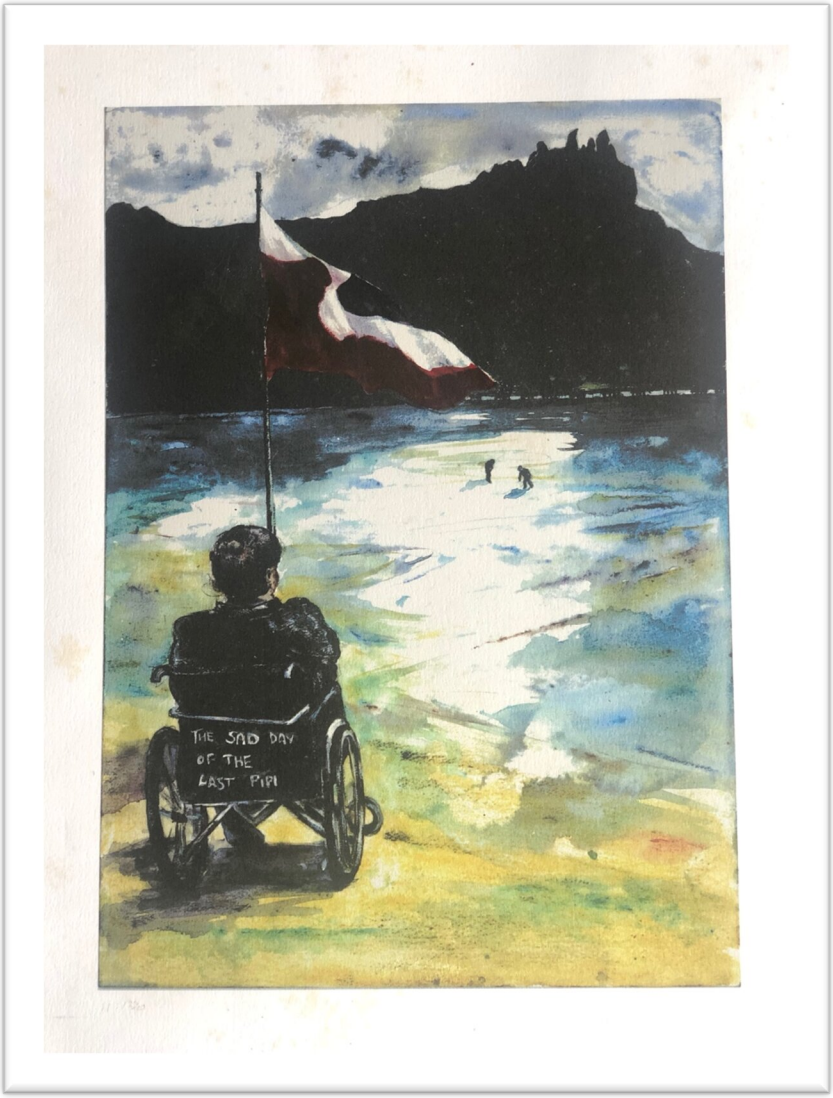
Appendix 24

Cultural Effects and Values Assessments

INTERIM CULTURAL EFFECTS ASSESSMENT
Northport Vision for Growth

Patuharakeke
TE IWI TRUST BOARD



Artwork "The sad day of the last pipi" 2000 - by Carol Peters (author's own). This Cultural Effects Assessment Report ("the Report") has been commissioned by Northport and undertaken by Patuharakeke Te Iwi Trust Board ("PTITB") as part of the Mana Whenua Engagement Process in relation to the Vision for Growth. The Report has been prepared in contemplation of Northport making an application for resource consents necessary to enable its proposal, and is able to be relied upon for that purpose.

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1. Purpose of this Paper

a) To present a '**Patuharakeke Cultural Effects Assessment'** (CEA)[1] **of the Vision for Growth (VFG) proposal by Northport** to PTITB Board for their approval prior to presentation to Northport.

b) To provide a set of initial recommendations from the hapū to Northport and the consenting authorities - Northland Regional Council (NRC) and Whangārei District Council (WDC) arising from the PTITB Effects Assessment and the review of the supporting documentation supplied.

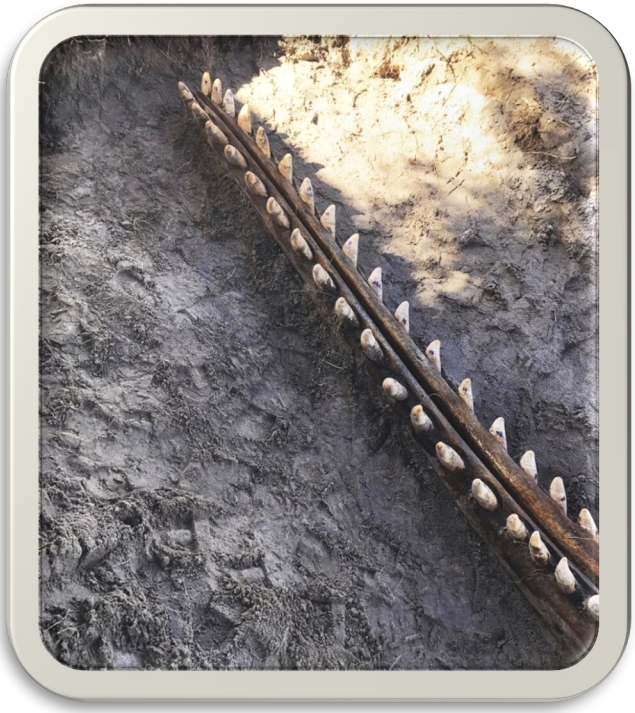


Figure 1: Part of the jawbone of Tahuhu Potiki – the sperm whale that beached on Mair Bank in 2017 (photo - Taryn Shirkey)

Whangārei Te Rerenga Parāoa

There are a number of traditions relating to the meaning of the harbour's name that are shared and valued amongst harbour tribes including Patuharakeke. A Ngāpuhi interpretation is that the harbour was a gathering place for chiefs where they would strategise before heading off to do battle with the southern tribes. Ngātiwai named the harbour Whangārei-Te Rerenga-parāoa (the gathering place of whales) because whales gathered there to feed during summer.

[1] A Cultural Effects Assessment in this context is an assessment of the potential and actual effects of a proposal, in this case a major expansion of regionally significant port infrastructure, on Patuharakeke and their culture and traditions, including the effects on their relationships with their environment past, present and future.

1.1 Introduction

Northport is situated just to the west of the mouth of the Whangārei Harbour, between the Refining New Zealand site and the entrance to the Marsden Cove Marina. The Port was first proposed in the 1960s and commenced operations, largely as a log port, in 2002. Patuharakeke are mana whenua whenua of the area Northport operates in and hold ahi kā status over Poupouwhenua/Marsden Point. The Patuharakeke Te Iwi Trust Board ("PTITB") represents their interests in matters including *inter alia* environmental and resource management issues.

PTITB has an operational relationship with Northport that was recently formalised through a Te Whakahononga Relationship Agreement in 2019 to assist an effective, stronger working relationship between the two parties. PTITB have a history of providing cultural and environmental advice and support to Northport and both parties strive to engage with one another in the spirit of good faith and transparency. PTITB representatives have also engaged in wider korero with whānaunga hapū and iwi of Whangārei Te Rerenga Parāoa through discussions with Ngātiwai Trust Board representatives and a series of hui with a working party of hapū/iwi technicians set up to engage on this application.

Northport seek multiple resource consents from the NRC and WDC to enable the "Vision For Growth" development strategy as laid out on the their website[2]. The VFG anticipates expansion of the current activity to comprise an already consented 4th Berth and new consents to enable further expansion to the East and West of the current maritime infrastructure. This will accommodate additional port activities including; container wharves, dry docking and maintenance facilities, cruise liner capacity and a new tug port with associated development of the shoreside related facilities expanding into the terrestrial hinterland. The proposed expansion will have a significant impact on both maritime and landside transport logistics chains, including increased numbers of large vessels of various types including bulkers, boxships, car carriers and cruise liners and all types of vessels using the enhanced maintenance facilities and greatly increased land transport of freight and some passengers. Increased port work and the generation of secondary businesses, should the expansion prove successful, would also result in economic and social changes for the local community.

Northport have presented separate assessments for the proposed east and west expansion. For clarity, Patuharakeke consider all the proposed consent applications to be part of a single bundle of consents for enabling the expansion of an existing activity, operation of the Port, and have evaluated the impacts on Patuharakeke accordingly. This is consistent with Patuharakeke's holistic vision and with the overarching objective of the RMA to provide efficient integrated management of resources. Compartmentalizing the effects according to a myriad of smaller activities does not accord with Patuharakeke's worldview and risks providing

[2] https://visionforgrowth.co.nz/

a "death by a thousand cuts" development framework where the overall impacts of development on the environment are obscured.

In their VFG, Northport state why they consider that this expansion is needed:

> *"To meet the future freight needs and support both Northland and North Auckland's growth, it's clear that Northport must expand. As one of New Zealand's key ports, we must keep up with global shipping trends. That means being able to handle more freight, offer more diverse services and adapt to changing freight need.*[3]

Central to this contention is the assumption that Northport is Nationally Strategic Infrastructure:

> *"Northport is New Zealand's northernmost deep-water commercial port. We are the closest port to most international markets and located less than two hours from Auckland, New Zealand's main commercial hub. Our unique position combined with deep-water capabilities means we have a vital role to play in our national economy and global trade."*

We have considered the VFG proposal against the evidence presented by the applicant and then applied a proven process of assessing the potential effects on the cultural values of Patuharakeke to prepare this report. Northport has requested we present a draft of the CEA to allow them to lodge the applications by early December.

1.2 Initial findings and Recommendations

It is recommended that lodgement of the Northport VFG related resource consents applications be delayed at this time, given the following:

a. The proposal will result in permanent significant changes to the environment (including people and communities) including the permanent loss of takutai moana and the creation of new whenua with associated Crown land title and will generate new Crown ownership instruments (easements) in the Coastal Marine Area (CMA). These causal outcomes of the activity, in the absence of a completed Treaty claims process, inclusive of MACA (Marine and Coastal Area (Takutai Moana) Act 2011) processes, have high potential to impact the relationship of manawhenua and Crown. Recent evidence before the Waitangi Tribunal indicates the act of

[3] https://visionforgrowth.co.nz/

lodgement of these applications will negatively prejudice the current Patuharakeke MACA process[4].

b. The proposal has high potential to result in adverse effects on Poupouwhenua, the cultural values of Patuharakeke and potentially to negatively impact the various relationships of Patuharakeke to its whenua, moana and other taonga as identified at various point in this CEA. No clear or agreed measures to remedy or mitigate such unavoidable impacts is proposed or agreed. There is a lack of monitoring and reporting to kaitiaki of the effectiveness of past measures to mitigate cultural impact from previous consents related to this activity, which in Patuharakeke's experience have fallen well short of delivering any meaningful positive outcomes and must be considered to have failed to be demonstrated to be effective. We would expect, at the least, that a full independent assessment of the appropriateness, adequacy and effectiveness of past mitigation measures will be undertaken, with recommendations for alternative measures, and submitted as a required part of this application.

c. The evidence provided, in particular the economic assessments, does not establish the case that there is a demonstrated need to further expand the port infrastructure beyond its existing consents to meet the reasonably foreseeable **regional** need and as such, the proposed expansion is not the most efficient and effective use of regional resources. Some economic modelling is presented that suggests that there may be a case for greater expansion than is currently consented in the event that it is confirmed that Northport is Nationally Strategic Infrastructure. Determination of this point, while it may be attractive to Northport, is largely beyond Northport's control, being the subject of current national assessment and consultation and the applicants should properly wait the outcome of the national process to determine whether Northport is considered regionally or nationally significant.

d. A large number of core parameters and assumptions have changed since the VFG was first promoted. For example, there is no longer any suggestion that the NZ Navy is intending to relocate to Whangarei and the Minister of Defence has confirmed that there was never any suggestion of the Aotearoa being dry docked or serviced at Marsden Point. The previous central administration's advocacy for a relocation of part of Ports of Auckland Ltd (POAL) to Northport has evaporated. The neighbouring activities of RNZ have gone from predicted expansion of refining and relates activities three years ago to a commitment to retire and dismantle all

[4] See https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_169463182/Wai%202660%2C%20B148.pdf for further discussion on this point.

refining activity, dramatically downsizing its workforce, greatly reducing its operational footprint and changing the emissions profile of the area. The proposed 4-lane road highway has not been approved for funding while some rail investment has been signalled. NZ is still in a global pandemic with resultant dramatic and unforeseen impact on global and national logistics. The NZ Climate Change Commission has released its first findings signalling major changes in national energy use, national transport and logistic chains and ultimately affecting the overall economy. None of these major shifts in Northport's development scenario are adequality reflected in the current VFG and supporting evidence which remains focused on open-ended growth and not necessarily sustainability or the needs of a decarbonizing economy.

e. There are sizable gaps in the evidence presented to date as detailed within the CEA and independent review but, in particular, relate to potential effects of greatly increased maritime discharges, selected use of ecological data for key cultural indicator species, including deficiencies in the evidence for shellfish, avifauna and marine mammals. There is almost no reference to the climate emergency and the potential or actual impact on the proposal from climate change in any of the evidence presented. The only practical reason for advancing the application to lodgement at this time would appear to attempt to avoid the deadlines for consideration of the effects of the proposal on future GHG emissions. This is disingenuous and counterproductive for three reasons, each supporting a delay to lodgement while these matters are considered fully.

   Firstly, the requirements from 31 December 2021 will affect all businesses that emit or plan to emit greenhouse gases as a by-product of their operations, particularly those operating on coal-fired heating systems. The new requirements do not affect the existing requirement for all applicants to consider the effects of global warming on the existing and future environment in which the activity is located or to consider the effects that air and water emissions resulting from the activity will have on the environment (including people and communities) in addition to their contribution to global warming. For example; the climate emergency is predicted to have a measurable impact on the sea temperature, level and acidity of the harbour and its ecology within the projected lifetime of the consent, all compounding and accelerating the level of negative stress this ecosystem is functioning within and predicted to have increasingly negative effects on shellfish, avifauna and marine mammals. Increased transport activity associated with growth models projected, in particular large ships such as cruise liners and car carriers and increased large vehicular traffic is likely to have an impact in regards the greatly increased air emissions from these modes. These will have an impact on GHG emissions that contribute to climate change, which is not in play until 2022, but also have potential to impact human regardless of their additional impact of contribution to global warming.

Secondly, regardless of the RMA requirements, NZ action to meet the climate emergency in line with our international commitments, will require dramatic changes to most facets of the NZ economy within the projected lifetime of these consents. The decisions made as a result of these applications will set the course of this piece of regional infrastructure for at least the next generation. Within this timeframe, a national move to a decarbonised economy, including an almost total overhaul of NZ's transport emissions profile is required. Yet the only reference in the evidence to these matters thus far is a possible consideration of an 8% modal shift in the landside transport logistics chain from heavy road to rail. There is, for example, no apparent consideration of what, if anything, the role of increased coastal trade might mean for the design of the port or what impact a regional or national shift to a more circular economy that greatly favoured exporting processed wood products over raw logs might mean for the projected future workload of the port.

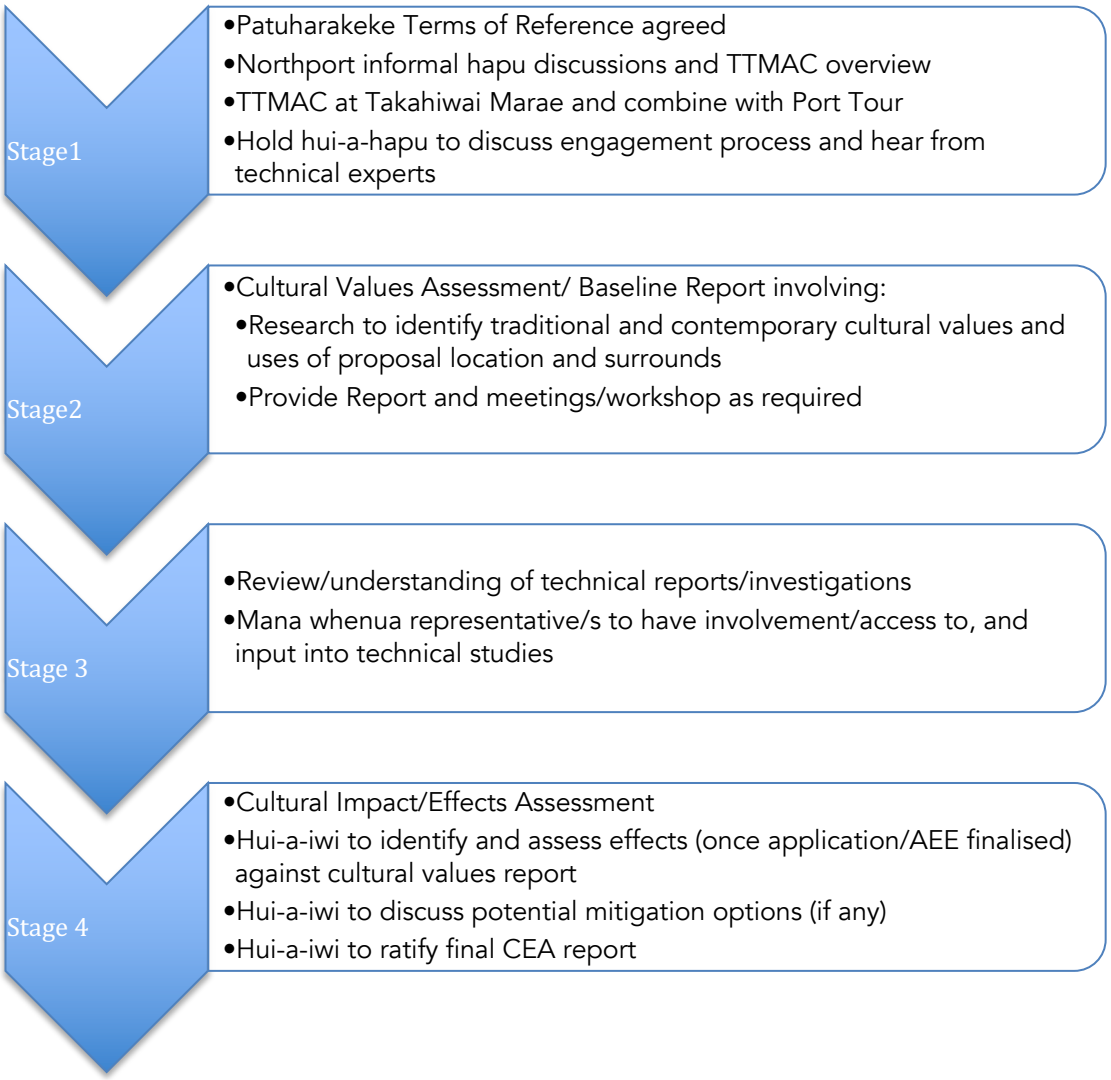
Thirdly, regardless of the RMA requirements at the time of lodgement, all public actors are now expected to fully consider their roles and responsibilities in response to the climate emergency. While Northport might argue that this is beyond its scope as a commercial entity, such questions are entirely applicable for its major shareholder, the NRC. We are certain that as a good and long-term citizen of Whangārei Te Rerenga Parāoa, Northport and its shareholders will want to strive to do all possible to ensure that the port is both climate resilient to the greatest extent possible and fully designed to meet the future sustainable needs of a quickly decarbonising Te Taitokerau economy over the next generation. If this is correct, then there seems little to gain from avoiding a statutory deadline to include consideration of the influences of the climate emergency when it is an issue that Northport and all major infrastructure managers will need to address as a central factor in their future planning anyway.

Patuharakeke have been witness to many changes to this environment over many years. The development record since the Poupouwhenua block was taken out of our ownership shows an uneven and chequered record, a boom/bust approach to heavy industrial development and a legacy of a degradation of the mauri of the harbour. The climate emergency will eclipse all others and, as the Prime Minster has reminded us, will be the defining issue of our generation. We can longer afford to make mistakes in our future planning and as such, it would be more responsible to fully consider all impacts of the climate emergency in relation to this proposal than to attempt to avoid them through early lodgement.

2. CEA Process

The diagram below depicts the general process for PTITB's engagement and the production of this CEA as agreed between the applicant and PTITB.

Figure 1: CEA Process



Stages 1 - 3 of this process have been completed previously. This report should be read in conjunction with the Cultural Values Assessment completed in April 2020 and the Independent Technical Review of October 2021 attached in Appendix 1 and 2 respectively. Key findings of these reports are summarized in sections 4 and 6 below.

Cultural effects or values are often narrowly pigeon-holed as matters relating to wāhi tapu or heritage, however for Patuharakeke these are only a subset of values or effects associated with a place or activity. In light of the definition of sustainable development in the RMA covering people and communities' social, economic and cultural wellbeing as well as environmental bottom lines, PTITB consider the implications of a proposal across all of these wellbeings for Patuharakeke hapū. A matrix methodology is used (see Appendix A) to flesh out matters such as historical, traditional and contemporary relationships, values and uses associated with the Refinery site and surrounds. The matrix is based on the key provisions in Part II of the RMA as follows:

- Recognition and provision for: the relationships between Maori, their culture AND their traditions AND ancestral land, water, sites, wāhi tapu and other taonga that might be affected by the proposal (as per s6(e) RMA);
- Recognition and provision for: the protection of protected customary rights (as per s6(g) RMA);
- Having particular regard to: the implications for the knowledge and practice of Kaitiakitanga by tangata whenua over their taonga of the proposal (as per s7(a) RMA);
- Taking into account: whether the principles of the Treaty of Waitangi are affected by the proposal (as per s8 RMA)[5].

The CVA along with the technical review of the documentation provided by Northport's consultants (and where available peer reviews from Northland Regional Council's independent experts), then goes on to inform the assessment of effects on Patuharakeke cultural values. Potential effects of Northport's proposal have been assessed within the framework of:

- The four-well-beings – environmental, economic, social and cultural values; and
- Effects[6] on the environment; and
- The Patuharakeke Hapu Environmental Management Plan 2014; and
- Patuharakeke Strategic Plan focus areas, goals and measures.

The assessment framework also includes categorization of whether effects are positive or adverse, the level of significance of any effects and whether it is possible to avoid, remedy or

[5] definitions of the principles of the Treaty given in "*Taking into Account the Principles of the Treaty of Waitangi: Ideas for Implementation of Section 8 of the RMA 1991*" (MfE)

[6] The meaning of effect includes
(a) any positive or adverse effect; and
(b) any temporary or permanent effect; and
(c) any past, present, or future effect; and
(d) any cumulative effect which arises over time or in combination with other effects— regardless of the scale, intensity, duration, or frequency of the effect, and also includes—
(e)any potential effect of high probability; and
(f)any potential effect of low probability which has a high potential impact.

mitigate, or alternatively, if offsetting or compensation is required. This matrix framework is attached in Appendix 3.

2.1 Information Sources

Review of the technical reports assisted in a broader understanding of potential constraints and impacts on cultural values identified. The reports reviewed are listed in the table below and as available by 22 October. It is noted that some reports are still in draft stage and Northport have advised that further revisions to the evidence may be still be submitted. It is our usual tikanga to not produce CEA until we have had the opportunity to appraise the hapū of all aspects of the proposal. In this instance, the CEA has been completed early to conform with Northport timelines.

Investigation/Technical Report[7]	Organisation	Lead Author
Air Quality	PDP	Jonathon Harland
Archaeology	Clough & Associates	Glen Farley
Hydraulic Modelling of the Coastal Waters	MetOcean Services Limited	Brett Beamsley
Marine Ecology (excluding avifauna & marine mammals)	4Sight	Mark Poynter
Avifauna Ecology	Boffa Miskell	Leigh Bull
Marine Mammals	Cawthron Institute Limited	Deanna Clement
Recreation Effects Assessment	Greenaway & Associates	Rob Greenaway
Acoustics	Marshall Day	B Lawrence
Transport	WSP	Parvez Sheikh
Natural Character, Landscape & Visual Amenity	Brown NZ Limited	Stephen Brown
Economics	Brown, Copeland & Co Ltd	Brian Copeland
Economics (Eastern)	M.E	Rodney Yeoman
Assessment of Effects (AEE)	Reyburn and Bryant	Brett Hood
NRC Peer reviews/other		
Avifauna Ecology	Beca	Claire Webb
Marine Benthic Ecology	NIWA	Drew Lohrer
Transport	Beca	Dan Jackson
Hydrodynamic, morphology and sediment transport modelling	NIWA	Christo Rautenbach

[7] Unless otherwise stated refers to both western and eastern reports

Investigation/Technical Report[7]	Organisation	Lead Author
Economics	NZIER	Peter Clough
Air Quality	NIWA	Suzanne Cawood
Landscape, natural character and amenity effects	Littoralis	Mike Farrow
Underwater Acoustics	SLR	Binghui Li
Terrestrial Acoustics	SLR	Peter Runcie

Table 1: Table of Investigations

Patuharakeke was a party and a submitter to previous consent application processes in the 1990's that led to the construction of the current port infrastructure that this proposal now seeks consents to expand further. Those processes found that there was potential for significant adverse cultural impacts arising from the activity and a package of mitigating measures was put in place to address these, including the resourcing over time of a Kaitiaki Roopu to assist in rebuilding the capacity of the harbour's kaitiaki to engage practically in the future resource management of the natural and physical resources of this locality. Patuharakeke and other kaitiaki of the harbour have long been critical of the monitoring and effectiveness of this measure. We are unaware of any assessment offered in this proposal of the effectiveness or otherwise of this package, a single passing reference to the measures not having lived up to expectation aside. As it is anticipated a further package of measures in regard this proposal will be proposed, we have strongly recommended that an independent assessment of the monitoring of previous consent conditions (e.g. condition 11) be undertaken **prior** to lodgement of the application. Alternatively, if the application is accepted without such information, we will assume that the relevant consent authorities already have such information available to them to assess the adequateness of the application.

In related work, between 2014-2017 extensive work was undertaken by PTITB and in collaboration with a range of whānaunga hapū and iwi of Whangārei Te Rerenga Parāoa to provide cultural advice to Refining NZ and the relevant consent authorities in response to a proposal to deepen the shipping channel at the entrance to the Whangārei Harbour. (Other CEA's addressing similar issues have also been produced since e.g. Refinery Reconsenting 2020, Marsden Cove Marina reconsenting 2020). A CVA was undertaken in the course of that process that involved a series of hui-a-hapu where the matrix methodology as described above was used. The cultural values identified in the Refining NZ Dredging CVA/CEA overlap with the current application, and contribute to this assessment. The CEA process was further informed by an independent review of the consultant reports listed above and a review of additional documents including:

- Northport Crude Freight Proposal – Tangata Whenua o Whangārei Te Rerenga Parāoa Cultural Effects Assessment and other various CEA's produced by PTITB

- Northland Port Corp Hearing Evidence from 1997 from various mana whenua submitters
- Patuharakeke Briefs of Evidence to the Waitangi Tribunal: Te Paparahi o te Raki District Inquiry (October 2013 and February 2016)
- PTITB MACA evidence
- PTITB Customary Fisheries documentation
- Interviews with Kaumatua and other whānau members
- Unpublished Historical Reports prepared by Harry Midwood of Patuharakeke

2.2 List of Hui

- Nga Hapū Whaipānga ki Whangarei Te Rerenga Parāoa Hui - 26th November 2020 held at Takahiwai Marae and facilitated by Jason Cooper
- Working Party/Roopu technicians hui[8] 5th and 24th March 2021, 26th August, 2nd September, 8th October 2021
- Hui-a hapu Saturday 15th May, Barge Park
- PTB Zoom hui 26 July and hui with kahui kaumatua 26th July (Luana Pirihi's whare)
- Updates at PTITB monthly board meeting July 19th, September 15th, October 15th 2021
- Meeting with Aperahama Edwards and Huhana Lyndon November, 2021 (Ngātiwai Trust Board)

It is important to note that planned hui to support this CEA process have been seriously impacted by the global pandemic and subsequent alert level restrictions that have inhibited the ability to hui at Takahiwai Marae kanohi ki te kanohi. As such a final hui-a-hapu to ratify this CEA has been unable to be held. ***This version of CEA is therefore unratified and should be treated as an INTERIM report only.***

[8] Facilitated by Jason Cooper, attendees on most occasions included Juliane Chetham (PTITB) Alyx Pivac (Ngātiwai Trust Board), Marina Fletcher, Mere Kepa, Mira Norris (Te Parawhau), Marama Muru Laning (Sir James Henare Research Centre), Catherine Murupenga-Ikenn (Te Rarawa, Ngāti Kuri/ United Nations Office of the High Commissioner for Human Rights, Indigenous fellow).

3. Description of the Proposal

The main activities to be consented are set out in ss 1.4 -1.5 of the draft Assessment of Effects' (AEE) and include:

i. A proposed Vison for Growth that comprises two primary expansions of the existing infrastructure.

ii. The western extension comprises a reclamation of around 10.9 ha and 900,000 m3 of capital dredging to provide additional wharves and more land for a shipyard with floating dry dock or for general cargo.

iii. The eastern extension comprises a reclamation of around 12.33 ha and extends the wharf an additional 250m eastward for Berth 5 from the already consented Berth 4 extension.

Overall, the resource consent applications lodged by Northport are assumed to be assessed as a non-complying activity, pursuant to both the operative and proposed regional plans. Northport seeks a 35-year term of consent, considering this term to be reasonable and in accordance with Part 2 of the RMA, noting the significant level of investment made, the ongoing level of investment security it would provide and because there is good information available about the existing environment and actual and potential effects.

Figure 2: "Vision for Growth" photomontage form Northport Website.

3.1 The Existing Environment

We mention existing environment here because in our discussion of baselines from a cultural perspective at hui held for this project, we have constantly been reminded by the applicant's team about "the existing environment" and what they consider is within scope of assessment. PTITB always conduct our cultural assessments on the basis of effects as defined in section 3 RMA. **"Ka mua, ka muri"** (often translated as"walking backwards into the future") is a widely known whakatauki that accurately reflects the way we consider Kaupapa eg. we should look to the past to inform the future. In our experience, and likewise for this application, past and cumulative effects of the port and other developments at Poupouwhenua do not appear to form part of the planning equation. Patuharakeke are hopeful that the RMA reforms will start to see a shift away from what the Randerson Report called "status quo bias, the report states;

"The resource management system has long favoured existing uses and consented activities, protecting them from changes in plans, rules and standards designed to promote better environmental outcomes and to effect change for the benefit of communities. The range of protections of this kind in the system is pervasive with the result that the ability to respond to urban growth and the environmental challenges and opportunities we face is seriously impaired."[9]

We also note that the unimplemented Refining NZ Dredging consent is highly unlikely to be implemented given the end to refining processes at the refinery. It is doubtful that the Suezmax tankers designed for the transportation of large quantities of crude oil that required the design of a deeper channel will now be required for the terminal operation. In the effects discussion more detail is provided on how existing environment continues to provide a mechanism for the minimising of cultural effects in favour of more of the same.

4. Cultural Values Assessment

The staged approach for this CEA saw preparation of a Cultural Values Assessment (CVA) in 2020 (refer to Appendix x). The CVA analysis finds its basis in relevant RMA sections 6(e), 6(g), 7(a) and 8 of the RMA. Specifically, it identifies Patuharakeke relationships to the Northport site and environs, the implications for the knowledge and practice of Kaitiakitanga by tangata whenua over their taonga of the proposal, and matters that have potential to affect the principles of the Treaty of Waitangi.

In its synthesis of information and korero gathered from hui and a number of documented sources, the CVA highlights how Whangārei Te Rerenga Parāoa was known to Patuharakeke and other Whangarei tribes as a bountiful and rich food basket or 'pataka kai'. The mahinga mātaitai, wāhi tapu, and cultural landscapes remain of utmost significance today. Their use still

[9] See https://environment.govt.nz/assets/Publications/Files/rm-panel-review-report-web.pdf pp156

revolves around maintaining customary practices and feeding whānau, hapu and manuhiri as in the past. The layers of mātauranga and management through katiakitanga have been stripped back due to a number of factors, such as alienation of rights and access, imposition of government controls, subsequent mismanagement, pollution, industrialisation and overfishing. Consequently, today's kaitiaki seek increased control over the management of these places and resources. The key focus is to prevent further diminishing of the mauri or life force of the harbour and to enhance and restore the important māhinga mataitai that remain.

The CVA explained how, in terms of any adverse effects as a result of the port expansion, it is mana whenua who have, and will continue to bear ultimate responsibility and impact for the effects on our environment and will once again lose access to more of the traditional takutai moana. Recommendations included that Northport provide a continued role for PTITB throughout the scoping and undertaking of any further technical studies required throughout the consenting stages of project and that Northport engage with our whānaunga hapu and iwi with interests in the harbour. Further specific recommendations concerned;

i. a request for further landscape assessment from additional viewpoints,
ii. discussions regarding landscape mitigation concepts,
iii. kaitiaki participation in any marine mammal and avifauna surveys/assessments,
iv. support for further longitudinal studies on the geomorphology and shellfish populations of Patangarahi Snake Bank, and
v. investigation of use of an holistic economic modelling approach that takes cultural values into account.

At the time of writing this CEA, Northport have yet to address several of these matters.

5. Options Evaluation Report

PTITB were recently provided a copy of the Options Evaluation Report to review. The report provides historical background to Northport and contains a Multi Criteria Analysis (MCA) for the western and eastern proposals. There are no cultural criteria included in the MCA. tables. We note this was received on 15 October 2021 and appears to have been prepared post design. Patuharakeke have previously been involved in MCA processes for large projects, notably the Refining NZ capital dredging proposal and Waka Kotahi/NZTA's Port Marsden Highway to Whangārei 4 laning project. In those examples, hapū representatives sat alongside other technical experts and participated in the scoring process. In those examples, the MCA exercise was completed many months prior to finalisation of the design. The MCA undertaken includes consideration of effects on subtidal and intertidal ecology, avifauna, marine mammals and amenity. Apart from structural matters, other considerations appear to be primarily business or operational. For reasons we will explain later in this report, we generally do not concur with the conclusions of the ecological reports and consider this scoring likely to be downplayed. Ecological effects are interlinked with cultural effects, eg. on kaitiakitanga,

whakapapa and harvest of kaimoana for example. However, other key effects on Patuharakeke culture and Treaty Rights arising from the reclamation itself, ie the alienation of yet more ancestral whenua (in this case papamoana or takutai moana) and extinguishment of acknowledgement and redress in relation to these rights either through a Waitangi Tribunal finding (eg. Stage 2 Report Paparahi o Te Raki[10]or through recognition of Customary Marine Title and/or Protected Customary Rights under the MACA are absent from the alternatives evaluation. As such, we consider the options assessment deficient and unable to be relied upon for RMA decision-making.

6. Independent Technical Review

PTITB contracted an independent consultant to undertake a technical review of the application and the supporting evidence The review undertaken by Dr Nuttall is located in Appendix 2. The review raised numerous questions and identified a number of shortcomings in the evidence provided. His comments are discussed below where relevant to specific effects on Patuharakeke that have been identified. It is noted that not all evidence or the draft AEE had been received prior to the review being completed.

7. Effects on Patuharakeke culture and values

The set of effects identified below is not set out in any order of priority or importance. As previously mentioned they are structured under headings of the four wellbeings as identified in the RMA - Environmental, Cultural, Economic and Social. Largely these issues are interconnected and overlap as certain environmental effects could just as easily be discussed under the categories of 'cultural, social or economic' wellbeing. Past effects of development at Poupouwhenua have impacted on the culture and values of Patuharakeke. This collective experience and memory informs the view of the hapu in relation to any proposed activity. Korero from interviews and hui (listed above) has also informed the effects assessment. Further analysis against the framework of the HEMP[11] and our Draft Hapu Strategic Plan[12] is included. The Hapu Strategic Plan categorises the four wellbeings into further subsets, and identifies strategic pou or pillars that will underpin the plan. These are:

- Pou Hauora – Whānau health
- Pou Taiao – Environmental

[10] https://waitangitribunal.govt.nz/inquiries/district-inquiries/te-paparahi-o-te-raki-northland/

[11] https://patuharakeke.s3.ap-southeast-2.amazonaws.com/public/website-downloads/Patuharakeke-Hapu-Environmental-Management-Plan-December-2014.pdf?vid=3

[12] prepared through a series of hui-a-hapu in 2019-2020

- Pou Whaioranga – Economic
- Pou Ahurea - Culture
- Pou Mātauranga - Educational
- Pou Tai Tamariki-tanga – Succession

A Matrix methodology (Appendix 3) was employed for the effects assessment exercise and also identifies appropriate HEMP methods and strategic pou goals that can address effects where mitigation is considered necessary. These matters are discussed further in section 6.

7.1 General Comments

A broad suite of reports have been prepared and these are reviewed as below. Five common shortcomings were identified as generic to many of the reports:

a. Temporal baselines, where referred to, were generally short-term and recent - at best incorporating no more than two or three decades of data. The ecology related reports in particular are contextualised with reference to change only over recent time.
b. Geographical baselines considered were generally tightly constrained to the immediate location of the activity and not placed in their context within the harbour catchment.
c. Identification of effects are constrained to those created by the landside activities proposed to be enabled and generally only the construction activity phase of these. Actual or potential effects from increased maritime activity enabled by the proposal are not considered.
d. The effects from the proposed activities of this specific proposal are not generally contextualised in relation to other activities in this locality and therefore potential for effects from this activity to be cumulative with others in the same locale is not fully considered.
e. The impact on both the proposed infrastructure and the surrounding hinterland of the increasing effects of the climate emergency (increasing sea levels, acidification, sea temperature, increased intensity of future weather events, etc) have not been taken into consideration. The term 'climate change' does not appear in most reports. This is most concerning in reference to the ecological and economic reports which are entirely mute and agnostic on this point, whereas fast accelerating adverse trends over time are projected by most science, including over the proposed lifetime of the consents.

7.2 Environmental Effects

7.2.1 Ecological Effects

Patuharakeke have a number of concerns with the conclusions reached in the various ecological assessments prepared by Northport's consultants. These mainly relate to the narrow baselines assessed/employed and the definition of existing environment. We remain concerned that this application acts from the assumption that the current receiving environment for the proposal is in an overall 'healthy' or 'satisfactory' condition, that the current ecological baseline is static and not situated in an overall declining historic trend and there is no acknowledgement that the pressures on this environment can be expected to continue to negatively increase as both development pressure and the effects of the climate emergency build over time. This only increases our concerns to the manner in which adverse effects are watered down when placed in the context of the wider harbour. We have not commented on them in great detail here but the narrow scope seems to preclude the consideration of the effects that operation of an expanded port will have, such as increased marine biosecurity and oil spill risks, as a result of greatly increased shipping traffic. These potential effects present significant risk to cultural values such as the mauri of our mātaitai.

It needs to be acknowledged from the outset that all cultural monitoring indicators or tohu associated with Poupouwhenua are in decline, some much more marked than others. Kutai, kōkota, tuatua, hūai – for which we were once famed and were once abundant in this locality - are now almost absent from the tables of our wharekai. As hau kainga we are no longer able to maanaki our manuhiri with the sustainable harvest of our own marine resources, an indictment on our ability to practice kaitiakitanga in line with our management aspirations for our rohe moana. Given this, we cannot concur with the expert findings as to the 'good' health condition ascribed to the existing ecological baseline. And saying that it is "relatively healthy" in comparison to other Harbour localities, assumes that the rest of the harbour is considered to be in acceptable condition, when clearly it is not. Management in recent years may have slowed some aspects of decline from the worst excesses of land clearance, uncontrolled run-off and the effects of sedimentation from poorly managed industrial processes in the past 100-odd years. To now assume that this means we are dealing with a static and 'healthy' ecological baseline in 2021 is not defendable.

Looking to the future, the lack of expert discussion over the expected changes to this ecology over the projected lifetime of the consent are of particular concern. Patuharakeke is watching the growing climate emergency with increasing alarm. We note the latest science from the International Governmental Panel on Climate Change (IPCC), United Nations Environment Programme (UNEP) and others that we are currently on a track for global warming of 2.7 degrees celsius by the end of this century and that regional variations mean the likely local impact on parameters such as ocean temperature and acidity could well be significantly higher.

These ecological changes are likely to be of an unprecedented scale, this is after all completely new territory for any of us. What this will mean for the ecology of the harbour is uncertain, but we have to assume that it will result in changes and challenges for many of the subjects of evidence to this application – shellfish, wafer quality, avifauna and marine mammals being prime examples. However, the evidence examined is largely silent on these matters. For us as ahi kā and tāngata tiaki, numerous questions arise. At what level of ocean acidification is shellfish spawning and recruitment affected? Will a further sea temperature increase of 1 degree affect the ability of kororā to feed their chicks? 2 degrees? Will it affect the migration of birds that currently roost at Poupouwhenua? Will increasing ocean warming mean that Parāoa, come closer to shore in search of kai, strand in distress, or will they be pushed further away from our shores?

Marine ecology

In his peer review for NRC, Drew Lohrer states;

> "*Poynter seems to argue that there is plenty of similarly diverse habitat near the Whangarei Harbour entrance and therefore there will be no overarching impact to permanently destroying some of it. I strongly disagree with this statement for two reasons. First, I think the Whangarei Harbour / Bream Bay entrance area is relatively unique in New Zealand; few other harbours navigable to large vessels have an estuarine mouth channel with diverse shell-armoured sediments, very clear water, and high abundances of birds, rays and marine mammals using both subtidal and intertidal habitats. Second, the assumption that there is 'plenty' of similarly biodiverse habitat in the areas is likely faulty. The area of habitat that will be permanently eliminated under the proposed plan currently supports high biodiversity and contributes to the overall functioning of the system ("an integral part of, and contributor to, the wider harbour and local coastal ecology and marine food web"). Moreover, the 'parts' of the broader ecosystem that will be eliminated may be disproportionally important relative to their area. Thus their losses could have unexpectedly adverse impacts.*"

Patuharakeke also strongly disagree with this "system-wide approach" taken by the applicant's consultants and espoused in the AEE (e.g. section 4.8 avifauna, s 6.9 policy analysis) being used to dilute direct and cumulative adverse effects so they are "less than significant when considered at this scale."

From a mana whenua perspective, Whangārei Te Rerenga Parāoa is always considered holistically, but not in a way that compares to the technical assessments undertaken by the applicant. For Patuharakeke, the harbour is a living entity. One would not suggest that amputating a foot is a minor procedure because the remaining body parts and organs remain intact. Moreover, if the person in this analogy was diseased and malnourished, a surgeon would

be unlikely to recommend the operation proceed. No hapū and iwi of Whangārei Te Rerenga Parāoa consider any part of it to be in a healthy state.

The state of the harbour has been a consistent concern reiterated by mana whenua in previous resource consent processes, in evidence before the Waitangi Tribunal, in regional policy and plan hearings processes and the like.[13] Iwi and hapū submitters explained at the initial port hearings that pipi and kōkota beds were going to be obliterated by the reclamation. We had hoped these would return to the west of the existing reclamation but as evidenced by the 4Sight surveys these beds have never re-established to a point that would support customary or recreational harvest. The decline of the Poupouwhenua mahinga mātaitai (Mair and Marsden Banks) east of the eastern reclamation and our ongoing efforts to protect it by way of legislative closure or rāhui has been well documented. The questions we raised at the Refinery dredging hearings about the effect of the reclamation on shellfish spat dispersal and settlement are yet to be answered although we note that Drew Lohrer's comments[14] support this concern.

> *"The hugely productive adult pipi beds once present on Mair and Marsden banks have dwindled, changes in along-shore currents following the construction of Northport may have blocked the secondary transport of juvenile pipis and contributed to their population declines on the banks. I am concerned both by the loss of potential pipi settlement habitat in intertidal areas to the east and west of Northport due to reclamation, and by the more acute angle of the proposed western revetment (Figure 2-6), which I believe will trap post-settled juvenile and adult pipi even more effectively than the current structure does."*

Patuharakeke are ahi kā responsible for kaitiakitanga in the portion of the harbour subject to the permanent loss of habitat. We have spoken at length in previous CEA's about intergenerational impacts on mana, mātauranga and tikanga. This is another example of erosion of those values and practices. Essentially, Northport's ecologists are suggesting that our whānaunga hapū around the harbour will uphold these values on our behalf, that their rohe moana will provide refuge, food and mates for our displaced taonga species.

As mentioned, our evidence before the Waitangi Tribunal, successive CIA's, submissions, our HEMP and Rohe Moana Management activities (under the Fisheries Act) has consistently maintained that the ecological values of the harbour are severely degraded and at tipping point. Contrary to the project ecologist's findings, from a cultural perspective, the lack of

[13] e.g. see section 15, page 41 Te Paparahi o Te Raki (Wai 1040) Regional Inquiry Tribunal Statement of Issues for Stage 2; https://waitangitribunal.govt.nz/assets/Documents/Publications/wt-te-paparahi-o-te-raki-statement-of-issues-stage-2.pdf

[14] See section 3.1.4 Northport Ltd expansion proposal: Review of marine benthic ecology effects assessment Prepared for Northland Regional Council. June 2021

keystone taonga species such as pipi/ kōkota, and hūai/cockles, in harvestable amounts, clearly demonstrates an ailing ecosystem and diminished mauri. Poupouwhenua Mātaitai (Mair/Marsden Banks) has been subject to a combination of customary rāhui and S186A (Fisheries Act) closures for a decade and are yet to recover. Commercial hūai harvest on Patangarahi (Snake Bank) also ceased a decade ago. Our recent surveys in conjunction with NIWA as described in the CVA highlight that while there are reasonable abundances at Patangarahi, very few individuals were of harvestable size. The hūai at Patangarahi were formerly the largest in the harbour.

Earlier this year a second rohe moana was gazetted in the Whangārei Harbour adjoining our existing one and essentially "shoring up" the entire harbour.[15] At a recent hui attended by Ngāti Tu, NIWA, NRC, Fisheries NZ and Patuharakeke, the plight of the tipa/scallop fishery nationwide and the mounting pressure on Whangārei and Bream Bay, in particular remaining Urquharts Bay stocks as a result of collapse in Pēwhairangi (Bay of Islands) and rāhui in East Coromandel and Whangaroa was discussed. The once plentiful tipa beds around Takahiwai and One Tree Point are virtually gone, pockets remain between Patangarahi and McDonald Bank and near Parua Bay, but Urquharts is still in a relatively healthy state although it gets increasingly hammered every season. Kōrero and consultation is still ongoing but there is increasing support for either part or all of the Whangārei Harbour scallop fishery to be closed in order to preserve this bed as a form of ūkaipō (nursery). These species are not only taonga because they are important kaimoana species, but because of their role in the whakapapa – Te Tini ā Tangaroa, providing food and habitat functions for myriad other species. This impacts on mauri and has flow on effects on kaitiakitanga.

The proposed western and eastern reclamations and dredging of the turning basin results in what one kuia refers to as the "reconstructing of Whangārei Te Rerenga Parāoa" (Mere Kepa, pers comm., 2 September 2021). This has obvious impacts as to what this means from a cultural landscape perspective. Effects identified from an ecological perspective, include the modification of Patangarahi (the ongoing erosion of the toe of Snake Bank) has the potential for adverse effects on the hūai population. The importance of hūai on Snake Bank is considerably elevated due to the decrease in edible sized cockle beds in Marsden Bay and One Tree Point, which we have seen decline steadily post construction of Northport and Marsden Cove Marina.

The reclamation itself will result in significant adverse effects by way of destruction of the benthic community and permanent loss of habitat and food source for taonga species including fish, marine mammals and birds. Re-establishing seagrass beds on both eastern and western port flanks will be smothered. Seagrass is an important nursery habitat for taonga species such as juvenile snapper and the benefits of benthic habitat (including seagrass meadows and the

[15] https://gazette.govt.nz/notice/id/2021-go2731

sediment itself) for carbon sequestration is just being realised but the rate of carbon sequestration is estimated at up to 100 times faster in coastal vegetation than in terrestrial forests.[16] Patuharakeke are soon to participate in an MBIE funded case study with NIWA looking at Carbon sequestration via Aotearoa's estuarine environments which involves case studies including Whangārei Te Rerenga Parāoa.

The importance of what remains and our ability to restore it is heightened due to the effects of the climate crisis that we are already seeing now, with rising sea temperatures contributing to diseases and die offs, storm damage affecting habitats, acidification and coastal squeeze. As per Dr Nuttall's review, these future effects have not been canvassed by Northport's experts.

Avifauna

As described previously, manu, like other taonga species are precious to Patuharakeke for a variety of reasons. They are often considered kaitiaki in their own right - in the traditional sense of the word, e.g. Kuaka (godwits) as described in the CVA and of course the Tūkaiaia pūrākau is central to Ngātiwai tradition and cultural identity. Shore and seabirds in particular are strongly associated to mātauranga Māori, particularly the maramataka as seasonal tohu and indicators of cultural health or mauri. The Refinery capital dredging CEA featured this quote from a hui-ā-hapū attendee; *"I whakapapa to the stingray and penguin"* which continues to illustrate our relationship with all taonga species.

In regard to effects on avifauna, a range of our concerns are covered in paragraphs 39-45 of Dr Nuttall's review. We are unsure as to the extent these issues have been relayed to Ms Bull, but as yet have not had sighted a response to them, and the most up to date avifauna assessment we have seen is dated February 2021. Similarly, for the single species (Variable Oystercatcher) where the applicant's expert has identified a more than minor effect, no proposed mitigation or offset strategy has been advanced as yet.

While these manu species are generally in decline as evidenced by their threat status, shore and wading bird communities have endured in this location in spite of all the industrial development. In fact, the presence of these complexes, e.g. the port and refinery, in conjunction with wildlife refuges and the physical characteristics of the southern entrance to Whangārei Te Rerenga Parāoa, creates in our view a unique habitat for shorebirds (within the context of the harbour). This is because sections of the area are off limits to dogs and human activity typically associated with residential activities does not occur. Unlike the situation on the eastern Bream Bay Coast, this stretch of beach is not subject to disturbance by motorbikes and other vehicles which are restricted by the presence of existing structures such as the port and refinery jetty and the port zone and associated regulations. Parts of the port and refinery

[16] https://niwa.co.nz/news/muddy-sinks

landward holdings (eg. Refinery stormwater basin and Marsden Maritime Holdings paddocks) support dotterels, red billed gulls and other significant and at risk taonga species.

We asked a question of Ms Bull at the May hui-ā-hapū regarding the potential displacement effects should a shifted population of shore birds relocate into adjacent areas with existing populations. Her reply was that surrounding populations are not at carrying capacity so any displaced birds can be absorbed, however we cannot readily find analysis on this matter in the avifauna report. As mana whenua mana moana knowing our harbour intimately, we do not agree that there is a wealth of other similar habitat nearby that these birds can merely shift to. Marsden Cove and One Tree Point are highly modified residential areas prone to high disturbance through people, unregulated access for cats and dogs, municipal stormwater discharges, and high recreational boat, jetski and other traffic. The coarser sands and deep channel Drew Lohrer refers to as the "outer Whangarei Harbour System" and surrounding land uses is distinctly different from Marsden Cove and One Tree Point. In our view Table 14 of Ms Bull's Draft Coastal Avifauna Assessment speaks for itself:

SURVEY LOCATION		NUMBER OF SPECIES	TOTAL ABUNDANCE	MEAN BIRD DENSITY (PER Ha)	SURVEY PERIOD
One tree Point	Expanded 5	1	3	0.22	20/12/19 – 17/2/20
	Expanded 4	1	37	5.75	20/12/19 – 17/2/20
	Expanded 3	3	57	4.11	20/12/19 – 17/2/20
	Expanded 2	0	0	0	20/12/19 – 17/2/20
	Expanded 1	5	1203	204.6	20/12/19 – 17/2/20
	Wildlife refuge	8	181	14.3	2017/18 and 2019/20
	Blacksmith's Creek	12	1344	17.0	2017/18 and 2019/20
	HW West 1	5	289	3.0	2017/18 and 2019/20
	HW West 2	10	2989	39.5	2017/18 and 2019/20
Northport	HW West 3	11	102	2.0	2017/18 and 2019/20

Table 2: Number of coastal bird species recorded during the high tide western (and expanded) wading bird surveys (from Draft Avifauna Assessment).

The table demonstrates that our taonga species prefer habitat either in or in close proximity to the proposal area, vastly outnumbering birds in the expanded survey locations (eg. One Tree Point) in both species' diversity and abundance. Like our tupuna before us who treasured Poupouwhenua as a nohoanga and mātaitai rich in kaimoana and manu species, these birds rely on this extremely special location that has qualities and characteristics that cannot be found or replicated elsewhere in the harbour.

The mapped Proposed Regional Plan (pRP) Significant Bird Areas (SBA's) are illustrated in the Draft AEE and we note that they coincide with the proposed western reclamation, however on

the eastern side this overlay only covers Poupouwhenua Mātaitai (Mair and Marsden Banks). Notwithstanding the limitations of the bird survey work pointed out in Dr Nuttall's review, the surveys demonstrate what mana whenua already knew, that birds don't recognise lines on maps and are distributed throughout the port area and proposed expansion on both sides. The pRP rules relating to mapped Significant Ecological Areas (SEA) (as well as SBA and Significant Marine Mammal and Sea Bird Areas (SMMSB)) are currently under appeal. Issues around the incompleteness of SBA mapping are likely to be revived when Topic 1 is progressed next year. There is also an appeal seeking that SEA, SBA and any areas that meets assessment criteria of Appendix 5 of the RPS is all treated the same under the coastal rules. In our view, the entire proposal site meets the appendix 5 criteria for significance.

In conjunction with inevitable climate change effects such as coastal squeeze we consider the unavoidable direct and cumulative effects on taonga bird species will be significant and adverse for both the western and eastern reclamations. While we have not sighted any proposed mitigation or offset in relation to avifauna, from Patuharakeke's perspective it will not be possible to mitigate the habitat loss on our manu.

Marine Mammals

The CVA outlined the importance of the presence of whale species in Whangārei Te Rerenga Parāoa as a tohu or indicator species of ecological health and mauri that is interconnected to the cultural health and wellbeing of the environment and mana whenua. As well as whales being kaitiaki in the true sense of the word, their presence is also a measure of our ongoing duties as tangata tiaki in striving to protect and nurture the environment. The naming of the harbour clearly illustrates the historical and traditional importance of whales within our rohe moana and this includes 'riu' or passageways within the harbour and Bream Bay and beyond. The technical review by Dr Nuttall outlines potential gaps in Dr Clement's analysis, namely that effects considered are primarily constrained to construction related activities without consideration of the potential effects of increased ship movements associated with the Port expansion; that impacts of climate crisis related effects on marine mammals were not considered, and that noise effects on species other than marine mammals has not been assessed. We have also discussed Dr Clement's assessment with Tom Brough, a Marine Ecologist from NIWA and the Far Out Ocean Research Collective who has raised concerns in relation to the limitations of using the DOC sightings dataset to make specific assertions about the use of Whangārei Harbour or Te Akau / Bream Bay by marine mammal species. Further concerns also exist for assertions made regarding the level of behavioural impacts, factors influencing acoustic impacts, factors influencing ship strike impacts, ecological effects of habitat and prey species, alongside significant assumptions made regarding the lack of coinciding/cumulative impacts.

> "*Without having any measure of how often sighting opportunities occur, in relation to other areas, it is not possible to say whether the harbour is important, or not, for marine mammals using these data sets*" (Pers. Comms. Tom Brough September 2021).

Also, due to the opportunistic nature of the DOC sightings database, little can be said about the use of the harbour and wider Bream Bay area, until systematic surveys are conducted. Furthermore, DOC sightings database includes significant biases to locations where research and commercial tourism occur, and therefore may have little value in this context.

The factors influencing acoustic impacts are difficult to judge as the visual and acoustic monitoring data are not given in the report. The assertion that Whangārei Harbour is not considered unique or ecologically important for any marine mammal species is also not backed up by any data or evidence and is contrary to mana whenua historical evidence and manifest in the translation of our name for the Harbour - Te Rerenga Parāoa - the gathering place of the Parāoa (sperm whale). Further to this point, stating that species continue to use the area despite ongoing development activities is not evidence for lack of impact.

With regard to ship strike impacts, the assertion that port-related commercial ships have a low probability of encountering a migrating whale is unable to be proven from the current opportunistic data, while migration routes, distributions (migratory or resident) and seasonality of visiting marine mammals can only be established with accuracy through systematic surveys. Without appropriate investigations to determine the location of critical habitat for marine mammals, suggestions that the area is or isn't important such as claims of the area being "not considered unique or important for feeding, resting or nursing" is conjecture. Just in the last few months local whānau have witnessed two pods of orca hunting stingray at Marsden Cove and a humpback at One Tree Point as shown below. Patuharakeke consider these visits will continue to rise as whale populations bounce back (eg. humpbacks globally following cessation of whaling) and that the harbour should be in a state that can support the return of these taonga and provide safe habitat.

There has been no direct assessment of the distribution of marine mammal prey within the wider harbour, or within the proposed reclamation areas. Therefore, the contention that there is 'no unique feeding habitat in the proposed areas' is unsubstantiated. Similarly, without a detailed study of the comparative prey availability between the habitat lost to the reclamation and the 'nearby habitat of similar biotic composition' it is incorrect to state that the loss of such habitat will be negligible.

With regard to cumulative impacts, the potential for noise levels to be elevated in the harbour for up to 8 years due to possible consecutive projects is significant. Further, if the projects do not run consecutively, then cumulative impacts will likely be experienced due to the possibility of several stressors from more than one project overlapping at the same point in time and within a confined space (i.e., pile driving from several projects, dredging, loss of habitat and sedimentation). While it's true that the impacts of multiple stressors over long time scales (e.g., in the case of consecutive projects) or overlapping scales is unknown for marine mammals, there is a possibility these effects may be severe.

Figure 3: Humpback off One Tree Point Boat Ramp September 2021 (photo by Les King).

Orca and bottlenose dolphins are in serious trouble and the collapse of the population in the Bay of Islands shows the huge impact of human disturbance on their behaviours. To our minds, the fact that marine mammals are exposed to a variety of anthropogenic stressors elsewhere in their range is good reason to exercise additional caution in the appraisal of additional threats from these proposals. That there is limited knowledge on how cumulative stressors combine to impact marine mammals is no reason not to assume such impacts don't occur. These matters will all be compounded by the effects of the climate crisis.

We also note that assessment of noise effects on species other than marine mammals is absent. During the recent Pakiri Offshore sandmining hearings, Dr Craig Radford of Auckland University presented evidence on noise effects of dredging on a range of fish and invertebrates.[17] He describes how marine mammals only make up a small fraction of the marine animals that would potentially be affected by increased noise pollution both during and in transit to the activity. Benthic animals are also not as mobile as marine mammals and cannot simply swim away if disturbed by noise being generated. Dr Radford considered acoustic assessments should also

[17] See https://onedrive.live.com/?authkey=%21AC%5FLv0%5FT2sCTAtU&cid=943FC6A80B823296&id=943FC6A80B823296%2118250&parId=943FC6A80B823296%2115898&o=OneUp and https://onedrive.live.com/?authkey=%21AC%5FLv0%5FT2sCTAtU&cid=943FC6A80B823296&id=943FC6A80B823296%2118251&parId=943FC6A80B823296%2115898&o=OneUp

consider ground roll or substrate-borne vibrations generated when noise producing structures come into contact or close proximity to the seafloor (e.g. dredge apparatus). This source of noise is particularly important for marine animals that live in and on the substrate, such as bivalves and crabs. Research has shown that substrate-borne vibrations can cause both behavioural (interferes with feeding) and physiological changes (structural damage) to these groups of animals.

Figure 4: Orcas hunting stingray at Marsden Cove July 2021 (photo Ari Carrington)

7.2.2 Discharges to Air

We note the comments by Dr Nuttall in regard the air quality assessments. We agree that these are restricted in scope, being largely concerned with effects arising from construction and then the effects of the dry dock once the infrastructure is completed. PTITB are concerned the effects on air quality will be more complex than that which have been assessed by the experts thus far.

Should the scale of activity projected in the economic analysis be achieved, then we can expect quite dramatic increases over the next generation in both land and maritime transport levels. The evidence we have seen thus far (draft, Feb 2021) has no consideration of whether this will generate effects and if so, at what scale and how this might contribute to cumulative impacts or any analysis of whether such effects will be ameliorated over time as NZ and world transport decarbonises. The lack of reference to any potential impact from maritime emissions is of particular concern, especially as Northport are highly confident that the cruise liner industry will return and increase. We are aware there is increasing international scientific evidence of the impacts of shipping generally and the cruise liner industry emissions in particular, on the health of coastal and port communities[18], of long running campaigns in places such as Malta[19] and Venice[20] to stop cruise liner visits due to their impact on human health and growing evidence more locally from places such as Port Vila where cruise liner visits in 2019 averaged more than one per day. Whānau have regularly reported that the fumes from ship exhausts are highly noticeable when downwind, especially when out on the water. Yet, we can find no reference as to any study conducted on whether the proposed activities will generate increasing health effects from either sea or shore increases in transport emissions. Further, as air quality assessment is focused on residential receptors and does not consider effects on kaitiaki, whānau, community and so forth when utilising beach or harbour, this dismisses the impact of dust and fumes affecting the experiential values of the cultural landscape (and similarly recreational and amenity values).

Also unreferenced is the major changes imminent for the current air quality baseline. The announcement of the forthcoming cessation of refining activity at Poupouwhenua has the welcome benefit of an enormous imminent reduction in air emissions of various pollutants within our rohe. Obviously, Patuharakeke are enheartened that this finally signals a reversal of the trend of increasing industrial pressures on our rohe and a move toward improving our environmental and social health. If this proposal now generates additional harmful emissions, how much of the positive benefit of the refinery ceasing emissions will be lost to this new source? Again, it is necessary to remind all parties that prior to the establishment of heavy maritime industry at Poupouwhenua, firstly an oil port in the 1960s and then a regional port in the early 2000's and all the related industrial expansion in the hinterland has been paralleled in a sharp and significant decline in what was previously very high natural values. Our ground water has gone from very high quality to heavily contaminated; our landscape has gone from unspoilt and tranquil to a skyline that is entirely industrial, heavily lit with artificial light at all hours of the night, our kaimoana resources have been devasted and numerous indicator species threatened. If there is going to be further potential impacts on our rohe, then at the

[18] https://www.forbes.com/sites/jamesellsmoor/2019/04/26/cruise-ship-pollution-is-causing-serious-health-and-environmental-problems/?sh=67e1a7fd37db ; https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6423703/ ; https://www.sciencedirect.com/science/article/pii/S016041201934423X

[19] https://timesofmalta.com/articles/view/cruise-ships-pollution-148-times-worse-than-cars.712920

[20] https://www.bbc.com/news/world-europe-56592109

very least we expect to be fully informed of what those impacts are and what the levels of impact might potentially be. This is not possible if attributes such as the potential effects of increased transport emissions arising are not fully evaluated.

7.2.3 Climate Change

PTITB identify climate change as a major threat to the cultural, economic, social, and environmental wellbeing of Patuharakeke. In our view the RMA falls well short of providing clear direction and impetus to support climate change resilience either by encouraging renewable energy projects or disincentivising energy intensive projects. The RMA reforms (e.g. Climate Change Adaptation Act) and work of the Climate Commission will progress the response to these matters in the very near future.

Climate scientist of Texas Tech University and chief scientist at the Nature Conservancy, Katharine Hayhoe recently said *"We have built a civilization based on a world that doesn't exist anymore."*[21] In our view, this proposal is derived from an outdated model of economic growth at all costs that is no longer tenable in today's world, nor does it align with a Te Ao Māori world view.

The issue of climate related effect is discussed at numerous points throughout this assessment and in the accompanying independent review so is not elaborated on further here. We reiterate our recommendation to Northport to fully consider the effects on climate change and again we see no need to race this application to avoid consideration of this matter.

7.2.4 Coastal Processes

Tonkin and Taylor's coastal processes assessment has utilised the morphological, hydrodynamic and plume modelling series undertaken by MetOcean to describe changes to the harbour from the existing port and to predict expected changes of the proposed expansion. To date there have been changes to the shell bank at the entrance to Rauiri Blacksmith's creek, migration of the toe of Patangarahi into the turning basin and local scour and deposition around the faces and corners of the port reclamation (particularly accretion of the beach areas between the port and the Refining NZ jetty) which are expected to continue or increase slightly. These changes are important for reasons discussed elsewhere in this report, such as potential effects on mahinga mātaitai and taonga species, and cultural landscapes for

[21] https://www.theguardian.com/environment/ng-interactive/2021/oct/14/climate-change-happening-now-stats-graphs-maps-cop26?fbclid=IwAR2UPo8JQJu3eCcVLI_0A0FHqneKX-ri2nIhgfFkozdiYEq44guVTCiWjhA

example. Reinen-Hamill's description of overall cumulative effects of the full development option is as follows:

> *"The proposal is an extension of an existing consented port reclamation and the proposed reclamations are aligned with the existing face of the reclamation that minimises potential adverse effects on tidal flows and sediment transport. However, the proposed developments add to the increased occupation of the CMA in this area and increase the spatial extent of effects on the seabed and shoreline due to the increased occupation. The eastern extension has a more significant effect due to occupation of both the seabed and beach areas, and the effects on tidal currents and sediment transport extend eastward along the existing channel to the Refining NZ jetty and the more landward extents of Mair Bank. The western extension occupies more of the inlet channel and increases sheltering of the eastern side of Marsden Bay and this extension may result in modest changes to tidal currents and the potential for finer sediment accumulation, although this is limited due to the small quantities of suspended sediment in the water column.* ***Due to the occupation of the beach and seabed and changes to the currents and wave as a result of the full vision for growth the overall cumulative effect on coastal processes and public access is high."***

Conclusions – Environmental Effects

The actual and potential effects of the proposed reclamation and dredging and future port operations on marine ecology, our taonga species and their habitats, (including through coastal processes effects) will be significant and adverse, particularly in the context of an already degraded harbour. While no mitigation has been proposed as yet by the applicant, we cannot foresee that mitigation of the effects of permanent loss of benthic habitat, avifauna habitat and physical alteration to tahuna or mātaitai sites and dispersal pathways of kaimoana species will be possible. For marine mammals, mitigation is given cursory attention and limited to construction related effects, and mana whenua, kaitiaki are not identified as having any particular role. The CVA was clear that hapū should have a central role in any marine mammal research and monitoring, and we would anticipate that any marine mammal observers would be trained and resourced kaitiaki. Nonetheless, this would still not bridge the data gaps outlined above, including the effects of markedly increased shipping activity passing through Te Ākau Bream Bay and into the harbour. Patuharakeke consider the effects (including cumulative effects) of this proposal on our marine mammal taonga have not been accurately assessed and are potentially significant and adverse. With regard to air quality effects we have stressed that the assessment undertaken is localised and limited and does not adequately capture the full range of effects on Patuharakeke which are potentially more than minor. The lack of adequate consideration of climate change effects is a common theme throughout this report, and the literature is clear that Māori will be disproportionately affected, and by 2100,

the risks to ecosystems were likely to be severe, threatening Māori culture and wellbeing.[22] Given that the port reclamation is still going to be around in 2100 (not merely for a 35 year consent term) we certainly consider this to be an effect on Patuharakeke values that should be considered within the RMA decision-making framework for this application.

With regard to our Draft Hapū Strategic Plan, Pou Taiao (the environmental pillar) looks to make informed decisions based on our own hapū initiated research and with like-minded partners, to include tai tamariki and kaumātua in our mahi as we strive for environmental management - ki uta ki tai and to influence legislation, policies and plans to increase the health of our Taiao. The adverse environmental effects of this proposal are considered to be of a magnitude that does not align with the key goals and measures set out in this pou.

7.3 Cultural Effects

7.3.1 Cultural Landscapes and Seascapes and Sites of Significance to Tangata Whenua

The consents sought will not impact on any individual archaeological sites or wāhi tapu. However, Poupouwhenua is a significant ancestral site that together with Whangārei Te Rerenga Parāoa and the mosaic of sites identified in the CVA, forms our cultural landscape (for this report this term encompasses seascape as well). Moreover, it is considered a sacred spiritual pathway - rerenga wairua for our people (Renae Niha, pers comm. 25/7/21).

While Poupouwhenua Mātaitai is identified as a SSTW in the pRP maps, the mapping of this discrete site is more a function of the resources and capacity Patuharakeke have to participate in planning processes rather than an indication of the true breadth of our connections. Spatially Poupouwhenua, Te Koutu, Rauiri and Te Ara Kahika (the stretch from the wahapū or harbour mouth to One Tree Point for example) is a subset of our wider relationship to the harbour and Te Ākau/ Bream Bay. Cultural landscape values which are holistic, applying to entire area and interrelated ecologically culturally and spiritually are reinforced by the recent Environment Court decision relating to the SEA zoning adjacent to the west of Northport. Part of the SEA area changed to a Multi-Purpose Port Zone (MPPZ) in the Decisions Version of the Proposed Regional plan and the SEA designation was removed. The Royal Forest and Bird Protection Society (F&B) filed an appeal seeking the reinstatement of the SEA in this area and PTITB were a s274 party to the appeal. In paragraphs 13-15 of the decision[23], Judge Smith set out the following:

[22] https://www.stuff.co.nz/pou-tiaki/126750843/climate-change-impact-on-mori-wellbeing-and-culture-sobering-yet-insightful

[23] http://www.nzlii.org/cgi-bin/sinodisp/nz/cases/NZEnvC/2021/21.html?query=NZEnvC%20021

"[13] Ms Shaw appeared before us for Patuharakeke Te Iwi Trust Board and made submissions as to the relationship of tangata whenua in this particular area. She noted that the area in question is at the eastern extent of a large area of particular cultural significance to Patuharakeke, and in fact that one of their significant marae is adjacent to this coastal feature.

[14] It is clear that they actively maintain a relationship with this area, including around Marsden Point and One Tree Point, and that it constitutes part of their ancestral lands, waters, sites, wāhi tapu and other taonga. We note that there is a Treaty claim in respect of the area. We also acknowledge that, as the eastern extent of the harbour, it would have some particular values. The extensive cultural areas exist both to the east and the west of the 190ha of SEA. To the west of the SEA, the harbour edge is noted as an area of cultural significance. ***From a cultural perspective, the harbour edge forms part of the cloak between the shoreline and the harbour, which is unbroken for a number of kilometres along the southern edge of the harbour.*** *It is also reinforced by large sandbank areas comprising pipi and the like.*

[15] In our view, these parallel forms of value (cultural and ecological) coalesce in the values that are seen on the southern side of Whangārei harbour, and particularly around One Tree Point. Whilst the existing port is of great significance to the Northland economy, and it provides national necessities, including oil and freight, this is in the context of an area that has significant ecological values."

In response to the queries raised in the CVA regards the landscape assessments, Northport commissioned Stephen Brown (and Buildmedia) to undertake an assessment of further viewshafts suggested by Patuharakeke. Simulations from Piroa/Brynderwyn range and several locations in the kāinga; the elevated end of Takahiwai Road, Pirihi Road on Motupapa peninsula and Takahiwai Marae were created. For the most part, either distance or intervening relief or vegetation obscures views of potential changes to the cultural landscape as a result of the port expansion. However, simulation VP10d from Mr Browns addendum booklet indicates that the additional gantries and drydock facility in a raised position will clearly be visible from Takahiwai Road against a backdrop of maunga on the northern side of the harbour (Manaia, Otarakaiha, Matariki – eg. the stretch between Manaia, Aubrey to Mt Lion). This is without including the scenario suggested by Mr Farrow in his peer review, eg. a future expanded port running at optimal capacity with all berths and the dry dock occupied as well as the Refinery Jetty. Mr Farrow described this scenario thus; "collectively, these ships would form a "wall" to the harbour edge that is largely of comparable scale to the gantry cranes seen in the Buildmedia simulations."

The magnitude of these impacts is increased even further once you look at viewpoints such as those simulated in VP01, VP02, VP05, VP07 and VP08. These usefully illustrate views back

towards the port from Poupouwhenua Mātaitai, in front of Rauiri, Reotahi, Patangarahi and other locations in the harbour - perspectives mana whenua regularly experience whether it be as whānau recreating – swimming, fishing, walking, kaitiaki/tangata tiaki undertaking monitoring and so forth. We consider the "before and after" shots with and without the reclamations and port infrastructure (eg. gantry cranes etc) demonstrate a substantial change and a significant adverse visual effect on our viewshafts to, on and around our harbour, maunga, mātaitai and other sites that collectively make up our cultural landscape. Further, views are merely one component of the connection to cultural landscape of which there are other intangible connections (eg. as described in the CVA – in the context of whakapapa, pepeha, waiata, pūrākau, whakataukī and so on) as well as physical connections.

The harbour's geomorphology will continue to be artificially "reconstructed," to a bottleneck, narrowing the 'rerenga' - that physical and spiritual pathway, the 'riu' for our whales, so that Te Koutu and Reotahi are merely shouting distance apart. The beautiful white stretch of beach that we follow on our hīkoi to Poupouwhenua Mātaitai, while marred with the Refinery Jetty, is still passable and still treasured. Rob Greenaway's Recreation Assessment has shown that it is genuinely a lovely place to walk, play and fish. Patuharakeke look forward to amenity values (perhaps better described as cultural health and mauri from our perspective) improving even further as soon as next year when processing ceases at the refinery and noise and odour emissions decrease. It will be a step closer to how this place was prior to the establishment of the refinery in the days when it was a significant nohoanga site. Should the eastern reclamation proceed, this beach and the dunes behind it will be forever lost, and Patuharakeke whānau, kaitiaki/tangata tiaki and the community will make their way to the beach via a strip sandwiched between the security fences of two massive industrial complexes. We have yet to see any simulations of what this might look and feel like, but we imagine it will have little resemblance to the existing connection to this piece of coastline, with views to the water blocked by stacks of containers and the cries of gulls drowned by the clanging of cargo being unloaded.

Figures 5 & 6 Whānau enjoying the beach Christmas 2018 prior to Pou Rāhui unveiling ceremony.

To the west, the remaining beach in front of Rauiri is another spot where it is still nice to take your tamariki for a swim and a play or a fish off the fishing jetty, even if you can't get a feed of pipi anymore. The wedge of the proposed western reclamation extending at an angle in front of where the Papich Road walkway terminates at the wildlife refuge and the small stretch of beach will also transform this area and with the drydock in use it will not be a pleasant area to use for recreation, getting a kai, or any other customary activity.

Patuharakeke have never subscribed to the argument that the presence of existing development enables the downgrading of landscape effects. The industrialisation of Poupouwhenua has had immense impact on our cultural landscape, relationship and access to it, as well as mātauranga and other tikanga and values associated with it. However, it does not diminish the significance of this place to us and should be used to justify more development (see Policy 5.6.3 of HEMP). The argument that visual and landscape effects of the port expansion will be absorbed into the landward Refinery plant is now moot as the refinery will transition to a terminal facility next year and plans are being made for the decommissioning and dismantling of much of the plant (excluding storage tanks) over the next 3-10 year time horizon (Naomi James, pers. Comm, October 12th 2021). We note that Mr Farrow also raised this matter in his peer review.

Figure 7: Patuharakeke tamariki swimming at beach west of Northport (Papich Road Walkway) during Kura Taiao Noho January 2019

7.3.2 Takutai Moana, loss

Severance of the physical relationship to this cultural landscape, the beach, the dunes, the takutai moana is perhaps the most profound effect this proposal will have on mana whenua. This is twofold, firstly through the direct loss and alienation of the takutai moana that Patuharakeke never sold or relinquished their rangatiratanga over and secondly, through impeded access to sites and areas of significance. The Paparahi o Te Raki inquiry has heard that the hapū of Whangārei have been rendered virtually landless with around only 1% of the whenua still remaining in our collective ownership. At a hui held on 25th July 2021, Patuharakeke kaumatua recalled the stance taken by our hapū to the original Northland Port Corporation application back in the late 1990's. They were clear that "nothing has changed" and we should refuse to be dispossessed of even "one more acre" of our land whether it be on the whenua or in the moana.

The CVA provided background on the illegal confiscation of Poupouwhenua from its original owners, a central tenet of our claim before the Waitangi Tribunal. The timing of this application is regrettable because Whangārei hapū still await the Stage Two Paparahi o Te Raki report. It was expected to be out at the end of 2020 but unfortunately has not yet been completed. Patuharakeke and our whānaunga hapū expect some compelling findings from that report on the Whangārei Harbour specific aspects of the inquiry. The proposed port expansion will perpetuate and exacerbate the grievances interrogated in those proceedings.

We have previously highlighted the shortcomings of the 2011 MACA Act. The WAI2660 Marine and Coastal Area (Takutai Moana) Act Inquiry is a kaupapa inquiry (an inquiry on a nationally significant issue that affects Māori as a whole) currently before the Waitangi Tribunal addressing two main questions:

> a) To what extent, if at all, are the MACA Act and Crown policy and practice inconsistent with the Treaty in protecting the ability of Māori holders of customary marine and coastal area rights to assert and exercise those rights?, and
>
> b) Do the procedural arrangements and resources provided by the Crown under the MACA Act prejudicially affect Māori holders of customary marine and coastal area rights in Treaty terms when they seek recognition of their rights?

Question b was dealt with first at hearings held in 2019. Patuharakeke, Ngātiwai, Te Parawhau and others presented evidence at these proceedings relating to confusion of the MACA processes, the lack of consultation, the significant financial burden experienced with the Crown's inadequate funding regime for applicants, the Crown's lack of clear policies and procedures for funding, and the MACA regime itself creating dissension amongst applicants. The Tribunal's Stage 1 Report was released in June 2020 and concluded that many aspects of the Crown's procedural and resourcing regime fell well short of Treaty compliance, saying *"this is particularly regrettable given the context in which the Marine and Coastal Area (Takutai Moana) Act was developed– as a replacement for the controversial Foreshore and Seabed Act*

2004, which left such a damaging imprint on Māori– Crown relations and the social fabric of Aotearoa New Zealand."

Earlier in 2021, Barrister Sarah Shaw addressed the Tribunal as a witness for Ngātiwai Trust Board on behalf of Ngātiwai whānau, marae and hapū in Stage 2 of the Inquiry. She dealt with several questions, importantly, the impact of "accommodated activities" already in place or which may be granted in the future (section 64 MACA Act) on an RMA Permission Right held by customary marine title holders under the MACA Act; and, what the differences are between the rights available to resource consent holders under the RMA and the rights available to customary marine title holders under the MACA.[24] Regardless of the limitations of MACA, our interpretation of her evidence is that the lodging of this application will set in motion the permanent extinguishing of mana whenua's potential to have their Customary Marine Title (CMT) or Protected Customary Rights (PCR) recognised and in particular our ability to use the RMA permission right (MACA ss66-68). This is because the proposal will meet the definition of accommodated activity in (MACA s64)

> *Ms Shaw concludes; "In my opinion the impact of "accommodated activities", already in place or which may be granted in the future, on a RMA permission right held by CMT groups is:*
>
> *a. For consented activities:*
>
> *i. The RMA permission right is not able to be exercised until the coastal permit has reached the end of its consented term, which for most activities is a maximum of 35 years. A coastal permit that had a lengthy consenting path through the council and appeal to the Environment Court might not commence for several years after it was initially lodged with the council, with the term then running from commencement.*
>
> *ii. The coastal permit could be for an activity with long-term or largely irreversible physical effects, such as reclamation or sand mining. iii. Reclamation has no statutory maximum term. Unless one is stated in the conditions on the coastal permit, the coastal permit will never expire and the RMA permission right will never apply.*

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24 https://forms.justice.govt.nz/search/Documents/WT/wt_DOC_169463182/Wai%202660%2C%20B148.pdf

b. For accommodated infrastructure, I interpret sub-paragraph (a) of the definition of "associated operations" as providing for renewal, which means that the RMA permission right will never apply.

c. For deemed accommodated infrastructure, the Minister of Land Information is empowered to waive the CMT group's RMA permission right with or without compensation."

In paragraphs 262-275 of her evidence, Ms Shaw also compares the rights available to resource consent holders under the RMA and the rights available to CMT groups under the MACA. What is interesting here is that if hapū or iwi were to gain CMT at Poupouwhenua, MACA s60(1)(a) states that CMT provides an interest in land but does not include a right to alienate or otherwise dispose of any part of a CMT area. Northport on the other hand, through what is essentially a property right conferred by a resource consent, can do exactly that.

In summary then, Northport's application being lodged before CMT orders will mean that if it is approved, hapū and iwi MACA applicants are not able to exercise the right to decline permission *even if our orders come through before the consent is actually implemented.* Secondly, the reclamation area will be permanently removed from the moana that we have already asserted our claim over. MACA only applies below Mean High Water Springs (MHWS), and the reclaimed area will be above MHWS, so we cannot get CMT or PCR for moana that has been reclaimed. If what follows is the same as what occurred with the existing reclamation, hapū will have no rights to the "new" whenua that has been created. This has already borne out in the process we outlined in the CVA relating to the vesting of the title created by the current port reclamation. While the Minister of Conservation did not go so far as to vest title, for all intents and purposes the resource consents held, and particularly the 105-year lease to Northport, is a property right.

7.3.3 Ahurea/Patuharakeketanga

The loss of land and access to sites has numerous ensuing impacts. Notably the loss of te reo me ona tikanga, mātauranga, impacts on mauri, our obligations as kaitiaki, and mana.

Mauri

Effects referred to above, such as removal of sand out of the system, the loss of benthic community, sediment plumes, and any impacts on tohora and parāoa (whales), for example, contribute to an overall effect on the mauri and cultural health of the harbour/ecosytem as a whole. At hui participants emphasized that tupuna referred to the harbour as an entity, looked upon in much the same way as a human being. Tāngata whenua measure effects on the harbour in the context of past and present effects, as well as the future effects anticipated as a result of the RNZ proposal. The mauri of Whangārei Te Rerenga Parāoa has been seriously diminished as a result of decades of management decisions that tāngata whenua had no part in. From the

late 1950's onwards, cement processing fines were dumped into the harbour at Portland, sediment dredged from the main channel was dumped on Snake Bank and at Takahiwai, agricultural run-off has become a major issue as were historical failures of the city's sewage treatment plant that saw untreated discharges entering the harbour regularly and on into the last decade. The Marsden Cove Marina development and reclamation of Northport berths along with existing and future refinery consents, fisheries pressure and future climate change impacts all add to this mix of past, present and future stressors on the harbour.

Mana

As kaitiaki of all natural resources within the rohe, tāngata whenua have a cultural and spiritual responsibility to ensure the mauri of these resources/taonga tuku iho is maintained, protected and enhanced. Due to our inability to manage our own taonga the mauri has been diminished. This has flow on impacts to our mana. For example, our mana as tāngata whenua, is affected by our inability to practice manaakitanga to gather kai moana for the table both for our families and manuhiri (something the people of Whangārei Te Rerenga Parāoa were formerly renowned for).

Mana is inter-generational. Decisions that were made during the time of previous generations of kaumātua (whether they were able to participate in their making or not) have caused long-term adverse effects on the ecosystem of the Whangārei Harbour and inevitably this has led to adverse consequences for the mana of this generation of kaumātua. Constraints to our participation today will affect the next generation and continue to transfer onwards to our future tamariki and mokopuna.

Kaitiakitanga

In the CVA we discussed our relationship to the site through Kaitiakitanga and historical impacts of colonisation including the severance of connection to whenua and moana which erodes the knowledge (mātauranga) and the practice (tikanga) of kaitiakitanga in relation to resources. The ability to tiaki the taiao/environment has been a key focus of PTITB for decades and in recent years we have made real inroads in re-establishing connections through revitalisation of tikanga, tirotiro (observation/monitoring) and contemporary expression of kaitiakitanga through participating in RMA processes and undertaking a variety of projects with councils, DOC, CRI's and so forth.

For Patuharakeke, kaitiakitanga is also the practice of resistance or opposition. Like other kupu Māori that have been subsumed into legislation, these kupu become watered down with decision-makers apprehending that mitigation measures involving mana whenua in monitoring or restoration somehow achieve the true intent of the word. It is a conundrum we refer to as the "mitigation dilemma."[25] Of course, if Northport eventually funds marine mammal observer

[25] See https://www.nzaia.org.nz/juliane-chetham.html

training or creates a harbour restoration fund, Patuharakeke will fully expect to be a party to these actions. But that is not kaitiakitanga. It is a mere trace of what this relationship actually means, it is an obligation we are born with that passes on to our tamariki and mokopuna who follow us, and it can be a heavy burden to bear.

Conclusions – Cultural Effects

In our opinion the potential effects of the Northport's proposed reclamation of 23 ha and dredging of at least 23 ha of Whangārei Te Rerenga Parāoa are high and significantly adverse in terms of cultural landscapes, seascapes and customary access and rights to the Takutai Moana. Further, it will diminish our Patuharakeketanga, ahurea as it will not provide for te reo Māori me ona tikanga, and cultural and spiritual wellbeing. The proposed dredging will continue to erode the mauri of the harbour, and subsequently affect values such as kaitiakitanga, mātauranga māori, and mana. These direct and cumulative effects span the past, present and future and are deemed by Patuharakeke to be significant adverse effects that are unable be mitigated. The outcomes of the expansion do not align to the cultural "safeguards" of ss 6(e), 6(g), 7(a) and 8 of the RMA, namely our relationship to our ancestral land, water, sites and other taonga will not be provided for (or able to be recognised if this proceeds eg. MACA determination for example); kaitiakitanga will be compromised rather than enhanced and inconsistent with Treaty principles such as rangatiratanga, partnership and the principle of mutual benefit. In fact, to truly comply would be to ensure immediate representation of ahi kā on Northport (or MMH) governance structure and agreement that any new title created would lie with mana whenua.

With regard to our Draft Hapū Strategic Plan, Pou Ahurea (our cultural pillar) sets out goals and measures in relation to maintaining tikanga, the presence of a strong and intergenerational taumata and that te reo, waiata, karakia, haka, whakairo etc (our narratives, interpretation) is embedded in our people and rohe. Pou Mātauranga (education) and Pou Tai Tamarikitanga (Succession) are also underpinned by building language, culture and identity, environmental management ki uta – ki tai and to support the expression, innovation and delivery of the next generations to apply their approach to the future of their rohe. The adverse cultural effects anticipate from the port expansion are of such a magnitude that it is difficult to see how the development will support these pou.

7.4 Social Effects

7.4.1 Hauora/Health

Hauora/Health is one of the Strategic Pou/pillars of the Draft Patuharakeke Strategic Plan. A number of potential social effects, including on the health of our people, were identified at various hui, some of which are alluded to elsewhere in this report as they cross over with environmental and cultural effects. For example, the health of Whangārei Te Rerenga Parāoa and Te Ākau Bream Bay and the health of our people are considered to be interconnected and inseparable. The cumulative effects of development on these resources impact the spiritual and physical health of mana whenua.

Noise

Noise effects could equally be considered as cultural effects or ecological effects, however, we also see them as a subset of hauora. Air Quality has been discussed elsewhere but similarly, has impacts on the hauora of our people. We note the Marshall Day assessment finds that the proposed activity will generate effects that are more than minor, however mitigation is focused on private houses. There appears to be no consideration of noise effects on community, whānau, kaitiaki, and so forth using what remains of the beach and reserve at Marsden Bay and Te Koutu whether it be recreationally or for customary purposes.

Transport/Traffic Effects

WSP's analysis focuses almost entirely on traffic effects that are immediate to the port footprint. Traffic effects were a serious concern identified back in 1997 at the time of the original NPC hearings and took a much broader view of the wider transport network. Tangata whenua were concerned about road safety matters in the face of greatly increased log truck and other heavy traffic movements. We recall that Port Marsden Highway's construction was a requirement of the consent but at that time the community was assured that the rail link to the port would also be in play. For Patuharakeke, the rail spur was considered one of the only redeeming features of the proposal however it never came to pass.

The issue of log truck traffic and its disproportionate impact on tangata whenua was raised in a Working party hui participants raised the issue of log trucks on Otaika Valley Road and other roads that adjoin Māori Freehold land blocks, the damage they do to the roads and safety concerns. Adverse effects are experienced along the routes between the timber source and the port. This issue is a significant one for Māori communities throughout Northland and other health impacts related to the generation of PM10 dust/particulates exceeding National Environmental Standards for air quality are also a theme.

In 2017, Tai Tokerau Māori and Council Working Party (TTMAC) members involved in workshops to develop the Proposed Regional Plan (pRP) for Northland advocated for measures to better manage the effects of road dust for communities like Pipiwai, however Council

proceeded with rules to treat discharges to air generated by vehicles as a permitted activity.[26] The Trust's submission on the pRP stated;

"PTB do not support rule C.7.2.5 Discharges to air from the use of public roads by motor vehicles as a permitted activity. Council have been made aware of the effects on health and wellbeing of marae and communities on unsealed roads. The Plan requires development of stronger provisions on air quality that provide for the maintenance, and the enhancement where it is degraded, of Northland's ambient air quality, and the avoidance, mitigation or remediation of any adverse effects on the environment of localised discharges into air. This includes the Marsden Point Airshed."

Ultimately the regulatory approach was deemed too costly for Councils to implement and the issue of health impacts associated with unsealed roads for Māori communities in Tai Tokerau remains unresolved.

The issue of safety on SH1 and particularly Whangārei to Port Marsden Highway has been a focus for central and local government agencies for several years now and an ongoing source of apprehension for whānau travelling it daily. Over 100 people have died or been seriously injured between 2015-2020 between Whangārei and Te Hana, with the worst section being between Whangārei and the Port Marsden turn-off. PTITB and Te Parawhau have engaged with Waka Kotahi in discussions on various roading programmes on of safety improvements and an upgraded 22km four-lane corridor. These priorities have changed repeatedly subject to political and economic forces and the latest iteration is restricted to addressing targeted safety improvements and the rail spur rather than four-laning.[27]

When port congestion issues affected supply chains following Covid19 last year Northport unloaded it's largest container ship ever, the Constantinos P, that was unable to proceed through Ports of Auckland. This resulted in a massive increase in of almost 2700 return truck trips (in convoys of a dozen per hour) between Marsden Point and Auckland in the lead up to Christmas. In partnership with Worksafe, Police ran a checkpoint operation finding almost 20% of the convoy vehicles were not roadworthy.[28] We touched on the arguments about the future

[26] See section 1.4 of s32 report at https://www.nrc.govt.nz/media/xhdfzb3r/section32proposedregionalplanseptember2017finalweb.pdf

[27] https://www.nzta.govt.nz/projects/sh1-whangarei-to-port-marsden-highway/ https://www.nzta.govt.nz/assets/planning-and-investment/docs/nzup/nzup-factsheet-northland.pdf

[28] https://www.stuff.co.nz/business/300180857/call-for-rail-north-of-auckland-as- https://www.nzherald.co.nz/business/warning-for-motorists-truck-convoy-carrying-christmas-cargo-driving-to-auckland/3HE55SCDJCLB6PENHLF2CVEELI/ https://www.stuff.co.nz/business/300175069/safety-fears-over-2700-truck-trips-from-giant-container-ship-in-northland-to-auckland https://www.stuff.co.nz/national/300184548/one-in-five-trucks-stopped-in-northland-police-sting-not-roadworthy

of POAL and decarbonisation issues earlier in our CVA[29] but this cargo operation served to illustrate the problems Northport will face in terms of greenhouse gas emissions (by virtue of its location). Some projections calculate moving the port to Whangārei would result in a 700-800 percent increase in greenhouse gas emissions when compared to current cargo handling and movement operations of the Port of Auckland.[30]

With regard to pedestrian and cycle routes the TIA notes there are no specific cycle facilities on the key roads within the vicinity of Marsden Point and PMH and given the rural environment of PMH and the 100km/h speed limit with a high volume of heavy vehicles, it is not suitable for either pedestrians or cyclists. This was not always the case and in the past many people rode and walked around One Tree Point and Ruakākā's roads. The current high speed and heavy vehicle environment has been created, at least in part, by Northport and will be further exacerbated by its expansion. The TIA considers effects are generally minor and anticipated, intersections can cope or be upgraded over time, trucks can be scheduled to operate at different times of day or over the weekend. It probably all seems relatively benign to the reader, but we know that the fatal crash that occurred at the Rama Rd/SH15 intersection in 2018 involved a father and his young son from Marsden Village. We know that in April of this year one of our own Patuharakeke Taitamariki was almost killed cycling to work at Allis Bloy Place along Marsden Point Road. Our whānau have told us their nights are commonly disturbed by the sound of trucks travelling at speed along Marsden Point Road most nights after 3am (Colin Newton, pers. Comm, 3rd June 2021).

If we are genuinely thinking about a more sustainable future, we should be aiming to restore opportunities for our community to walk or cycle to work or school, not only to reduce carbon emissions and road congestion and maintenance costs, but social/ health and wellbeing outcomes. We would recommend as a first step that Northport join the newly formed Ruakākā/One Tree Point Cycleway Focus Group and find ways to support this initiative.

Conclusions – Social Effects

For Patuharakeke, the construction of Port and the Port Marsden Highway/ SH15 has enabled and promoted substantial industrial, commercial and residential growth in our rohe, however, this growth has been ad hoc and has not been accompanied by holistic infrastructure planning and future proofing. In our eyes, the growth has driven increased pressure on natural resources and the social, economic and cultural wellbeing of Patuharakeke has not improved as a result.

[29] see section 3.3 Cultural Values Assessment Report: 'Vision for Growth' Masterplan for the Expansion of Northport (April 2020).

[30] https://www.auckland.ac.nz/en/news/2021/04/09/moving-auckland-port-environmental-disaster.html

Air and noise emissions impact on the experiential qualities of the cultural landscape at Poupouwhenua and are experienced throughout the harbour and kāinga. Developments like Marsden Cove have further alienated us from our harbour and its resources, the inability of the Ruakākā Wastewater Treatment Plant to cope with the growth was a catalyst for a consent for an ocean outfall in Bream Bay and our local highways and roads are less and less safe for the community. There are numerous examples like these in our rohe.

For Patuharakeke, the potential effects on our social wellbeing, including physical (hauora) and cultural health (mauri ora) along with values such as amenity, consenting to expansion of Northport will have more than minor effects. Mitigation has not been offered for noise effects beyond residential receptors, transport effects of the current operations on mana whenua are understood but in relation to the expansion the assessment is limited and therefore unclear.

With regard to our Draft Hapū Strategic Plan, Pou Hauora (our whānau health pillar), Pou Mātauranga (education) and Pou Tai Tamariki-tanga (succession) are potentially affected by the social effects of this proposal. These pou support initiatives that improve the health and wellbeing of Patuharakeke whānau and the community, particularly in relation to creating a hapū led housing strategy, education, training services and healthcare services for and by our whānau. They are also underpinned by concepts such as rongoā revitalisation, taha wairua, tamariki and kaumātua wellbeing and developing and nurturing māra kai and mahinga mātaitai. These goals and measures reinforce what we have said earlier, that the hapū view social wellbeing as firmly connected to and requiring wellness across other wellbeings such as environmental and cultural wellbeings to be achieved. Again, there is nothing in the technical information we have seen from the applicant that indicates these pou will be supported.

7.5 Economic Effects

At the outset of this CEA, we have recommended to Northport that they delay lodgement of this suite of applications at this time. Our reasons for this recommending this include our concerns over the economic analysis supplied and the potential for economic effects, and we noted:

The evidence provided, in particular the economic assessments, does not establish the case that there is a demonstrated need to further expand the port infrastructure beyond its existing consents to meet the reasonably foreseeable regional need and as such, the proposed expansion is not the most efficient and effective use of regional resources. Some economic modelling is presented that suggests that there may be a case for greater expansion than is currently consented in the event that it is confirmed that Northport is Nationally Strategic Infrastructure. Determination of this point, while it may be attractive to Northport, is largely beyond Northport's control, being the subject of current national assessment and consultation

and the applicants should properly wait the outcome of the national process to determine whether Northport is considered regionally or nationally significant.

A large number of core parameters and assumptions have changed since the VFG was first promoted. For example, there is no longer any suggestion that the NZ Navy is intending to relocate to Whangārei and the Minister of Defence has confirmed that there was never any suggestion of the Aotearoa being dry docked or serviced at Marsden Point. The previous central administration's advocacy for a relocation of part of POAL to Northport has evaporated. The neighbouring activities of RNZ have gone from predicted expansion of refining and relates activities three years ago to a commitment to retire and dismantle all refining activity, dramatically downsizing its workforce, greatly reducing its operational footprint and changing the emissions profile of the area. The proposed 4-lane road highway has not been approved for funding while some rail investment has been signalled. NZ is still in a global pandemic with resultant dramatic and unforeseen impact on global and national logistics. The NZ Climate Change Commission has released its first findings signalling major changes in national energy use, national transport and logistic chains and ultimately affecting the overall economy. None of these major shifts in Northport's development scenario are adequately reflected in the current VFG and supporting evidence which remains focused on open-ended growth and not necessarily sustainability or the needs of a decarbonizing economy.

The economic evidence and, to a large extent, the business case underlying the expansion, is based on an assumption that Northport's role in the national economy needs to be greater than just a regionally significant asset, that is to say it has national interest. It is largely argued that a larger port at Poupouwhenua is needed, not to accommodate expanding regional trade but to take the overspill from an expanding North Auckland economy. The modelling also shows the vast portion of economic benefit from this expansion will also not be to the regional economy but will flow south.

As we have attempted to point out to Northport, and to its principal shareholder (NRC), whether Northport would have national or regional status is not something that Northport gets to decide. There is currently a national planning process in place in regard the future strategic direction of our national logistic chain and decisions over the future size and function for Northport should follow that process, not pre-empt it. We appreciate Northport's confidence that growth is the preferred and best future solution and that supporting national growth is a core objective. However, the evidence submitted to date in terms of the two economic reports, does not provide real evidence to support this. We remain concerned as to whether this proposal is based on determining the best long-term vision for sustainability for Te Tai Tokerau and continue to ask what the real costs of such expansion are and whose interests are being best served by it. Unfortunately, to date, we have yet to see a full cost- benefit analysis and we understand that the costs for undertaking such an exercise are considered beyond budget for this application.

As we have also stated previously, "the development record since the Poupouwhenua block was taken out of hapū ownership shows an uneven and chequered record, a boom/bust approach to heavy industrial development and a legacy of a degrading harbour mauri". Each new rendition of this cycle starts with an influx of new investment, workers and careers. And when each fails, there is a fresh round of redundancies and retrenchment. Each time, more of our whānau shrug their shoulders and pack their bags. The statistics depressingly show that it is tangata whenua who are generally the most disadvantaged whenever there is an economic cost to pay and the last in the queue when there is economic benefit accrued. Historically, in previous times of economic downturn, Māori received unemployment benefit at lower rates than Pakeha society[31] – but as kaumatua recall, lower incomes did not necessarily result in such marked disparities as we see now, because we could survive on our natural resources, in particular our kaimoana. Now in times of hardship, while there may be less institutional discrimination, we have even less whenua and natural resources to fall back on.

As we previously commented in neighbouring development proposals, for us this highlights that these economic assessments do not factor in non-market values including ecosystem services and cultural values. Earlier developmental and political "trade-offs" that occurred for reclamation and dredging in Whangārei Te Rerenga Parāoa never included data or estimations of the financial loss to mana whenua and the community of diminished recreational and customary fisheries, the inability to benefit from sale or lease of land confiscated from mana whenua and numerous other values, let alone spiritual, existential matters. Essentially our position is that an integrated, holistic modelling approach is required to fully assess proposals such as this and a triple bottom line method of financial auditing and reporting with the addition of a cultural component should ideally be utilised.[32] There are a number of experts in Aotearoa New Zealand that are now incorporating such methods into assessments of projects, mitigation, and interventions including specific inclusion of cultural data and valuations (Calum Revfem, Proxima Global & Richard Yao, Scion. Pers. comm. March 2020).

PTITB have often been critical of our experience as mana whenua over the last half century of industry at Poupouwhenua where we have not shared in the economic benefits gained from past development of the area. We have yet to have a detailed discussion as to opportunities to explore pathways for training, education and employment should this development progress. Such korero should be genuine and address meaningful and mutually beneficial partnership opportunities at multiple levels with Patuharakeke as mana whenua of this area.

Dr Nuttall's review refers to the lack of any alternative economic narrative to the endless growth one model used. We note the just released Forsyth Barr report into the future of forestry and

[31] https://www.nzinitiative.org.nz/reports-and-media/reports/te-oranga-o-te-iwi-maori-working-paper-5-maori-and-welfare/document/86

[32] ie. https://www.globalreporting.org/standards/getting-started-with-the-gri-standards/

in particular log exports[33] which picks up on many of the issues raised by Dr Nuttall. Overall, nationally log experts are projected to drop in the next decade - as already noted in the Northport evidence for the regional log harvest. But rather than predicting longer term future expansion of raw log harvest, the report notes;

> *"the use of wood domestically is undergoing a transformation through the use of trees to sequester carbon, power boilers and as a low carbon building material alternative … another wild card is the government's plan to change the industry towards more domestic processing and higher value processed products …. and a shift to net-zero emissions will further change industry dynamics as moves to biofuels and carbon sequestering may spur more planting and higher prices, but not for the export trade as it currently operates."*

Similar advice is now coming out of both MBIE and Climate Commission work. We fully expect NZ to announce far more ambitious climate related targets in the near future which will have large effects on the future share of our long term economy and our internationally facing trade. However, this application is being progressed in the absence of any real analysis of these factors.

In Patuharakeke's opinion, the first priority for Northport is to assess the future regional need for a major port and to plan for that. What is the best port for our future? This proposal asks what is the biggest port what we can use for national benefit, with a hope for trickle down or side flow of benefit regionally. If the majority of regional use is projected to be a continuation of logs and this market is likely to undergo fundamental change in the lifetime of the consents, is there a need for much expanded facility?

A similar situation exists with regard to the projected growth from the cruise liner industry, which Northport is 'confident' will rebound. In February 2021 the PCE published a follow up report on the environmental consequences of growth in tourism[34] and stated, with respect to the disruption to international tourism caused by Covid-19:

> *"While the prospects of vaccines allowing economies and societies to function again look promising, it seems increasingly clear that a return to something approaching normality will not be swift. Whereas past shocks such as the 9/11 terrorist attack, the severe acute respiratory syndrome (SARS) outbreak, or the global financial crisis saw visitor arrivals return to previous levels in less than a year, that seems unlikely to be repeated. Elements*

[33] https://www.rnz.co.nz/news/business/454262/log-exports-to-peak-before-dropping-more-than-a-third-within-decade-forsyth-barr

[34] https://www.pce.parliament.nz/media/197087/report-not-100-but-four-steps-closer-to-sustainable-tourism-pdf-24mb.pdf

of the industry that rely on a resumption of international tourism face an extremely challenging near term".

Which raises the question, why press ahead with policy recommendations designed to manage the pressures of growth when the industry faces an unprecedented contraction of existential proportions? There are two reasons for doing so. In the first place, what Aotearoa has to offer is as special and attractive as it was before the pandemic. In a world facing ongoing environmental degradation, New Zealand's relatively unspoilt natural assets coupled with the amenities of a developed country make our tourism offering if anything more attractive. But there is a more compelling and immediate reason: the discontinuity created by Covid-19 offers an opportunity to address some of the longstanding environmental and social issues associated with New Zealand's tourism industry. There is broad support for the idea that protecting tourism livelihoods in the short term should not morph into a slow but inexorable return to the status quo in the long term.

The PCE's recommendations with respect to infrastructure (in terms of future central government spending) are:

"As tourism re-emerges in the wake of Covid-19, I recommend that any future central government spending on tourism-related infrastructure should be made conditional on two things:

- *That it is consistent with the sort of tourism residents, mana whenua and local businesses want in their midst. This means developing a genuine, community-owned destination management plan – as distinct from a destination marketing plan.*
- *That any infrastructure that is subsidised meets high environmental performance standards."*

While Northport may be confident of a return to pre-Covid tourism industry, including increasing numbers of cruise liners, this view is not universally shared. Again, we suggest taking the time to fully evaluate the lessons from the pandemic and the considerations of what changes a rapidly decarbonising global economy will have on the future needs of a fully sustainable regionally significant port infrastructure.

Conclusions – Economic Effects

Insufficient analysis and evidence is provided to determine the economic effects (whether positive or adverse) of this proposal on Patuharakeke and its taonga. From what we have seen we conclude economic benefits to the hapū will not outweigh the externalities particularly in terms of cultural and ecological effects. With regard to our Draft Hapū Strategic Plan, Pou Whaioranga (our economic pillar), focuses on developing opportunities for supporting Patuharakeke economic initiatives, with goals and measures framed around utilising our

whenua, sustainable ventures e.g. ecotourism, increasing financial literacy and governance and management capacity and understanding and developing the skills of our whānau / hapū. We do not have clarity at this stage as to how this proposal will specifically align to these goals if at all.

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10. Glossary of Māori terms

Ahikā - continuous occupation by a group
Ahurea - culture, cultural identity
Atua - God, deities
Haka - ceremonial Māori dance or challenge
Hapū - sub-tribe, holding traditional, ultimate authority for their people, original signatories to Te Tiriti o Waitangi/Treaty of Waitangi/TOW
Harakeke – flax
Hau Kāinga - local people of a marae, home people.
Hi inga ika - fishing grounds (also called tauranga ika)
Hīkoi - march, walk
Hui - gather, meet.
Hui-ā-hapū - gathering of the hapū
Hūai - Cockle, *Austrovenus stutchburyi*
Ihe - piper, *Hyporhamphus ihi*
Ika - fish
Iwi - tribe
Kai - food
Kaimoana - seafood
Kōrero - to talk, or discuss
Kāinga - home, village, settlement
Kāhui kaumātua - group of tribal elders, governance group that oversees hapū matters
Kaitiaki - iwi, hapū or whānau group with the responsibility of kaitiakitanga; also with reference to the Customary Fishing Regulations 1998 = individuals who can authorise customary fishing
Kaitiakitanga - guardianship, stewardship
Kaitiaki rōpū - group of kaitiaki
Kanae - grey mullet, *Mugil cephalus*
Kanohi ki te kanohi - face to face
Karakia - prayer, incantation
Kaupapa - theme, policy
Kaumātua - elders
Kina - sea urchin, *Evechinus chloroticus*
Pātiki - flounder, *Rhombosolea Plebeia*
Pepeha - tribal saying locating yourself in the wider cultural landscape
Pēwhairangi - Bay of Islands
Piharau - Lamprey, *Petromyzontiformes*
Pioke - Dogfish, *Squalus acanthias*
Pīngao - golden sand sedge, *Desmoschoenus spiralis*
Pipi - infaunal bivalve, *Paphies australis*
Pou - pillar, landmark, support
Pou Hauora – Whānau health
Pou Taiao – Environmental
Pou Whaioranga – Economic
Pou Ahurea - Culture
Pou Mātauranga - Educational
Pou Tai Tamariki-tanga – Succession
Poupouwhenua mātaitai - kaimoana gathering site located at the entrance of Whangārei Harbour, also known as Mair and Marsden Banks
Pūpū - cats eye, *Turbo smaragdus*
Pūrākau - myth, ancient legend, story
Rangatira - chief, leader
Rangatiratanga - chieftainship; sovereignty (includes right to self-determination)
Rauiri – Blacksmith's creek
Rāhui - restriction or control on an area
Rerenga - flowing, flight, voyage, journey
Rerenga wairua - fleeing, flying spirits
Rongoā - Māori traditional healing and medicinal plants
Rohe - territorial boundary, district, region
Rohe moana - territorial waters
Riu - passageway
Taiao - Environment
Tai Tamariki - youth, children
Tamariki - young children
Takutai moana – Foreshore and seabed

Ki uta ki tai - from mountains to sea
Kōiwi tangata - human bones
Kōkota - infaunal shellfish, *Paphies australis*
Kōpua Mangō - shark fishing grounds
Kōura - crayfish, *Jasus edwardsii,*
Kororā - little penguin, *Eudyptula minor*
Kuaka - Godwit, *Limosa lapponica*
Kuia - elderly woman, female elder.
Kupu - word, saying
Kūtai - mussel, *Perna canaliculus*
Mahi - work
Mahinga kai - food and other resources, and the areas they are sourced from
Mahinga Mātaitai - customary seafood gathering site, shellfish bed
Mana whenua - territorial rights, power associated with possession and occupation of tribal land
Mana - authority, prestige, respect, dignity, influence
Manaaki - to take care of
Manaakitanga - hospitality, kindness, caring (for people)
Manaia - Eponymous ancestor and Mountain
Manawhenua - those who have customary authority over a traditional area
Manuhiri - visitors, guests
Manu - bird, any winged creature including bats, cicadas, butterflies, etc.
Manu Ōi - Shearwaters/Mutton Birds, *Puffinus tenuirostris*
Matariki - Mt Lion
Maramataka - Māori Lunar Calendar
Moana - Ocean, sea
Māori - Indigenous people of New Zealand
Mātauranga - knowledge, body of knowledge
Mātauranga Māori - Māori epistemologies, traditional knowledge systems
Maunga - mountain
Mauri - the essential life force of all things, spiritual essence
Mokopuna - grandchildren
Nohoanga - seasonal occupation sites, places
Tangaroa - God of the sea
Tangata tiaki - human caretakers
Tangata whenua – indigenous people of the land
Taniwha kaitiaki - supernatural beings valued as a protective guardians
Taonga - treasures
Taonga tuku iho - heirloom, treasures passed down, cultural property
Tāmure - snapper, *Chrysophrys auratus*
Taumata - a term used to describe a group of learned and distinguished knowledge holders of a tribe.
Tauranga waka - canoe landing site
Taha wairua - spiritual wellbeing
Tāhuna - sandbank
Te Tai Tokerau - Northland, NZ
Te Koutu - One Tree Point
Te Ao Māori - Māori world view
Te Ākau - Bream Bay
Te Whara - Bream Head
Te Tini ā Tangaroa - The Ministry of Fisheries
Tiaki - to look after, protect
Tirotiro - to inspect, observe
Tikanga - Māori customary values and practices
Tio - native rock oyster, *Saccostrea glomerata*
Tipa - scallop, Pecten novaezelandiae
Tohorā - marine mammals, whales
Tohunga - Traditional Māori experts imbued with certain capabilities, characteristics entrenched in Te Ao Māori (Māori world view)
Tuatua - infaunal bivalve, Paphies subtriangulata
Tūkaiaia pūrākau - a story about the Tūkaiaia, a kaitiaki of Ngātiwai and its significance to the iwi
Tūāhu kōhatu – marker stone
Tuna - eel, *Anguilla dieffenbachii* and *Anguilla australis*
Tūpuna - ancestors, grandparents
Turangawaewae - a person's right to stand on particular land and be heard on matters affecting that place and their relationship to it.
Urupā - burial site
Ūkaipō - nursery, origin, source of sustenance

where food is gathered
Ngātiwai - Māori iwi of the east coast of the Northland Region of New Zealand
Patuharakeketanga - customs unique to Patuharakeke
Papamoana - sea bed, ocean floor
Pakahā - Fluttering Shearwater
Parāoa - Sperm Whale
Pā - fortified settlement site
Pā harakeke - flax garden
Pātaka kai - pantry, food storage area
Pāpaka - crab
Pārera - Grey duck
Ingoa wāhi - place names
Waiana kōiwi - underwater burial caves, ledges
Wairua - spirit
Waka - canoe
Wahapū - mouth of a harbour, or estuary
Waiata - song
Wāhi taonga - places and things that are treasured and valued
Wāhi tapu - places and things that are sacred
Wānanga - seminar, workshop
Whakapapa - genealogy, cultural identity
Whakataukī - proverb where the author is known
Whanaunga - relative, kin
Whare - house, building
Whare kai - dining hall
Whakairo - carving
Whare tūpuna - ancestral meeting house
Whānau - family
Whangārei Te Rerenga Parāoa – Whangārei Harbour, Gathering place of Whales, Chiefs
Whenua - land

11. Appendices

Appendix 1: CVA

https://visionforgrowth.co.nz/resources/documents/PTB-CVA-Northport-VFG-Final-150420-compressed.pdf

Appendix 2: Independent Technical Review

Northport VFG resource consent application – Technical Reports Review, September 2021

Tena koe Juliane,

Scope of Work

2. Patuharakeke RMU have requested we review the technical reports provided by various Northport Ltd (NPL) consultants and provided on their Vision for Growth/documents website.

3. Specifically, you have asked us to concentrate on the aspects in the reports of concern to or potentially impacting Patuharakeke's interests and, where appropriate, recommend additional or clarifying information. Finally, you have asked us to make comment where we consider that the activities may lead to potential or actual cultural effects.

4. We have taken Patuharakeke's interests to be those identified in the *Patuharakeke Hapu Environmental Management Plan* (HEMP) and in the consent specific Cultural Values Assessment. Likewise, we have taken cultural effects to be broadly interpreted, as discussed extensively in both documents.

5. Our review has comprised:

    a. Initial interviews with RMU Patuharakeke (23/24 February);
    b. An initial meeting with relevant NRC staff (26 February)
    c. Attending Northport's VFG workshop (15 May)
    d. Desktop review of reports as they came available on the website and the Economic Assessment provided separately (30 May);
    e. Consideration of revised reports (in particular economic, traffic, marine mammals) and NPL response to matters raised since the 30 May draft and available at the date of this review[35].

6. This report completes the review. Responses in italics have been made to various of the matters raised by NPL in reply (and marked in bold below).

Generic Comments

[35] Some documents, in particular the T&T coastal process and the economic report, appear still to be in draft and unfinished form.

7. A broad suite of reports have been prepared and these are reviewed as below. Five common shortcomings were identified as generic to many of the reports:

    a. Temporal baselines, where referred to, were generally short-term and recent - at best incorporating no more than two or three decades of data. The ecology related reports in particular are contextualised with reference to change only over recent time.

    NPL response: Northport recognises the inherent disconnect between the RMA prescribed baseline (the state of the environment at the time the consent is applied for) and the whānau/hapu view of the appropriate baseline. However, within the consenting process we are obliged to work within the prescribed RMA framework. Northport appreciate that the inherent disconnect remains and irrespective of the RMA framework, the cultural effects relevant to the natural baseline will still occur. We suggest that there are opportunities to address these 'out of RMA scope' effects outside (but parallel to) the consenting process.

    We are unsure as to why NPL contend that consideration of the effects of their proposed activity on the environment are constrained by a temporal baseline that only commences on lodgement.

    In any regard s.3 RMA refers to (b) any temporary or permanent effect; and (c) any past, present, or future effect; and (d) any cumulative effect which arises over time or in combination with other effects. Ss6(e) and 7(a) speak to relationships that predate Te Tiriti and s.8 speaks to a relationship of more than 180 years to which Patuharakeke is still waiting the Waitangi Tribunal's decisions and/or Crown action on the matter of how their ownership of the site under question was alienated and their status in the decision-making over the land and its resources changed. As these relationships are well recognised in the RMA, the associated temporal baselines would appear to be well "within scope".

    NPL is proposing to apply for consents to expand a major existing industrial activity, an international port and regionally significant infrastructure which was first consented in 1999, through permanent modification via reclamation of an area of land and water that is of extremely high importance to Patuharakeke's past, present and future.

    In the T&T July 2021 Coastal Processes report, considerable space is used to contextualise the sediment movement within geological time to explain the evolving change in the sediment movements at the time of application and as the basis for assessing projected effects in the future and reports going back over many decades are reviewed. In regards the ecological assessments in particular, the reports record an overall finding from assessing recent data that the harbour ecology is "relatively healthy" and in

'good' ecological health. There would appear to be a number of verifiable reports and studies, including work done by the same researcher agency used by NPL, for related work at this site in the 1960s and 1980s, which would seem to show a clearly discernible trend line of declining ecological health (possibly what NPL's refers to a "natural baseline" above) given the apparent changes in key cultural indicator species over the past century and particularly in the past generation. This declining trend line is not a 'baseline' in the sense that it is not horizontal. Since the 1960's there has been a marked increase in the industrialisation and urbanisation of the lower harbour, a trend this proposal seeks to maintain with projected ever-increasing growth over time. We are not implying here what the correlation is between these two trend lines, if any, but simply pointing out that the analysis is not available if the data is restricted to that currently being used.

b. Geographical baselines considered were generally tightly constrained to the immediate location of the activity and not placed in their context within the harbour catchment.

The experts have used their expertise and judgement to define the geographical scope of their assessments. Mostly this is related to the extent of the primary mechanism of effect but also the nature of the area they are studying. For example, the visual/landscape has assessed the effects from a range of viewpoints across a wide geographical range. In contrast, the Archaeological report has focussed on the areas where disturbance will occur, which is at the site scale. We are keen to understand, in more detail, where Dr Nuttal considers the geographic extent is limited.

The proposed activity sits at the lowest point of a water catchment. Best practice would assume that we start with at least a catchment-based approach to resource management if a sustainable ecosystem approach is being adopted. The Operative Regional Plan provisions on indigenous biodiversity requires "taking a system-wide approach to large areas of indigenous biodiversity such as whole estuaries or widespread bird and marine mammal habitats"[36], which we read to include at least the lower harbour.

In terms of Patuharakeke's interests, we assume a rohe-based geographical unit. "From a cultural perspective, the harbour edge forms part of the cloak between the shoreline and the harbour, which is unbroken for a number of

[36] D.2.16 Managing adverse effects on indigenous biodiversity. https://www.nrc.govt.nz/media/rdiczxbm/consent-order-topic-11-biodiversity-significant-ecological-areas-and-natural-character-objectives--policies-f-1-3-f-1-11-d-2-16-d-2-17-and-sea-maps.pdf

kilometres along the southern edge of the harbour"[37]*. Within the rohe, the confiscated Poupouwhenua block, where the proposed activity is located, is the central tenet of Patuharakeke's unresolved Treaty claim. The Marsden Point industrial zone is visible throughout most of the rohe and in any regard, is heavily inter-connected culturally with the remainder of the rohe . There is a strong correlation between the economic and physical effects of this zone and the cultural health (past, present and future) of Patuharakeke given their multifaceted relationship – as kaitiaki, manawhenua, hau kainga, ahi kaa and Treaty partner.*

Patuharakeke have consistently stated that a holistic and integrated approach is required to achieve sustainable management of the harbour and that all activities need to be evaluated on their collective and cumulative contribution to the overall health of the catchment.

c. Identification of effects are constrained to those created by the landside activities proposed to be enabled and generally only the construction activity phase of these. Actual or potential effects from increased maritime activity enabled by the proposal are not considered.

Where required by the RMA, the reports assess the potential effects related to increased shipping (i.e. marine mammal report). Where those effects fall outside the ambit of this process (i.e. normal ship discharges) we have not assessed those.

We were asked to identify aspects in the reports of concern to or potentially impacting Patuharakeke's interests. In this regard we are not limited only to the identification of effects under the RMA. We have not sought legal opinion on the definition of "normal ship discharges". Regardless, the most ambitious scenarios being modelled by NPL include the potential for a significant increase in vessel movements (potentially at least doubling current levels) , especially if increasing numbers of cruise liners are added, and heavy traffic (road and rail) movements, particularly if the more ambitious of the ME modelled economic scenarios were to eventuate. Such movements will incur an increased environmental cost, regardless of whether they require consent, and add to the overall cumulative effects on the rohe.

The cumulative potential impacts from both air and water discharges (especially if scrubber fitted ships are allowed) of a large increase in large shipping activity where potentially 5 berths and a large drydock were employed to full capacity, including increasing numbers of large cruise

[37] Decision No. [2021] NZEnvC 021

liners, are potentially significant. Increasing international science identifies the serious public and environmental health impacts of ship emissions, even under more stringent IMO regulation. Not including the externalities inherent in the evaluation of effects simply risks passing the costs to community, the environment and future generations to absorb.

d. The effects from the proposed activities of this specific proposal are not generally contextualised in relation to other activities in this locality and therefore potential for effects from this activity to be cumulative with others in the same locale is not fully considered.

The assessment reports do address cumulative effects on the existing environment. The most notable activity which is consented, but not exercised is the Refining NZ channel deepening project. The hydrodynamics reports have evaluated the Northport proposal with and without the RNZ channel deepening. At this stage, we are not aware of other relevant consents which are not exercised, or relevant permitted activities which have the potential, in to alter the nature or scale of effects of this proposal.

NPL is located within a community which includes RNZ and a number of smaller actors at a local level and then district, regional and national actors. Within Patuharakeke's rohe the cumulative effects of the activities of the various actors collectively contribute to the overall effect on the environment. From the evidence available on most cultural indicators, for example and in particular shellfish, the overall effect is one of degraded health. Major work is required to reverse this trend. The RMA speaks to integrated management to achieve efficient use of resources. It is not clear that this development proposal is being advanced taking into account other changes in development pressure within the rohe. Patuharakeke has a consistent record of asking for individual activities, such as the expansion of a major port, to be considered in the context of the management of its rohe as whole. Patuharakeke has consistently asked for an integrated structure plan for Marsden that allows all competing development interests within the rohe to be coordinated to ensure the most efficient use of resources and protection of the national and cultural environment.

For example, NPL's immediate neighbour, the other major industrial actor in this locality, has just announced major changes in its operations, potentially; a major reduction in localised air emissions, freeing up 85% of their current land footprint, significantly affecting their related vessel movements and affecting their water and electricity bulk supply agreements and quite dramatically altering the ladsacpe through removal of major structures. The channel deepening consents they hold are now demonstrated to be unnecessary. A major wood processing factory, referenced in the economic report as responsible of 2% of NPL cargo loadings, has closed down recently. The Ministry of Defence has clarified that there is no short to medium term

option of any significant relocation to Whangarei. WDC is projecting residential growth in the immediate vicinity to increase by at least 45% by 2050.

e. The impact on both the proposed infrastructure and the surrounding hinterland of the increasing effects of the climate emergency (increasing sea levels, acidification, sea temperature, increased intensity of future weather events, etc) have not been taken into consideration. The term 'climate change' does not appear in most reports. This is most concerning in reference to the ecological and economic reports which are entirely mute and agnostic on this point, whereas fast accelerating adverse trends over time are projected by most science, including over the proposed lifetime of the consents.

Up until the end of 2021 the RMA requires applications to assess the effects of climate change on the proposal, but not the effects on climate change as a result of the proposal. In this instance, the most relevant effect of climate change (keeping in mind the RMA definition of the existing environment) is sea level rise and extreme wave/rainfall events. The application addresses these points in relation to the height of the reclamation/ wharves and the design of the stormwater system.

The distinction in the RMA is noted and understood. There does not appear any serious attempt to "assess the effects of climate change on the proposal". The inclusion of a short section on climate change in the T&T report is discussed in more detail below. This reference aside, it is not clear how the other reports have assessed the effects of climate change on the proposal, the term "climate change" does not appear in either of the economics reports, the ecology reports or the transport report for example. Given both the ownership of NPL[38] and its role as a long term actor in the rohe, it is considered disingenuous to attempt to ignore its role in a decarbonising local, national and international economy in this manner.
Regardless of the impact of future emissions from the expanded port operation, the climate emergency is still highly relevant to the proposal and needs to be properly brought into frame in the accompanying evidence. This absence is evident in a number of reports but primarily the ecological, transport and economics analyses.

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[38] **https://www.nrc.govt.nz/resource-library-summary/plans-and-policies/climate-change/nga-taumata-o-te-moana-implementation-plan/. NRC, the major shareholder of the applicant, considers that a state of climate emergency currently exists in the region and has committed to polices to inter alia lead by example by significantly reducing its own carbon footprint. The Ngā Taumata o te Moana implementation plan is silent on whether such policies should apply to its subsidiaries. See also;**
https://marsdenmaritime.co.nz/about/; *https://marsdenmaritime.co.nz/investors-area/organisational-chart/*

The current climate emergency is already having an ecological effect on the proposal locality and the latest IPCC science confirms that these will increase exponentially over time. A number of effects are relevant to the stress the ecology is currently under and will increasingly be subjected to, including SLR and extreme events but also rising air and sea temperatures, acidification, etc. It is likely that current modelling understates the potential of such effects and we cannot concur that these are restricted only to the height of structures and stormwater design.

In terms of the economic analysis, the proposal purports to be the best vision for the future port needs of Northland. It is assumed by the applicant that a growth model (more ships, more cargo) is best. However, NZ has stated at the highest possible international levels that it is totally committed to a global 'no more than 1.5 degree agenda by 2050', a statement repeated by the PM at last week's UNGA. Such an agenda implicitly requires major and unprecedented change to all facets of the economy, including a full reconsideration of the role of rail and coastal freight movement in a rapidly decarbonising economy. It must be assumed that our ports of the future and the logistics chain they are linked to, and within the lifetime of the proposed consents, will not be carbon based. It implies quite significant impacts on our international trading profile (which are discussed in more detail in regard the economic analysis sections below). It has enormous implications for local fuel and bunkering infrastructure within the projected lifetime of the consents being applied for, especially if NZ joins many of it major trading partners in backing a call for full decarbonisation of international shipping by no later than 2050 at IMO this year.

Such matters are all relevant to assessing Patuharakeke's interest and additional to the direct contribution that the new or modified infrastructure might make through its construction or operation to national GHG emissions.

Air Quality

Air Quality Report West DRAFT[39]

8. This report identifies that the assessment has been undertaken in regard NPL's proposal to expand the port's capacity by reclaiming land and building additional berths. This project comprises of land reclamation, construction of wharves, and associated dredging. In addition, NPL is also proposing to incorporate a commercial shipyard with floating dry dock into the reclamation.

[39] It is noted that a number of reports are specific to one or other of the development proposals (East and West expansions) but in all but cover sheets and proposal description summaries are for all intents and purposes duplicates. It is assumed that these will be all considered as a bundled proposal. In any event, from a cultural perspective it makes no sense to consider them separately.

9. The scope/budget of this review does not allow for independent asessmsnt of the data used here. There appears no reason at this level of review to dispute the technical methodology or data produced in the report or that the findings reached in regard the specific aspects of the activities identified are inadequate.

10. However, the scope of the study is limited only to the construction and then landside operations of the infrastructure. It is assumed that the increased scope of the port will potentially see marked increase in ship movements and maritime activity associated with port operations, including air emissions from ship exhausts . Both are known to cause significant human and environmental health effects on both marine and terrestrial receiving environments and the effects can be geographically widely dispersed dependant on localised weather patterns. The science on the effects of ship generated air pollution on human and environmental health is now well established and rapidly increasing.

    NPL response. Section 15 of the Marine Pollution Regulation (1998), which is a regulation under the RMA, permits the ordinary discharges from a ship. Section 16 of the regulation prevents regional councils from setting rules, or placing conditions on consent, to control those discharges. Consequently, we have discussed the ship emissions in the Air Quality report but have not undertaken a detailed assessment of the emissions. We note that the New Zealand Government has now signed up to MARPOL Annexe VI which aims to reduce sulphur dioxide, particulate matter, and nitrogen oxides in ship emissions.

    No updated Air Emissions report was received prior to finalising this review. As discussed previously, neither s.15 or 16 restrict the consideration of the effects of maritime pollution under this proposal. The considerable space devoted to discsisoon of oher increased ship effects, e.g. potential effects of ballast water, is noted.

11. In similar vein, we note there is no mention of increased air emission arising from increased heavy traffic movements generated by projected port activities outside of the immediate port operational area, a matter we might have expected to find in the related traffic report.

    NPL response. We have discussed this with our air quality specialists, and they are updating their report to include an assessment of the vehicle emissions on SH15. The assessment will utilise the Waka Kotahi screening tool, which is the standard method for this type of assessment.

    No updated Air Emissions report was received prior to finalising this review.

Air Quality Report East DRAFT

12. This report identifies that the assessment has been undertaken in regard NPL's proposal to expand the port's capacity to the east by reclaiming land and building additional berths.

13. We make the same comment in regard this report as in para's .8 - .10 above.

Harbour Ecology

Ecology and Water Quality Reports. (The comments immediately below are specific to the western reclamation studies but are also generally relevant to the Eastern reclamation reports)

14. The project requires capital dredging and deepening of the port turning basin within areas previously consented for dredging but as yet not dredged; new capital dredging in zones yet to be consented for that activity; and approximately 10.5 ha of reclamation.

15. This report states that it provides information based on historical information and recent baseline studies which cover intertidal and subtidal ecology and marine water quality. It purports to address actual and potential effects of the proposal on marine ecological values (but excludes a consideration of marine mammals and birds as these are covered by other specialists in those areas)

16. The most historical report referenced are the studies undertaken for the NPL Consent Application in 1992-97. At its outset the report notes that the harbour has been subjected to significant anthropogenic impacts including: land reclamation; the deposition of 3 million m3 of sediment fines and 2 million m3 of channel dredge spoil since the 1920's; and runoff from urban, industrial and rural sources. This is the closest the report gets to acknowledging that the harbour and catchment have been heavily, extensively and permanently modified and severely downgraded by compounding anthropocentric activity, which has accelerated exponentially with more recent colonisation over the past two centuries.

17. Despite such modifications, the report finds the localised ecology to be "relatively healthy" or "good", and in similar repair to comparable highly modified ecologies throughout the harbour.

18. This clashes significantly with Patuharakeke records, which that show the ecological values of the harbour to be greatly diminished across most or all cultural indicators over inter-generational periods. At p.22 the CVA summarises:

> *The waters of Whangarei Terenga Parāoa are a taonga gifted by our tupuna which today's kaitiaki have a duty to conserve and protect for*

their mokopuna. These waters once teemed with kaimoana such as those species listed above. However, since colonisation, more than a century of poor environmental management practices has seen an immense decline in marine species as a result of degraded water quality, habitat loss and harvest pressure.

19. While the report finds there to be a rich diversity of marine life in "relative" abundance, there are numerous reports of now degraded ecosystems missing key indicator species of high cultural and economic value . For one example the CVA records at p.21

> *According to Patuharakeke elders, prior to the construction of the Refinery, a substantial mussel bed covered the takutai adjacent to the site, ranging from the edge of the channel in to shallow water and running from Mair Bank along to the Port Jetty. "When an easterly gale blew you could just roll carpets of mussels into your sack." (Living Memories Hui, Rangiora, Takahiwai 1998).*

Despite such evidence having being presented by mana whenua in numerous related fora, it is not referenced, let alone relied on, in any of the expert reports.

NPL response. As set out earlier, the RMA framework sets a baseline for the effects to be assessed against, and that baseline is the existing environment at the time of application. Northport recognises the significant disconnect between hapu/whānau views of the baseline and that prescribed by the RMA. Northport is keen to discuss how a process outside, but parallel to the consenting, could help address these issues. This is a matter that could be woven into the mitigation plan and/or wider initiatives like those currently being discussed with Patuharakeke (i.e. applying similar frameworks to the Sea Change project for the Whangarei area).

As discussed above, the 'baseline' referred to does not restrict NPL placing the ecological reports within their historic context. Since preparing the draft of this review in May, we have sighted the various Bioreseachers reports compiled in support of applications for RNZ in the 1980s and covering a very similar locality. They describe in detail the extent, variety and distribution of key species of high cultural value then evident within Patuharakeke's rohe and would appear to show a marked decline over less than a generation from large and available harvestable stocks to near collapse and some species (e.g. kutai) now absent.

20. It would also be at variance with published record, for example from 1961 at the time of construction of the first refining wharf

> *"when we were building the wharf, they had floodlights on at night and we used to go out there and ad you'd see kingfish by the hundreds and kahawhai so thick you could go out and walk on them. … I had a boat*

and we'd drift down the harbour and sometimes get a couple of hundred snapper."[40]

21. The report states that the lower harbour supports extensive cockle and pipi beds, both of which support commercial, recreational and customary fisheries within the harbour. There is no longer a commercial shellfish industry in the harbour, and while there is evidence of range of size and abundance, few large sized fish are available, and certainly in greatly declined numbers, than previously known. The impacts of the loss of key kaimoana species such as cockles, pipi and kutai are obvious and include cultural and economic effects.

22. These findings contrast strongly with the evidence available in the CVA which reports complete cessation of commercial harvest a decade ago. At p.24 of the CVA:

    This trend is evidenced by the 2012 closure of the Snake Bank commercial cockle fishery that had operated from the early 1980s. Catches were in excess of 500 tonnes initially but dropped progressively over time to less than 50 tonnes.

    There is insufficient available stock to support customary take and certainly insufficient to support any sustainable commercial harvest.

    NPL response. We are aware that there is no longer commercial shellfish operation in the harbour, and we will correct the report accordingly.

    No updated reports were available at the finalisation of this review. NPL's acknowledgement of the lack of commercial availability is noted. It is assumed that NPL also concur that there is a parallel lack of cultural availability..

23. Previous resource consent conditions associated with both NPL and RNZ activities had promised mitigation via resourcing kaitiaki to actively monitor and restore these key ecosystems over time. Nothing in the ecological assessment reports indicates that these previous mitigation conditions have had any lasting or sizable result. Any impacts arising from the proposed activity must be considered cumulative to those already created by NPL and its neighbours over time. If we are correct in assuming that previous mitigation condition did not prove effective then the question of what they will be replaced with this time around must be addressed now.

[40] Paterson M, 1991 *The Point at Issue: Petroleum energy politics in New Zealand, 1955-90*, Collins, Auckland. P.42

NPL response. Northport has supported the kaitiaki ropu via the harbour health improvement fund as required by the consent conditions. The group has undertaken cockle reseeding (no further work supported by the group although some initial work was undertaken to scope large scale reseeding) and seagrass restoration (no further work was undertaken as shortly after the project finished seagrass started to naturally return to the harbour). We agree that the mitigations carried out to date, may not have been as extensive or had the desired (or anticipated) effect. However, the current state of the environment is what we must use for the RMA process.

NPL's support of the harbour's kaitiaki is noted and acknowledged as is the existence of a number of projects. This said, it must also be acknowledged that the mitigation measures under the previous consent package, especially in regard cultural effects of the proposal, clearly did not work and were unsatisfactory. The reasons for this and the corollary of what alternative measures might be considered is beyond the scope of this review but we would expect that it would be the subject of independent analysis prior to lodgement of fresh applications and as such, is a missing essential component of the current report suite.

24. In regard the discussion over the SEA classification of some or all the proposed site, it is noted that the Court has subsequently clarified this matter in RFBPS v NPL, (Decision No. [2021] NZEnvC 021) and found that works proposed for the western reclamation/drydock would consequently be a non-complying activity.

25. We have no concerns as the accuracy of the sampling undertaken as reported. We note that no reference for the 'relative health' adduced from this is made, other than its similarity to other similar habitats in the harbour. Showing the species composition and density relative to what can be assumed to be the ecosystem composition from historical and available evidence over a much greater time horizon would provide a better perspective of the site's health. We note the concerns already raised over the adequacy of the sampling methodology in the CVA.

NPL's response. The ecological study includes the time-series of data that Mark had available and which related to that which he collected more recently. Northport took onboard the feedback from the CVA around the 4Sight sampling methodology. As a result, 4Sight undertook additional intertidal and subtidal sampling to collect more robust data to inform their analysis and reporting.

26. The absence of any harvestable kutai or pipi beds and near absence of harvestable cockles is alarming, given the historic records of the level of abundance of these taonga species in tribal evidence. These are supplemented elsewhere by the applicant's own studies. The proposal's Archaeological Report states at p.4

> "Whangarei was a desirable place to live due to its sheltered harbour, ample marine and freshwater resources and temperate climate."
>
> "for Maori, fishing was a great pastime, describing how they used to make raids on the sharks about One Tree Point" (p.5)
>
> "access to the rich marine resources would have been straightforward"(p.10),

and p.10-14 lists numerous excavations detailing shellfish middens and fish types and numbers found, e.g.

> "One of the middens contained predominantly pipi (Paphies australis), while the remainder of the middens were predominantly cockle (Austrovenus stutchburyi). A further 10 shell species were identified in the middens, at lower frequencies. Four of the shell samples from the excavation were submitted for radiocarbon dating, which returned a date range for occupation in the area from the mid-16th century to the early 19th century."

27. It can be inferred that the findings from interpretation of the data are somewhat subjectively made. For example, at p.18, the assessment of pipi data over a 21-year spread is interpreted as suggesting pipi density can be highly volatile. However, it can also be interpreted as suggesting that any meaningful pipi populations have been absent for upwards of 80% of this time and the overall trend continues to be downward. By the time the overall conclusions of the report are reached, this is translated as "confirming the high marine ecological quality values of the area around Northport and Marsden Bay" and the presence of "a healthy and ecologically well-balanced community".

28. To give a further example, the summary conclusions made at p.19-20 are subject to interpretation. The sampling does not show "beds of edible cockles" as the report states. Some very small numbers of edible sizes were found interspersed in beds of much smaller sized fish and the general pattern is of poor shellfish health with the vast majority of sampling showing a predominance of undersized fish and an absence of key species.

29. The size of fish found in the 2020 surveys is particularly alarming, with apparently no edible fish being among the small numbers present and the finding that in "an ecological sense, pipi appear to be virtually functionally absent from the Marsden Bay shorelines". If nothing else this suggests the mitigation measures from previous consents have not resulted in any meaningful ecological remediation or rehabilitation of the area, albeit the reference to possibly increasing sea-grass beds is an outlying positive indicator. Conversely the

reports of increasingly extensive presence of the invasive Asian date mussel is a further indication of deteriorating ecosystem health.

30. What is clear from the available record is a declining trend line within historical record of ecological health. Since the eye-witness reports of Shell's refinery manager in 1961, at the point the first port construction took place at Marsden, number of all taonga fauna species have declined, in most or all cases dramatically – fish, shellfish, avifauna, mammals – in the space of a generation. This should not be read to imply that the port development has been causal to this or to what degree its construction and operations have contributed (the Shell manager laid the blame for falling fish stocks to commercial trawlers).

    The ecological reporting and evaluation are based upon the data collected, and it does require the ecologist to apply their professional expertise and judgement. Consequently, different experts may have different views on the current state of the environment and the likely effects. Mr Poynter's reports have been reviewed by Niwa (on behalf of Council) and Northport is undertaking additional peer reviews itself (using Dr Shane Kelly). Northport is keen to have ongoing discussions with whānau/hapu about the ecological effects, including how mitigation of those effects could be achieved.

    Further review of reports is beyond the scope and budget of this review.

31. The arsenic and nickel concentrations found in sediment sampling (pp18-19) raises a potential concern, with both metals known to be found in 'land-farming' of sludge and refinery by-product at various locations in and around the Refining NZ site and thought to be used in some shoreside armouring and dune protection in the vicinity in the past according to published records. Concentrations were also elevated in comparison to historic SoE monitoring in 2014, 2012 and 2010.

    Noted, and we will pass this onto Mr Poynter. RNZ operations and associated discharges are outside Northport's control.

32. None of the findings presented in regard water quality and NPL stormwater discharges are contested.

33. The findings reached in regard potential effects of projected dredging activity appear consistent with the data provided and analysed.

34. Potential changes on the ecology caused by accelerating global warming and the effects of the increasing climate crisis are not considered in the report.

We are happy to discuss this further, particularly how the ecologists could access some specific data on the impacts/expected changes to the ecology of the environment in question.

A literature review of relevant available science is beyond the scope of this review. However, local science has been advising of the types of impacts projected for at least the last decade.[41]

Morphological, hydrodynamic and plume modelling

35. We have no comment to make here in regard the findings of these reports which we assume to be accurate, apart from raising the query as to whether impact of sea level rise and increased storm intensity factors resulting from global warming have been considered.

36. Anecdotally, both mana whenua and community have been regularly reported as saying they are convinced the reclamation for the current berths has changed the local hydrology and may be contributing to the changes at Mair and Marsden banks. Both NIWA and local marine biologists, such as Vince Kerr, have also raised the lack of understanding about shellfish spat dispersal in the lower harbour and whether, or to what degree, past changes related to NPL and RNZ activities have affected that.

NPL reponse. The hydrodynamics of the harbour will have changed because of the previous reclamation, the magnitude, and effects of which should have been evaluated in the original consent process. Post construction monitoring of the changes in current flow and strength as well as sediment transport showed good alignment with the modelled predictions. Northport is more than happy to provide the reports setting out these findings. The changed conditions now form part of the existing environment which this proposal will be assessed against.

In terms of spat dispersion modelling, we have had a few brief discussions with Juliane and MetOcean about that type of modelling. It can definitely be done but requires a good understanding of the sources of the spat. We are keen to work with whānau/hapu on undertaking this type of modelling. This type of work could form part of the measures in the mitigation plan

Consideration of potential mitigation measures is beyond the scope of this review and in regard, a draft mitigation plan has not been prepared. We repeat our previous comment that we assume design of a mitigation plan would begin with an independent analysis of the lessons learnt and obvious shortcomings of

[41] For example, https://www.researchgate.net/publication/259741354PredictedimpactsofclimatechangeonNewZealand'sbiodiversity

mitigation measures utilised in regard previous development processes for this locality.

Marine Mammals

37. No detailed report was available on the website for review.

38. From the supplied PPT and presentation at the VFG 15 May workshop three key gaps were identified:

    a. Effects appear to be have been considered only from the perspective of the activities related to construction without consideration of any effects from increased ship movements associated with the activity.

    b. No consideration appears made to the impacts of climate crisis related effects on marine mammals.

    c. No noise effects on species other than marine mammals appears to have been considered

    NPL response. The full report is now on the website and has been provided to whānau/hapu. The report does include operational risks, such as ship strike and loss of debris overboard (entanglement). The underwater noise effects on fish have been discussed in the underwater acoustics report, but the focus is on the species of highest risk, which is the marine mammals. Speed reductions for commercial vessels would also be useful in reducing noise levels but would need to be implemented outside the RMA process.

    Two reports are now available on the website, one for the eastern and one for the western reclamation, although both appear identical apart from the cover sheet and initial description and only Report No. 3649 was read in full.

    A range of issues are evident. The relationship between the body of the report and the opinions expressed (presumably by the report's author although this isn't stated), in Appendix 3 is not clear, nor why this information is not included in the body of the report. It is noted that the issue of the definition of the 'Significant Marine Mammals and Seabird Area' is a matter the Environment Court considers is reserved for later hearings on the Regional Plan[42]. We suggest NRC be asked to clarify this matter. In the event that the matter is now resolved by the most recent decision, then the issue of definition of SMMSA's is closed. The matter of Outstanding

[42] Pp20-21 https://www.nrc.govt.nz/media/rdiczxbm/consent-order-topic-11-biodiversity-significant-ecological-areas-and-natural-character-objectives--policies-f-1-3-f-1-11-d-2-16-d-2-17-and-sea-maps.pdf

Natural Landscapes in the CMA is unresolved and the subject of a current s.293 process. We suggest NRC be asked to advise what impact, if any, this might have on the application.

There appears a range of questions over the relationship between the data used and the conclusions drawn and it would useful to get an independent expert opinion. Sources such as the Department of Conservation's Marine Mammals Sighting database, for example, is a record of those people that opportunistically report sightings and are a poor substitute for a proper scientific study. Statements such as the "majority of migrating whales currently pass by Hen (Taranga) and Chicken Islands in deeper, more offshore waters" or " commercial ships have a low probability of encountering a migrating whales" are not directly linked to the data referenced at the start of the report and are open to challenge. I personally have navigated these waters in all seasons over four decades. On some occasions I have reported marine mammal sightings in my ship's log or to the DOC database but more often than not I haven't made any report. I have encountered Bryde's whales between Taranga and Bream Bay. Just last week we were met by a large pod of dolphins a mile east of Home Point. There was a seal in the Hatea River last month. I have observed Orca in Urquhart's Bay hunting rays and as far up river as Kissing Point in 2007 (which was reported to DoC).

The overall finding, that Whangarei and Bream Bay are not ecologically significant habitats for marine mammals, is at direct odds with all tribal record and matauranga, with the very name of the harbour describing its intimate relationship with whales as one example. Ngātiwai, Patuharakeke and others are often cited as naming the harbour Whangarei Te Rerenga Parāoa (the gathering place of whales) because whales gathered there to feed during summer.

The Ngātiwai Trust Board RMU has long been a leading authority on whale and marine mammal standings and strikes within the region and we were surprised that their expertise and knowledge was not referenced nor were they consulted in the expert reports.

There appear a number of other inconsistencies with other reports. For example, at p.37 "In regard to potential increases in shipping, NPL is expecting that additional commercial ship traffic will be from other New Zealand destinations (i.e. Ports of Auckland) rather than any new or additional container ships coming from overseas". However, a central tenet of the ME report is that a larger port is required to absorb an increasing share of UNI international container trade. No reference is made to any potential increase in direct coastal trade, either within the region or

nationally, arising from an increased shift to shipping over road and rail under a decarbonising economy.

The report potentially understates the timeframes of disturbance. While there is a stated preference for the various construction projects to be undertaken collectively, it is also possible that they could occur sequentially, in which case the construction effects could be over a time line of several years, potentially a decade. The transport report suggests a 20-year development horizon.

In regard the monitoring and mitigation proposed, it is disappointing to note that this is recommended to be governed by a Marine Mammal Management Plan to be developed and presumably implemented by DOC and the applicant and their experts. That tangata whenua and kaitiaki are not even considered speaks heavily of the effectiveness of the empowering of kaitaki that was proposed under previous consent mitigation processes.

Avifauna

39. Reports covering both the eastern and western proposed developments were reviewed, again noting they are essentially identical reports.

40. The key issue of concern is the lack of holistic assessment of the impact. The report indicates that numbers may not be accurate and are not as important as trends and then concentrates (in some cases poorly – mean numbers of birds only) on numbers.

    NPL response. The report has since been updated to take a more system-wide approach to the bird species that use the project area.

    The reports on the website at the date of this review are still showing as February 24, 2021 versions.

41. There are no wider linkages to the site discussed (occupation and tide height, seasons etc). The assessment did not cover all of the seasons or comment on the change in flock numbers/composition over time.

    NPL response. As a result of the request at the technical hui, additional bird survey work has just been completed to add a winter season to the existing data. This will allow some comparative analysis to the existing data set and identify if other bird species are present over the winter months.

    The reports on the website at the date of this review are still showing as February 24, 2021 versions.

42. There is no assessment of the impact of the current port against the predicted environmental impacts at that time. Were they correct? We assume that any additional effects emanating from the proposed further development will be incremental to those already caused.

    NPL response. As previously set out, the RMA baseline is the existing environment and that is the basis for the effects assessment.

43. If mitigation measures were provided specific to avifauna in past consent conditions, have they proved effective? Did they empower Patuharakeke in fulfilling their ancestral responsibilities as kaitiaki?

    NPL response. The previous consent had funding for a harbour health improvement fund, which listed studies of NZ dotterels as a potential study area. We are not aware that the group funded any avifauna specific projects.

44. There is no indication of the impact of the structures on the shoreline habitat behind it. The report assumes there will be none despite considerable impact from the current port on long-shore flow and the Marsden Point natural roost.

    NPL response. The report does address and assess the effect of the loss of the shoreline/dune habitat due to the reclamation. Dr Bull has also reviewed the hydrodynamics report and evaluated the relevant predicted effects from changes in the tidal flows/morphology. Dr Bull will also review the upcoming T&T coastal process work and update her report to address any additional effects identified.

    The reports on the website at the date of this review are still showing as February 24, 2021 versions.

45. There appears no attempt to put any potential impacts into context with the rest of the harbour now. There appears to be an assumption that how the harbour was 20 years ago is what it is like now (i.e. roost availability, population stability) and no mention that it may be different. It appears plausible that because many parts of the port and MMH land behind have been undeveloped up until now, birds may now be using port as habitat.

    NPL response. Dr Bull is obliged to use the existing environment as a baseline for her effects assessment. As identified in the survey work, a range of birds currently use the developed areas of the port for breeding.

46. There is no reference to how the climate crisis is likely to effect avifauna, despite the obvious correlations with marine feedstock availability related to ocean

warming and acidification, effects of climate variation on migration and breeding patterns, for example.

NPL response. Whilst we must base the effects on the existing environment, we are happy to discuss the point raised further. We would need some data on the predicted changes to enable Dr Bull to undertake an assessment.

Providing a literature review on the potential effects of the climate emergency on avifauna is beyond the scope and budget of this review. NZ literature since at least 2012 has been reporting increasing levels of global sea bird decline across all 350 species with Paleczny et al (2015)[43] reporting close on 70% decline in populations to 2010 and noting that "seabird population changes are good indicators of long-term and large-scale change in marine ecosystems". Reports this month from the UK of guillemot mortalities[44] draw direct linkages to climate change with the Royal Society for the Protection of Birds noting the climate crisis was exacerbating the factors that lead to falls in seabird populations. Closer to home, there are recent reports available of the impacts of marine hotspots several degrees above records in the Tasman and Pacific in the past three years having a significant impact on the ability of sea birds to feed due to the warmer temperatures driving prey fish to unusual depths. Such pressures are projected to increase significantly as the climate emergency accelerates and we would have expected to see some comment as to the effect this is likely to have on avifauna over the projected lifetime of the consents. Whitehead et al (2019) have a useful chapter specific to climate change and threats to seabirds of Northern Aotearoa[45].

Transport

47. No report is available for review from the website.

NPL response. The report is now on the website and has been provided to Patuharakeke.

We have reviewed the August 21 report and note a range of issues arising and these are discussed in more detail following NPL's responses in the following paragraphs.

48. From the PPT and presentation at the VFG 15 May workshop the following issues arise:

[43] https://digitalcommons.usu.edu/watsfacpub/976/
[44] https://www.theguardian.com/environment/2021/sep/18/scientists-investigate-hundreds-of-guillemot-deaths-on-uk-coastline
[45] https://1523901d-6124-4111-a0c3-51808943665d.filesusr.com/ugd/de29abde931d3693e64d0dbaeebfa453c569dc.pdf

a. Only land road transport effects are considered. Maritime transport is not referenced.

NPL response. The scope of the transport assessment was road transport only.

The scope of the transport report appears primarily road with some reference to rail. Marine transport is of potential relevance if coastal shipping is included as an increasing priority in a decarbonised economy during the lifetime of the consents. In regard rail, we were unable to find any basis for the projected 8% transfer of freight and question whether this is a realistic figure given the national commitment to a 1.5 degree agenda and the level of shift in transport required to achieve Paris Agreement commitments. The lack of rationale to explain the use of various assumptions throughout the report is a general concern (e.g. 8% shift to rail – why not 7% or 70%; 20 and then 30 cruise liners visits per annum – the cruise liner industry may rebound and continue its upward trajectory in which case much more than 30 cruise liners could visit in a year or it may never recover fully and the future comprises smaller numbers of specialist vessels).

b. No consideration is given to the major changes ahead for the transport sector in a decarbonising NZ economy over the expected lifetime of the consents. If Aotearoa is to meet its international commitments, all transport will need to be at least close to absolute zero emissions before these consents expire and major structural changes, including reduction of heavy road traffic (and probably reduction in personal vehicles use) accompanied by greatly increased reliance on rail and coastal shipping in this timeframe. BAU scenario modelling is simply inappropriate in this context.

NPL response. Understood and agree. The transport report therefore likely represents a worst-case scenario in terms of traffic numbers and resultant effects on the capacity and safety of the assessed road network. We also note that whilst the motive power for the transport network may change from petrol/diesel to electricity or other fuels (i.e. hydrogen), road and rail based transport will still be needed to move the freight to the end user. In the timeframe of the modelling, truck-based transport is still likely to be the primary solution for short-haul freight tasks.

We appreciate NPL concurrence that BAU modelling is inappropriate for this proposal. However, we would need to more critically assess that data presented to agree it represents a worst case scenario. It appears that the

projected traffic flows used in the transport study may not take into account the projected traffic flows associated with the "full higher growth scenarios" projected in the ME reports. For example, the modelling explained at p.78/112 of the Transport Study appears to show a change in container trucks of 8125 container trucks in 2018, rising by 21617 in year 5, 30804 in year 10 and accelerating to 174, 495 in year 20. There is a large increase in imported vehicles arriving at the port in year 10 but this remains static thereafter. No rationale is given to explain why figures of 20 and 30 cruise ships per year are shown.

Noise

49. The assessment used creates no concerns as to its accuracy and we have no additional comment bar noting the confirmation of the finding that the proposed activity will generate effects that are more than minor.

    Mitigation of the identified effects is focused on private houses. Historic tribal record confirms regular seasonal fishing camps of two to three thousand that used this locality in the past. There appears no consideration of effects on community, tangata whenua, kaitiaki, etc using what is left of the beach and reserve at Marsden Bay and eastern side for their amenity?

    NPL response. The noise report focusses on the receivers which are most sensitive to noise, which are people sleeping. The controls are set to ensure appropriate noise levels for those receivers. Outdoor noise levels near the port will likely increase with the development. We have discussed the outdoor noise levels with Marshall Day, and they are updating their report with a discussion of the related effects on recreational/ community users. We note that container handling technology is constantly being upgraded and the handling equipment is getting quieter and quieter. Most current modern container handling equipment is electric or is diesel-electric.

    The latest noise assessment reports available on the website are dated March 2021 at the time of this review.

Landscape, archaeology and recreational effects

50. The reports have been read. We have no comment to make in these regards other than the noise query above and defer to the CVA and forthcoming CIA.

Reclamation and Shipyard Concept Design Report

51. We have read the report and have no comment to make in regard the engineering proposed which we assume to be of a very high standard.

52. We do note the shipyard design and extensions/dredging required for the turning basin is justified based on the dimensions/mooring, turning requirement of the Navy's Aotearoa – without confirmation it will be used for this purpose.

NPL response. At this stage, the design case for the Shipyard 1 berth (on the western edge of the reclamation) is the Aotearoa. While this is the design vessel for the development, like the balance of the facility, the berths have been designed as multipurpose berths, providing flexibility and demonstrating long term benefit to the development. In terms of water depth, the berths and turning basins has been designed to accommodate the anticipated vessels, including cruise ships, car carriers and a range of other vessels coming in 'light-ship' for maintenance in the dry-dock.

In recent discussion, the Minister of Defence confirmed that there is no intention to relocate the navy in part or whole to Whangarei in the short to medium term. He also confirmed the the Aotearoa purchase includes a lifetime servicing arrangement for the vessel in Singapore. It woud not appear there was ever a design or business case involving the Aotearoa drydocking at the proposed new facility.

53. We do ask the question of what allowance or consideration has been made in the design in regard projected sea-level rise and associated increased future storm intensity. We note that as the science increases there is an upward trend in projections of the amount of sea level rise predicted, with most studies agreeing that there will be marked acceleration by at least 2060.

For operational reason alone, Northport needs the facility to a be constructed to an appropriate level. Work has been undertaken to understand that level with sea-level rise and extreme weather conditions (primarily swell waves and the impacts on the underside of the wharf). We will include further discussion of this design approach in the application.

We are still waiting disclosure of the 'appropriate level' and note the revised advice in the latest IPCC reports in this regard, including the potential for SLR of more than 2m within this century.

54. We assume the new infrastructure to be a permanent fixture and therefore the effects of reclamation cannot be avoided or remedied. We note the comments made by the Environment Court in this regard in its recent decision on the SEA associated with the Western reclamation .

NPL response. We will address these matters in the technical reports and the AEE.

Economic Assessment

55. The economic report is not available on the website and the analysis of the Eastern reclamation was supplied separately. We have not yet been supplied the Copeland report on western reclamation/drydock.

NPL response. The Copeland report has been supplied subsequently.

We have received the Brown-Copeland report for the western reclamation and the revised ME report covering the Eastern reclamation and the 31 May NZEIR review of both reports.

As a general comment it is noted that the two reports adopt quite different analytical approaches to their assessments to the extent it is difficult to compare them, especially given the minimalist approach adopted in the BC report.

This said, both approaches assume a conventional or traditionalist approach to economic theory based around assumed ever-increasing growth and to large extent both assume their respective economic investments – in a drydock and an expanded container/cruise liner/car wharf facility – will naturally prove successful eventually as the NZ economy continues the overall growth pattern sustained for the past 70 years. This is certainly a possible future but it is certainly not the only possible future.

Neither report factors in either the potential for negative growth, the commitment of government to fully decarbonise the economy within the lifetime of the consent, the local and international lessons of the Covid pandemic or the potential shift to a circular economy.

The fundamental question here is whether NPL's "Vision for Growth" also equates to a "blueprint for sustainability and resilience". The opening paragraph of the ME report correctly states "Northport's role is likely to change significantly in the future, mainly as a result of changing trade patterns". What isn't established in the assessment is the overall direction of that change over the projected 35-year lifespan of the consent and, given that the reclamation is permanent, beyond. In many regards, the VFG asks "how big a port infrastructure can we fit into Marsden" and doesn't ask "what is the most effective and efficient green port design needed for Te Taitokerau in 2056?. In the event, however unlikely, that the projected future growth does not eventuate, what are the economic effects then? What is the best size and design of Northport to meet the regions foreseeable future need? Marsden, and the region's development, has always been uneven and has lagged significantly behind the national development program. The development record includes the boom and bust of the kauri economy, massive land clearance and siltation exacerbated by the Portland Cement plant, the boom and bust electricity generation industry under Think Big with the power station finally dismantled and shipped out, an oil refining industry that was never truly a sound

economic proposal but was endlessly propped up largely to sustain regional employment for 60 years, a fast declining wet fish industry and a now exhausted shellfish industry. The vaunted light/heavy Marsden industrial zone has not yet produced a successful and sustainable industrial base. And at the other end of the catchment the evidence of the failed superyacht and naval construction ventures are plain to see along the banks of the Hatea River. Already a number of generations of often specialised skilled labour have been trained and lost to the region. The current loss of the Refinery workforce is only the latest episode. Only four years ago the 'vision' was for at least a substantial portion of POAL to relocate alongside a significant portion of the Navy and a fast expanding cruise liner industry while next door RNZ were predicting greater expansion.

Patuharakeke's interests lie in NPL making the most sustainable long term decisions as it undergoes its significant change.

The BC report raises a range of issues. The authors preference to rely on a compartmentalised approach to assessment, where economic effects are considered separately and apart from non-economic effects is noted. Given the close interrelationship between ecological, social, economic and cultural values associated with this development we would have assumed a triple (or quadruple) bottom line reporting line would have underpinned the analysis. It is questioned whether circular economy approaches, such as the Donut model developed by UK economist Raworth [46], would provide a more integrated and appropriate approach. Using the log trade as an example, a circular model might assume that we would move from trucking raw logs from forest to wharf by road for exporting and importing containers of finished wood products and steel building products to exporting higher value finished timber products ourselves while diverting as much product to local markets as possible. If the processing industries are developed locally as well, then a greater share of the economic benefit is retained locally and regionally and less "lost" ex-region. This model aims to maximise the localised economic return of a regionally significant infrastructure without requiring greater cargo volumes to be 'imported' regionally and then exported internationally as proposed in the NAI scenario in the ME report.

The NZIER comments in regard use of multipliers are noted and agreed. The analysis assumes the economic venture will be successful and notes the economic benefits associated with the drydock construction phase. In terms of operation, it assumes a range of additional industries will be attracted by the successful venture. No consideration is given to the potential costs to such industries should the venture, for any reason, fail in whole or part. No real evidence is provided in the BC report to confirm the existence of a successful business case to support the venture. Likewise,

[46] *https://www.kateraworth.com and adapted to an indigenous perspective here* https://www.resilience.org/stories/2020-10-08/an-indigenous-maori-view-of-doughnut-economics/

the assertion that "it is anticipated that the Project will enhance the profitability of NPL and therefore lead to an overall increase in the flow of dividends to MMH and its 53.6% shareholder, the Northland Regional Council" is entirely dependent on the economic success of the venture. No evidence is provided to support the claim that the proposal will reduce costs for New Zealand shipping companies. It may well increase the range of services available to NZ shipping companies but this does not mean it will do so at reduced cost. The conclusions given at para. 50 are not proven by the evidence provided.

Additional comments arising are made in italics and inserted in the following paragraphs.

56. The ME report starts with the assumption that NPL's role is "likely to change significantly in the future, mainly as a result of changing trade patterns" and the report establishes two futures, Business-as-usual (BAU) and a North Auckland Imports (NAI) scenario with the underlying assumption that future activity will fall somewhere within this range. *In the updated report, two additional scenarios are modelled.*

57. The only point of certainty in future projection appears to be the log harvest, long the ports major activity. The NIA assumptions appear to be based on a large degree of unsubstantiated optimism that this trade can be attracted to NPL and the necessary logistics infrastructure, primarily transport, will be in place to enable this.

58. It is extremely difficult to place great reliance on this report given the amount of critical parameters that are considered 'beyond the scope' of the report. The term is used 13 times throughout. The two major caveats to the analysis undertaken as set out on pp 1-2 (and paraphrased on p.48) and the additional caveat set out on p.29 are extremely broad in their scope. and there is a consequential inability to truth any of the conclusions deduced from the modelling.

NPL response. The economists, like the other experts must rely on the best available information at the time. Additionally, they need to apply their professional expertise and experience to evaluate the future trends and effects. The validity of their methods and professional judgement is being tested through the pre-application review by Council and will be further tested during the hearing process.

59. No consideration is given to the impacts on any modelling of the climate crisis and we refer our comments in previous sections. For Aotearoa to give effect to its international commitments, decarbonisation of the national economy must begin now and will see large and significant changes to our transport profiles. The projected levels of use of NPL under the NIA modelling will require much more than a shift of heavy trucks to either hydrogen, electric or fuel cell, but likely require increasing reliance on electrified rail and decarbonised coastal shipping.

While central government is slow to advance either of these at this juncture, much can be learnt from the rapid advances being made in most other developed economies. However at this stage, and until government commits to the level of investment needed for real economic decarbonisation, increased reliance on rail and coastal shipping is conjecture.

60. Broader national climate response will also have potentially significant impact, dependant on how central government organises its activities to meet our international targets. For one example, a transition from raw log export to replacing steel and cement with timber throughout the domestic construction industry is a logical measure that could be advanced with urgency. This would then impact two of Northlands key economic drivers with subsequent impacts on logistics of transporting those commodities. In this example we might assume the localised and national economic benefits to be positive, however the fact remains they have simply not been considered in the analysis offered.

NPL response. Northport agrees that long term changes to the way transport modes are powered is inevitable, and some changes to the freight type may occur. Funding for the Port rail connection was recently confirmed by the government.

61. There is no consideration of future shock events, such as the current Covid pandemic, occurring during the life time of the consents being applied for and it is implied that after Covid we will revert to some form of BAU with steady moderate overall national economic growth. This is of course only one of several possibilities which must also include potential for periods of negative growth. It is notable that at least one major local employer, Carter Holt Harvey, has closed its door since this study was prepared. Cessation of refining activities will almost certainly see another major local workforce removed. Should the national oil supply convert to direct shipments to regional centres, arguably the most economic and environmentally efficient option, a large amount of the current coastal shipping movements associated with Northland will drop dramatically.

NPL response. Northport is comfortable with the predictions in the economics report.

62. If the objective is to achieve the best and most efficient port for Northland's future, rather than a larger port based on inadequate future planning, then it would appear imperative that a much more comprehensive economic analysis is required.

NPL response. Northport has undertaken a robust future planning process and is confident with those plans and the supporting information. Additionally, the Government have commenced a NZ Supply Chain Study with a bias to the Upper North Island. Northport will continue to use all the best available information in its infrastructure planning, including the outcomes of this upcoming report.

We are not challenging NPL's business confidence but we do question its weight within a national planning frame. Northland's geography plays against it significantly and the decisions over what share of the national, and in particular UNI, cargo traffic comes via Northport will likely be made at a national level, or at least ex-region. If the desired output is the most appropriately sized regional port, would it not be logical to allow the outcome of the NZ Supply Chain study to determine the future national significance of the asset? Until this is done it is not possible to truth the core assumption in the ME modelling, namely that "in the coming three decades Northport's role is likely to extend beyond its regional trade tasks, to support trade from outside the region – i.e. it will take on a national role".

63. One small example of this is the reference to the Cruise liner industry and the assumption it will revert to its previous course with the end of the pandemic. The future of this industry now highly uncertain but it appears clear from all industry sources that a return to a BAU is unlikely.

NPL response. In the short term, that may be the case, but Northport is confident that cruise vessels will visit Northport in the future.

64. No real basis is given for the assumption that transport savings will equate to 25%. The future of Ports of Auckland Ltd (POAL) is unclear and no firm decision is made that it will relocate to South Auckland, which appears as a fundamental assumption to support the NIA model.

NPL response. This statement is incorrect, the economics report assumes the POAL does not move in the timeframe of the analysis.

65. We cannot support the finding that NPL will, in future, take on a national role and nor is this supported by the analysis presented. Unless there was large scale shift of POAL to NPL, at best NPL will supply an ancillary service to one other region. Given its geography, this fact is unlikely to change.

NPL response. Northport holds a different position on this matter.

66. While we can fully understand and emphasise with the position NPL is placed in here, it is simply not possible to consider the economic effects of this activity in isolation to the other major economic drivers associated. These include the immediate future of RNZ, where the only certainty appears to be that refining activity will cease shortly, the future planning of the Navy, the need for central government to re-evaluate the future use of coastal shipping and other development imperatives. To conclude that it "is likely that NPL's trade tasks will

shift towards higher value goods in containers" on the basis of the evidence presented is irresponsible.

NPL response. Northport is comfortable with its position on this matter.

67. It is not possible to comment on the accuracy of the projection of potential growth equivalent to 60,900 jobs from the evidence presented.

68. We opine that the study undertaken is unlikely to be considered to meet the test of a formal Cost Benefit Analysis and this appears already conceded by the authors. In the report the need for a CBA is established, the needed componentry for a CBA is detailed and then it is concluded that a. "it is not possible to develop a detailed CBA" (p.41) and then b. "uncertainty means that it is not constructive to develop a detailed CBA" (p.41). As a result a rather obscure 2015 Treasury report, "Guide to Social Cost Benefit Analysis " is relied on to justify simply providing a high level summary of assumed benefit and costs. This is followed by, as a final step to a CBA (which it has already been established is not being undertaken), a 'sensitivity analysis' which is offered with the justification that is best practice for testing the assumptions used. A list of very broad assumptions is then listed with highly limited analysis.

NPL response. Northport is comfortable that the economics report(s) robustly assess the effects as required by the RMA framework. These reports will be tested through the consenting process.

Coastal Processes

69. We have read the draft T&T report. A range of issues arise. We have no comment on the data or analysis done in terms of describing the coastal processes which we assume to be of the highest standard. Closer review of this data is beyond the budget and scope of this review.

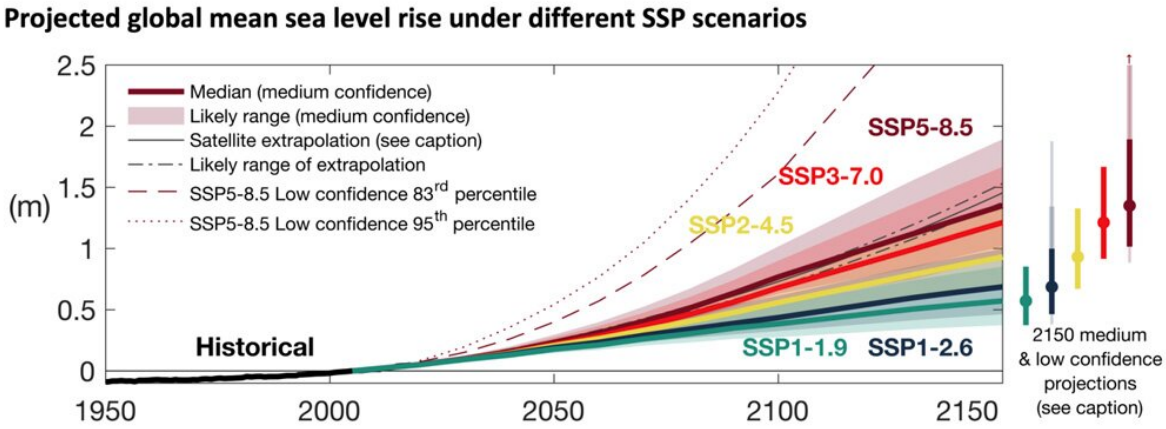
70. In general terms, we note that T&T consider the effect of the proposed development on occupation and disturbance is very high, effects on public access to the CMA to be very high, the effects on currents and sediment transport to be moderate, and due to the occupation of the beach and seabed and changes to the currents as a result of the eastern reclamation the overall cumulative effect on coastal processes and public access is very high.

71. In regard the monitoring and mitigation proposed, it is disappointing to note that tangata whenua and kaitiaki are not even considered and this again speaks heavily of the effectiveness of the empowering of kaitiaki that was proposed under previous consent mitigation processes.

72. The T&T report is one of the few reports that provides serious discussion on the impact of the climate emergency on this proposal and the recent IPCC AR6 report. At 3.12 T&T assess climate change effects and discuss the differences between the IPCC AR5 and AR6 modelling relevant to SLR. The report concludes:

> The modelling projects slightly more warming for a given pathway than AR5 scenarios. This means that there may be slight increases in sea level rise of in the order of 10 to 20cm at 2150 for the extreme (8.5) scenarios. The modelling also includes the potential for a low likelihood, high consequence event of marine ice cliff instability (MICI), although this scenario is characterised by deep uncertainty due to limited process understanding and limited availability of evaluation data. If this event does occur, sea level changes could be in the order of 2 to 5m at 2150.

73. The AR6 reports needs to be read clearly and within context[47].



Projections of GMSL for each of the five SSP scenarios. The bold lines indicate the median projection of models that include only medium-confidence processes, while the shading represents the "likely" range of those same models. The bars to the right show the median and likely ranges of projections for models that include both medium- and low-confidence processes (such as MICI). Source: IPCC (2021) Figure 9.27.

74. AR6 is the also first IPCC report to discuss "committed" SLR – the rise which is already locked in due to historical emissions. Even if emissions were to stop today, it is *likely* that sea levels would rise an additional 0.7-1.1m by 2300. Taking into account the "pledged emissions" through 2030, these numbers increase to 0.8-1.4m of committed SLR.

[47] Carbon brief provide a useful summary at https://www.carbonbrief.org/in-depth-qa-the-ipccs-sixth-assessment-report-on-climate-science

75. AR6 concludes that in almost all emissions scenarios, global warming is expected to pass 1.5C in the early 2030s and the Earth will be 1.4-4.4C hotter than pre-industrial levels by the end of this century, depending on whether emissions are rapidly cut to net-zero or continue to rise

76. While SLR may have limited impact over the proposed consent lifetime, even under best case scenarios, it will have an increasing impact on the location over time. AR6 confirms the possibly of that occurring sooner rather than later. The impacts of a 4.4C increase in average global temperature in the next 88 years, however unlikely that may be , would likely have significant influences beyond just SLR and including ecological processes (including avifauna, marine mammals, etc) and economic and trade modelling. Given this we would expect to see this matter further addressed in the relevant sections of the AEE.

Dr Peter Nuttall
Director
S4S (Fiji) Ltd

1 October 2021

Appendix 3: CEA Matrix

Patuharakeke Effects Matrix – Northport Vision for Growth

Patuharakeke Wellbeing	Effect	Type of Effect[48]	Positive/Adverse and Magnitude[49]	Relevant HEMP[50] provisions	Assessment against HEMP
Environmental	Marine ecology and coastal processes Reclamation – destruction of fauna and habitat, effects on mātaitai Dredging sediment plumes Disruption of Diminished mauri of water and potential flow on effects to Poupouwhenua Mahinga Mātaitai, other sites of significance and	Past, Present Future, temporary, Cumulative. Permanent	Reclamation destroys shellfish and other marine biota habitat permanently. Others have raised potential issue of reclamation and changes to coastal processes disrupting larval dispersal for pipi/kōkota etc, potential for geomorphological changes to Snake Bank cockle bed, concern over potential for change to structural integrity Poupouwhenua Mātaitai/ Mair and Marsden Banks.	Section 9 "Tangaroa" 9.1.1 Issues a)The cultural health of Whangarei Te Rerenga Parāoa, Bream Bay and our estuaries is adversely affected by: i.Direct discharges of contaminants, including wastewater and stormwater; ii.Sedimentation iii.Diffuse pollution from rural, urban and industrial land use; iv.Reclamation, drainage and degradation of coastal wetlands; and v.The cumulative effects of activities.	Proposal's environmental effects are incompatible with the relevant HEMP provisions and Draft Hapū Strategic Plan (Pou Taiao) goals and measures.

[48] http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM231795.html

[49] No effect, minor effect, significant effect, critical effect.

[50] https://patuharakeke.maori.nz/wp-content/uploads/2015/02/Patuharakeke-Hapu-Environmental-Management-Plan-December-2014.pdf

	Whangārei Te Rerenga Parāoa generally.		Increased shipping = potential for heightened oil spill risk and other pollution including providing artificial surface for more establishment of biosecurity risk/marine pest species to establish ie. Mediterranean Fanworm – in close proximity to our mātaitai, nearby Reotahi Marine Reserve and other significant sites. The mauri of Whangārei Te Rerenga Harbour is in a diminished state and this activity will not improve harbour health (we have also seen no mitigation/offsetting proposals) Cumulative effects of port expansion in conjunction with climate crisis and effects on food webs, storm events, acidification and	b)Patuharakeke are not represented in decision-making over the management of coastal waters in our rohe. Objectives 9.1.2 (a)-(e) Policies 9.1.3 (a)-(c), &(h) Methods 9.1.4 (a), (c)-(d) Section 9.6 Industrial Activities at Poupouwhenua Issues 9.6.1 (a) and (b) Objectives 9.6.2 (a) and (b) Policies 9.6.3 (a), (b), (c) other relevant sections (9.8)	

			coastal squeeze on our taonga species are not considered. **From our perspective these potential effects on Poupouwhenua Mahinga mātaitai, Te Koutu, Rauiri, Whangārei Terenga Parāoa are considered significant and adverse.**		
	Potential effects on taonga species e.g. marine mammals, birds	Past, Present Future, Cumulative.	The Cawthron Report concludes effects on marine mammals are less than minor. Assessment focuses on operational effects and how they can be mitigated through protocols. We have issue with dataset used and consider the harbour and Bream Bay are important for marine mammals from a cultural (and ecological) perspective. Increased shipping traffic will heighten ship strike risk for whales.	Section 9 generally ie. 9.7 Marine Mammals 9.7.1 Issues a) The habitat of marine mammals is facing immense human-induced pressures. 9.7.2 Objectives a) Increased numbers of healthy whales and dolphins inhabiting and migrating through our coastal waters and harbour. 9.7.3 Policies	Proposal's effects on taonga species are inconsistent with relevant HEMP provisions and Draft Hapū Strategic Plan (Pou Taiao) goals and measures.

			Underwater acoustic effects on other species eg. benthic dwelling taonga are not considered. PTITB consider the proposal site to be very significant bird habitat. We are not convinced that birds will merely be able to relocate elsewhere in the harbour. Cumulative effects of port expansion in conjunction with climate crisis and effects on food webs, storm events, acidification and coastal squeeze on our taonga species are not considered. The mauri of Whangārei Te Rerenga Harbour is in a diminished state and this activity will not improve harbour health	a) The cultural, spiritual, historic and traditional association of Patuharakeke with marine mammals, and the rights to exercise rangatiratanga and kaitiakitanga over marine mammals is guaranteed by Te Tiriti o Waitangi. 9.7.4 Methods a) Patuharakeke will continue to advocate for a clean and healthy marine environment for marine life, including dolphins and whales. Section 7 "Tane Mahuta" - 7.1 Issues a) The mauri of indigenous flora and fauna is being negatively impacted by land use, development,	

			(we have also seen no mitigation/offsetting proposals) **Overall we consider the potential effects on taonga species to be significant and adverse.**	disease and pest incursions leading to biodiversity losses. b) All indigenous flora and fauna are taonga tuku iho to Patuharakeke. c) Decline in key species has significant adverse cultural, social, health and economic effects on Patuharakeke. d) Matauranga Maori in relation to indigenous biodiversity is at risk due to loss of access to sites and other taonga and the ability to practice kaitiakitanga. 7.2 Objectives a) The mauri of indigenous ecosystems is protected and	

				enhanced enabling Patuharakeke to provide for our physical, social, economic and cultural wellbeing.	
	Discharges to Air	Past, Present Future, Temporary, Cumulative.	The evidence provided concludes effects of discharges to air are less than minor. We note air quality is focused on residential receptors and does not consider effects on community, kaitiaki, whānau etc utilising the beach for example. Effects from emissions of increased land and maritime transport have not been considered. Complaints from whānau viewing visible plumes from Takahiwai and on and around the harbour. Climate change issues are not assessed.	S. 4 "Ranginui" Section 4.1 Discharges to Air Issue 4.1.1 Objectives 4.1.2 Policies 4.1.3 Methods 4.1.4 Section 4.2 Climate Change 4.2.1 (a) Climate Change will impact the cultural, economic, social, and environmental wellbeing of Patuharakeke. 4.2.4 (a)Patuharakeke will work proactively	The proposal is not consistent with the HEMP provisions relating to climate change and also has a possible conflict is around adverse cumulative effects on mauri (of taiao/ ecosystems)

			The emissions profile of the refinery will soon change with a move to a terminal so port related impacts will be greater - the "existing environment" context is changing. **As such Patuharakeke consider would be that air quality effects of this proposal are potentially more than minor.**	with all agencies and individuals who are seeking positive and pragmatic solutions and responses to climate change. b)PTB will work with industry to develop cultural monitoring methodologies to complement the existing monitoring regime relating to discharges to air.	
Patuharakeke Wellbeing	Effect	Type of Effect[51]	Positive/Adverse? and Magnitude[52]	Relevant HEMP[53] provisions	Assessment against HEMP Patuharakeke
Cultural	Permanent "reconstruction" of Whangārei Te Rerenga Parāoa, including Te Koutu, Patangarahi, Poupouwhenua.	Adverse, permanent, past, present and future, cumulative effects. In particular the potential impact on the Treaty relationship with the Crown in regard the title of the new whenua created	These matters cannot be addressed by any specialist apart from mana whenua. However, to the extent that Rob Greenaway discusses recreation and access – he concludes "both the eastern and western	**Section 9.2 Foreshore and Seabed** **9.2.1 Issues** a) The historical loss of our foreshore and seabed rights has resulted in adverse cultural, environmental,	We have not seen any mitigation that addresses most of the relevant HEMP provisions.

[51] http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM231795.html

[52] No effect, minor effect, significant effect, critical effect.

[53] https://patuharakeke.maori.nz/wp-content/uploads/2015/02/Patuharakeke-Hapu-Environmental-Management-Plan-December-2014.pdf

	Generation of new land titles and maritime occupational rights. Changes to "riu" for whales, rerenga spiritual pathway Alienation of more ancestral land, takutai moana, traditional nohoanga site/s, extinguishment of customary rights. Ongoing loss of Te Reo me ona tikanga, mātauranga – intergenerational impacts Ongoing Impacts on kaitiakitanga – knowledge and practice through	and the granting of further Crown easements in the CMA, with particular regard to any potential impact on Treaty claims negotiations and MACA application processes	reclamations are likely to have significant adverse effects on recreation cumulatively, largely due to effects at Marsden Bay Beach as a result of the eastern reclamation. The eastern reclamation will have adverse effects on Marsden Bay Beach as a recreation destination, with or without retained options for public access. Effects are therefore likely to be significant locally and more than minor regionally. Mitigation options for the eastern reclamation need consideration but the already-consented Berth 4 proposal has minimal additional effects on recreation." T&T also identifies significant adverse effects in the coastal processes report in relation to loss of the beach etc	social and economic impacts on Patuharakeke. These are perpetuated in the contemporary context by the lack of appropriate statutory recognition of our customary rights over the foreshore and seabed. b) Patuharakeke have specific interests in Port and reclamation activities that require addressing. 9.2.2 Objective a) Recognition of, and appropriate provision for the longstanding rights and interests of Patuharakeke in relation to the foreshore and seabed.	

	loss of access to places and taonga species - intergenerational impacts Diminished mauri, flow on intergenerational effects on tikanga and values e.g. Manākitanga, mana		PTITB consider permanent significant adverse effect and cumulative effect of removal of our takutai moana and impedes access when combined with existing Port footprint, Refinery structures, Marsden Cove modifications. We have never relinquished our customary title to this whenua. This alienation from one(beach), papamoana/takutai moana etc has flow on effects on our Patuharakeketanga that are intergenerational on our tamariki and mokopuna yet to be born. **Alienation and loss of papamoana, "one"/**	b) A partnership regime with respect to port and reclamation activities in our takutai moana. **9.2.3 Policies** a) Patuharakeke will continue to seek just outcomes through our Waitangi claims processes (and other mechanisms) and advocate for an equitable partnership stake in port activities that will allow us to reaffirm our kaitiaki status and allow us to properly discharge our responsibilities. This would provide income to assist us to appropriately look after and manage	

			beach is a Significantly adverse cultural effect.	our foreshore and seabed. b) Patuharakeke will continue to seek ways to express our customary rights and interests over particular sites and areas within our takutai moana (eg. see policies in section 9.8.3 of this plan). 9.2.4 Methods. b) PTB will continue to engage with Northport, NPC and NRC to build and maintain robust working relationships to address cultural issues and achieve positive cultural, environmental and economic outcomes. c) PTB and NPC will investigate the	

				feasibility of having a Patuharakeke representative appointed to the NPC Board of Directors.	
	Effects on waahi tapu	All	Archaeological sites are unlikely to be affected. However sites of significance eg. Te Koutu, Patangarahi, Poupouwhenua, Rauiri, and the wider network and landscape of the harbour and Te Akau Bream Bay, our maunga etc are affected. *See below - cultural landscapes section*	See below	See below
	Cultural Landscapes/ Seascapes and sites of Significance to Tangata Whenua	Past, Present Future, Temporary, Cumulative. Effects of Coastal Structures on Poupouwhenua/Whangarei Terenga Parāoa Cultural Landscape/Seascape and	Stephen Brown Report concludes effects on natural character, landscape and amenity are more than minor, no mitigation described as yet	*Section 8 "Waahi Tapu me Waahi Taonga"* 8.1 Issues a) Ongoing damage, destruction and mismanagement of waahi tapu and areas	Proposal is contrary to HEMP provisions for protection and enhancement of areas or sites of customary value and access to sites of cultural significance

		Mapped site of significance to Tangata Whenua (Poupouwhenua Mātaitai -deemed operative in pRP maps) and SEA.	**PTB consider the effects on the cultural landscape/seascape in this location are high,** regardless of the industrial activity already present in the surrounding zone (noting this will decrease in the coming years with the refinery transition as well). The eastern reclamation visually removes the stretch of beach and path/access to Poupouwhenua mahinga mātaitai impacting its integrity as a cultural landscape. Along with the visual barrier created, it also creates a physical one. Access to Poupouwhenua Mātaitai is permanently removed. As yet we have not seen what is proposed for esplanade reserve along the refinery boundary. This raises issues in the	or sites of significance that contribute to, or are a part of, our cultural landscape and seascape. a) Areas or sites of customary value are often limited to western definitions, such as "archaeological". c)Changes in land ownership and use have often denied Patuharakeke access to sites of significance and waahi tapu. **8.2 Objectives** (a) the protection and enhancement of areas or sites of customary value; and (e) Patuharakeke have access to sites of cultural significance in our rohe. **8.3 Policies**	and Draft Hapū Strategic Plan (Pou Ahurea) goals and measures.

			context of customary access as well and links into Treaty and Takutai Moana issues ie loss of foreshore and seabed ownership/ access **Overall we consider the potential cultural effects of the physical reconstruction of the harbour and loss of our takutai moana and access to be significant and adverse**	(c) Our cultural landscapes and seascapes should be afforded at least as high a priority as other landscape values when being considered as part of any process under the RMA, the Conservation Act, the Reserves Act or the LGA. (d) Preparation of landscape assessments for resource consent applications and similar processes should be done in conjunction with PTB RMU to ensure that the cultural aspects of the landscape are given full recognition alongside other	

				values such as natural character and amenity values. (e) Monitoring of effects on cultural landscapes and waahi tapu (including marine cultural heritage) within our rohe is the responsibility of the ahi kaa and kaitiaki. This should be reflected in all relevant consent conditions. This function should be formally transferred to PTB RMU as mana whenua and resourced appropriately. (f) Any areas and sites of customary value that contribute to, or are a part of our cultural landscape	

				must be defined by Patuharakeke. 8.4 Methods (a) PTB RMU will request that councils and other relevant agencies afford cultural landscape and seascape values at least as high a priority as other landscape values when preparing plans and policies and when considering landscape values during resource consent processes; & (g)Patuharakeke must have unrestricted access to waahi tapu and other places of cultural significance on Crown land within our rohe. *Section 9.3 Access to the Coastal Environment*	

				9.3.1 Issues (a) Patuharakeke access to the coastal marine area and customary resources has been reduced and degraded over time. 9.3.2 Objectives (a)Healthy dune and beach ecology, safety for beach goers, and protection of sites of significance, natural character and amenity through collaborative management between Patuharakeke and the respective agencies. b)Customary access is protected and enhanced. 9.3.3 Policies (a) Customary access to the coastal environment is a customary right, not a privilege, and must be recognised and provided for	

				independently from general public access; and (d) PTB will oppose coastal land use and development that results in the further loss of customary access to the coastal marine area, including any activity that will result in the private ownership of the foreshore. **9.3.4 Methods** (d) Councils issuing consents that could affect customary access will include consent conditions to protect and enhance customary access.	
Patuharakeke Wellbeing	Effect	Type of Effect[54]	Positive/Adverse? and Magnitude[55]	Relevant HEMP[56] provisions	Assessment against HEMP Patuharakeke

[54] http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM231795.html

[55] No effect, minor effect, significant effect, critical effect.

[56] https://patuharakeke.maori.nz/wp-content/uploads/2015/02/Patuharakeke-Hapu-Environmental-Management-Plan-December-2014.pdf

Social	Potential effects on health/ hauora of Patuharakeke from environmental effects as they are inextricably linked. Past effects on transport network, traffic safety, lack of adequate infrastructure	Past, temporary, present, future, cumulative.	It is difficult to measure the cumulative effects of the Port expansion on social wellbeing, hauora as a narrow focus for assessment has been taken by experts. **Potentially more than minor adverse effects.**	S. 4 "Ranginui" Issue 4.1.1 Objectives 4.1.2 Policies 4.1.3 Methods 4.1.4 b)PTB will work with industry to develop cultural monitoring methodologies to complement the existing monitoring regime relating to discharges to air. c)PTB to work with industry and other relevant stakeholders to consider funding research on the impacts of air discharges at Poupouwhenua to human health. d) PTB will work with industry and other relevant stakeholders, academic institutions	Overall the proposal is not entirely incompatible with the relevant HEMP provisions. Where there is possible conflict is around adverse effects on mauri and ecological and cultural effects outlined above which of course links to social wellbeing. Does not accord with goals and measures sought by Draft Hapū Strategic Plan (Pou Hauora, Pou Mātauranga, Pou Tai Tamarikitanga)

				and other interested parties, to fund research to assess the health impacts of activities on Patuharakeke whānau.	
	Potential Effects on Amenity Values "amenity" is not really a concept that translates well in Te Ao Māori (recreation is similar in not being a traditional practice) However, dust, noise, etc all impact on the experiential values of the cultural landscape as a whole.	Past, temporary, present, future, cumulative.	Public Access issues are discussed above. Air quality is discussed above but is also pertinent from an "amenity" perspective. Similarly, Noise emissions assessment are again focused on residential receptors and does not consider effects on community, kaitiaki, whānau etc utilising the beach for example. From a mana whenua perspective however, we note the challenge for us in separating out these layers of effect which in our experience are cumulative effects	Public Access is discussed above	As above

			on the cultural and social values and uses of Poupouwhenua and surrounding area. **Potentially more than minor adverse effects.**		
Patuharakeke Wellbeing	Effect	Type of Effect[57]	Positive/Adverse? and Magnitude[58]	Relevant HEMP[59] provisions	Assessment against HEMP Patuharakeke
Economic	Potential Economic Effects Unknown Ministry of Defence has confirmed they are not intending to relocate navy to Whangārei. Unclear as to what benefits will arise directly for Patuharakeke whānau through job production etc. As economic	Past, Present Future, Temporary.	The M.E and Copeland Reports concludes only minor benefit to the Northland regional economy. Report light in terms of taking into account lessons from Covid-19 Situation and other global challenges and changes. We note that non market values are not part of the assessment either and a Triple bottom line method of financial auditing and reporting	No specific chapter but provisions throughout such as Section 9.1.3 (c) "Decision-makers will ensure that economic costs do not take precedence over the cultural, environmental and intergenerational costs of degrading coastal water quality"	Proposal does not align with Section 9.1.3 (c). We don't have adequate information to ascertain if proposal outcomes will align at all with Draft Hapū Strategic Plan (Pou Whaioranga), but we do not consider the proposal to be sustainable.

[57] http://www.legislation.govt.nz/act/public/1991/0069/latest/DLM231795.html

[58] No effect, minor effect, significant effect, critical effect.

[59] https://patuharakeke.maori.nz/wp-content/uploads/2015/02/Patuharakeke-Hapu-Environmental-Management-Plan-December-2014.pdf

	reports speak to "regional benefits" We know of a couple of whānau presently employed at Northport. Patuharakeke have a relationship agreement with Northport. There are no Governance positions for hapū members although we have consistently asked for such representation. Economics do not consider past negative economic impacts on hapū through loss of land, loss of resources, impacts on low income families (eg. inability to supplement weekly kai budget with		with the addition of a cultural component would be preferred. There are a number of experts in NZ that are now incorporating such methods into assessments including specific inclusion of cultural data and valuations (Calum Redfem, Proxima Global & Richard Yao, Scion. Pers. comm. March 2020). **PTITB's position is that the economic evidence is insufficient to assess the effects on Patuharakeke economic wellbeing.** We recognise there are potential benefits to local and regional economy but a actual CBA is needed to determine whether these outweigh the		

	kaimoana for example)		potential costs, including the true cost of externalities. From a mana whenua perspective the economic benefits have not been proven to outweigh the historic and ongoing cost on our culture and values, and the significant loss and disconnection of relationship to our one (beach), papamoana/takutai moana etc has flow on effects on our Patuharakeketanga and extinguishing of customary rights that are intergenerational on our tamariki and mokopuna yet to be born.		

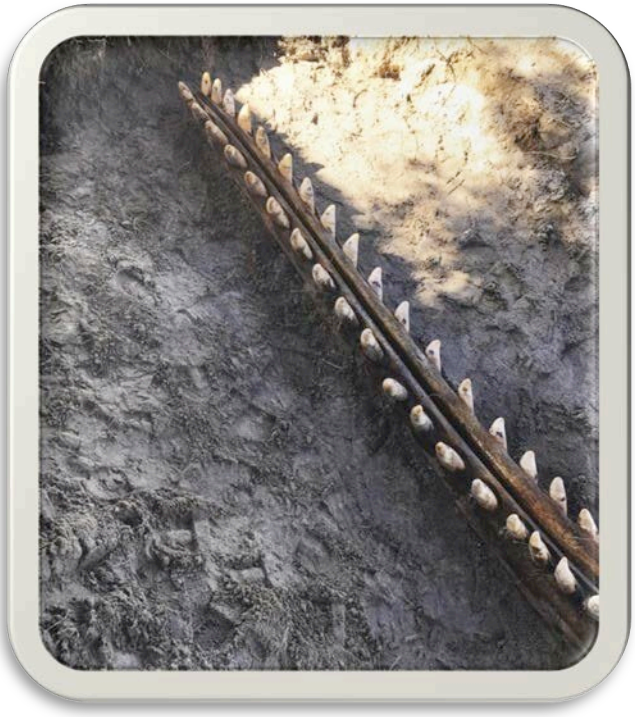
Patuharakeke
TE IWI TRUST BOARD

CULTURAL VALUES ASSESSMENT REPORT:

OF NORTHPORT LIMITED'S '*VISION FOR GROWTH*' MASTERPLAN FOR THE EXPANSION OF NORTHPORT.

Patuharakeke tamariki swimming at beach west of Northport (Papich Road Walkway) during Kura Taiao Noho January 2019.

This Cultural Values Assessment Report ("CVA") has been commissioned by Northport Ltd and undertaken by Patuharakeke Te Iwi Trust Board ("PTB") as part of the Tangata Whenua Engagement Process in response to Northport's masterplan for the future - 'A Vision for Growth' (VFG). This CVA is one step in an ongoing process that will ultimately provide a Cultural Effects Assessment Report should Northport proceed with resource consent applications. All Intellectual Property contained in the Report resides at all times with tangata whenua. Should any person wish to use the Report for any purpose other than that specified herein, the prior written consent of PTB must be obtained.



Ko Manaia te Maunga
Ko Whangarei Terenga Paraoa te Moana
Ko Takahiwai te Marae
Ko Rangiora te Whare Hui
Ko Patuharakeke te Hapu
Tihei mauri ora!

Part of the jawbone of Tahuhu Potiki – the sperm whale that beached on Mair Bank in 2017 (photo - Taryn Shirkey)

Whangarei Terenga Parāoa

There are a number of traditions relating to the meaning of the harbour's name that are shared and valued amongst harbour tribes including Patuharakeke. A Ngapuhi interpretation is that the harbour was a gathering place for chiefs where they would strategise before heading off to do battle with the southern tribes. Ngati Wai named the harbour Whangarei-terenga-parāoa (the gathering place of whales) because whales gathered there to feed during summer.

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Table of Contents

1. PURPOSE OF THIS PAPER

a) To present a '**Patuharakeke Cultural Values Assessment"** to Northport Ltd.
b) This paper will form part of the suite of baseline technical reports commissioned by Northport as part of the 'Vision for Growth' project design phase and preparation of an Assessment of Effects for consent application purposes going forward.
c) This paper will form part of the overall tangata whenua engagement process for this proposal and inform any eventual Cultural Effects Assessment ('CEA') this is also referred to as a CIA or Cultural Impacts Assessment but they are the same exercise.

2. INTRODUCTION

Northport is developing a plan for future expansion of its site at Poupouwhenua/Marsden Point. The intention is to understand constraints and opportunities to arrive at a feasible footprint that will provide the port with sufficient flexibility to facilitate regional (and national) growth into the medium to long term future. The Vision For Growth ("VFG")[1] was released in 2018 as Northport gather technical data and community and stakeholder feedback prior to making a decision on whether to advance any specific resource consent applications.

Patuharakeke are tangata whenua of the area Northport operates in and hold mana whenua status over Poupouwhenua/Marsden Point and the Patuharakeke Te Iwi Trust Board ("PTB") represents their interests in matters including *inter alia* environmental and resource management issues. PTB has a long standing relationship with Northport that was formalised in a Relationship Agreement ("RA") in mid 2019 to assist an effective, stronger working relationship between the two parties. PTB have a history of providing cultural and environmental advice and support to the Northport and both parties strive to engage with one another in the spirit of good faith and transparency. There is also a great deal of experience and capability within Patuharakeke and the wider hapu and iwi of Whangarei Terenga Paraoa with resource management and environmental matters, particularly consent applications and developments in and around the harbour. This contemporary management perspective is in addition to the role tangata whenua have carried out for centuries when discharging their duties as kaitiaki.

Northport wishes to engage with tangata whenua in regard to the VFG and have initiated specific consultation with PTB in October 2018. Northport have also approached Te Taitokerau Māori and Council Working Party ("TTMAC"), the collective of iwi and hapu representatives and councillors. Patuharakeke hosted members of TTMAC in December 2018 at Takahiwai Marae to briefly discuss the project and undertake a port tour with Northport staff.[2] Initial discussions have been held with Ngatiwai Trust Board who have since deferred to Patuharakeke as hau kainga at this stage in the process but will continue to engage throughout future stages (Jim Smillie pers. comm February 2020). Further engagement with our other whanaunga hapu and whanau of Whangarei Harbour is anticipated and encouraged going forward. In 2018 and 2019, PTB have submitted an updated Tangata Whenua Engagement Process Terms of Reference which recommended a pathway for engagement and framework for a CEA going forward.

[1] See https://www.vision4growth.co.nz
[2] see http://northland.infocouncil.biz/Open/2019/03/TTMA_20190314_AGN_2508_AT_WEB.htm

2.1 Engagement Process

As hau kainga, tangata whenua holding mana for the area and RA partner, PTB have committed to work with Northport to assist with facilitating engagement and preparation of assessment reports. The outline below sets out a roadmap for engagement and development of the reports.

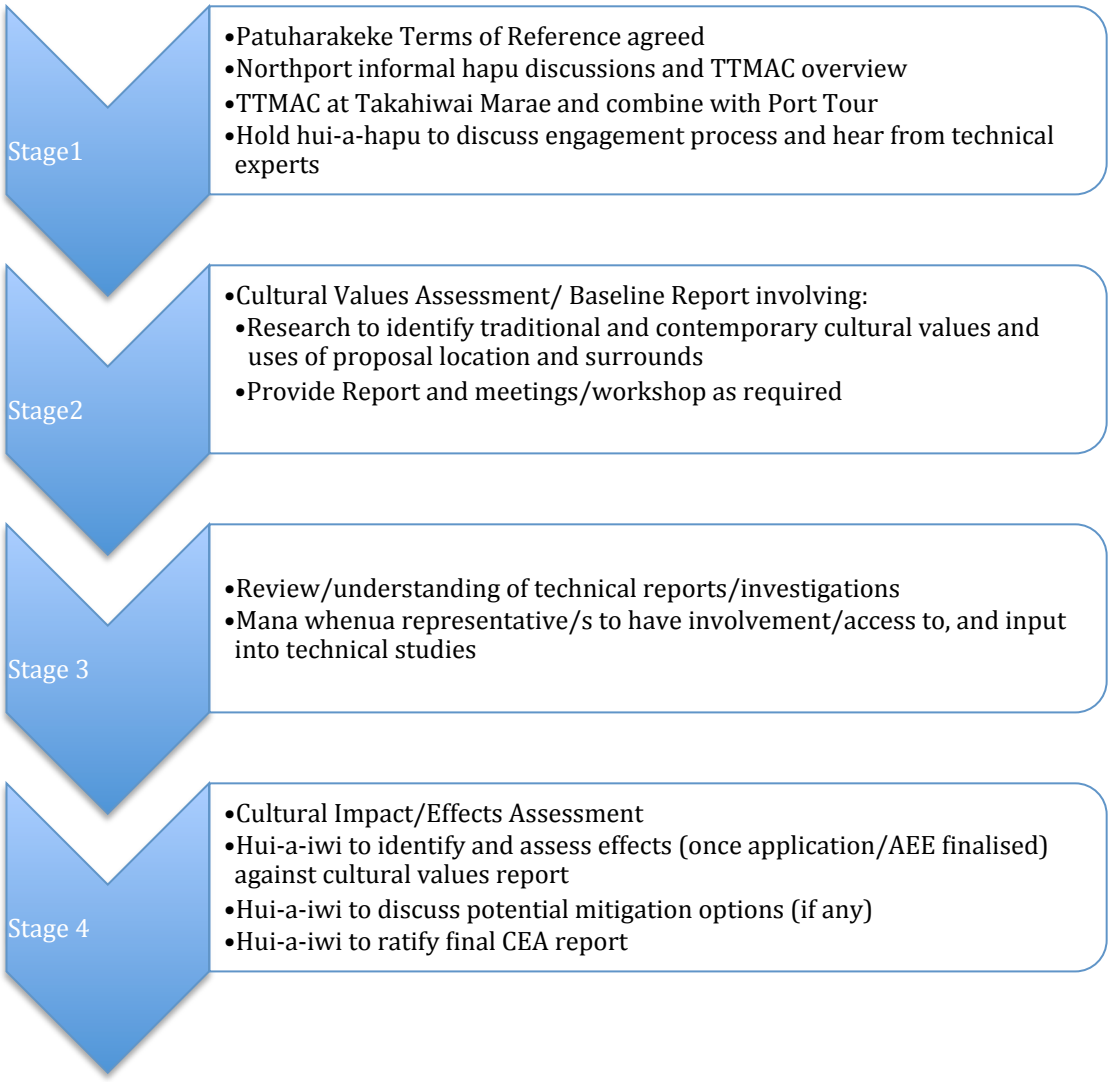

Figure 1: Engagement Process

Cultural effects on Maori (and their values, culture and taonga) are not defined in the Resource Management Act 1991 (''RMA'') and have generally been poorly defined in terms of best practice. This lack of definition has often meant that "cultural effects" are narrowly scoped and "pigeon-holed" or reduced as matters relating only to wahi tapu or heritage and seen in a "past tense" sense rather than understanding its continuous nature incorporating current events or activities as well as past. While these matters are critically important, they are only a sub-set of all the effects that a proposal might have on tangata whenua, their values and environmental concerns.

PTB have developed and use a tested matrix based methodology based on the cultural safeguards of the RMA that concentrates on firstly identifying cultural relationships to the proposal site and implications for the practice of Kaitiakitanga. These matters are discussed in section 5 of this report.

3. VISION FOR GROWTH OVERVIEW

3.1 Historic Context

3.1.1 Northport Consent

Patuharakeke were first approached by the Northland Port Corporation ("NPC") in 1992 regarding their proposal to construct a timber port (Northport) at Poupouwhenua. NPC commissioned Patuharakeke to undertake a cultural impact assessment of the proposal in 1992. A clear protocol for engagement was set out by Patuharakeke and later strengthened and supported by Dr Margaret Mutu who was part of a Technical Review Panel set up by the Parliamentary Commissioner for the Environment at the time. This was following a request from Northland Regional Council ('NRC') to assist in the process of considering the application (Chetham, 1998). However, the period leading up to the resource consent hearings in 1997 was fraught with issues, particularly around consultation, differing ideas of what constitutes consultation, and an inaccurate list of iwi and hapu to consult with.

Having been removed of our rights over the harbour during the last two centuries through the Crown's exercise of presumptive ownership, management and control (for example, numerous Harbour Board Vesting and Empowering Acts), in our experience, the decision to grant consent was almost a foregone conclusion. The prevailing view was always going to be that reflected by the Joint Hearing Committee;

> *"The Committee accepts that Maori presence and ancestral values underpin RMA matters, but in the special circumstances of this application considers that these need to be put in the context of the wider issues of the application, the harbour, and the community….After much deliberation the Committee has reached a view that the furthest outreach of settlement in Tai Tokerau and their productive lands will receive positive benefits from the availability of the proposed port. The wood and other products that they will export through the port could, in turn, be a contributor to adverse effects on the harbour, therefore on the customary way of life of Maori people living on its shores. This is part of the paradox of the modern world."* (Joint Hearing Committee, 1997:38).

Following the Committee's recommendation to NRC and the Minister of Conservation to grant the various consents and restricted coastal activities there was an appeal to the Environment Court by Whangarei iwi and hapu which was unsuccessful. Construction of the port commenced in in October 2000 and it opened for operations in June 2002.

3.1.2 Port Reclamation Vesting Process

Areas of reclamation are administered by the Minister of Conservation under section 9A(1) of the Foreshore and Seabed Endowment Revesting Act 1991 ('Revesting Act').

A former lease for $1/year between the NRC and Northport covered approximately 30 Ha of the facility commencing in 1991 and expired in 2011. Following the outcome of the resource consent process both NPC and Patuharakeke had sought ownership of the reclamation by applying for vesting of the fee simple title under section 355 of the RMA. NPC considered that ownership of the reclaimed land would provide them with security and certainty required for ongoing investment and ensure the long-term viability of the port. PTB's application was largely based on our claim that customary title has never been relinquished, our obligations as kaitiaki and the cultural importance of the site (Chetham, 2013). As well, PTB accepted that with the highly modified nature of the Poupouwhenua area, our aspiration of being a landowner and landlord still prevailed.

Consideration of the vesting applications was not progressed for some time due to the environment court proceedings and then the increasing debate over the foreshore and seabed ownership and subsequent legislation in 2004. Leading up to the expiry of the lease in 2011 the Department of Conservation (DOC) began to increase dialogue with Patuharakeke and NPC in 2010 and issued a draft submission making recommendations to the Minister of Conservation. DOC's position was to recommend that the Minister delay vesting the land in neither party until treaty claims pertaining to the area are settled (Chetham, 2013). Communications between DOC and PTB broke down over the matter despite continued queries raised by PTB. In January 2018, the Minister of Conservation vested the leasehold interest in the reclamation in Marsden Maritime Holdings Ltd (NPC's new title) for 105 years. PTB found this information by chance while researching other matters. In our view, this decision was contradictory to section 4 of the Conservation Act which requires the principles of the Treaty of Waitangi are given effect to; and section 41(4) of the Marine and Coastal Areas/Takutai Moana Act ('MACA').[3] Further, the lack of information from the Department of Conservation despite was disappointing. These are issues we will continue to hold the Crown accountable for through other fora, for example our High Court application for Protected Customary Rights through the MACA. These matters are explored further in section 6 of this report.

3.2 Vision for Growth Proposal

Presently, Northport has a port area of 49 hectares and three berths totalling 570 metres in length. The majority of the port area is currently used for log marshalling, with smaller areas dedicated to woodchip handling, container exports and agricultural imports. Other uses include administration, customs, the wharf aprons, access roads and tug wharfs. Northport has an existing consent to construct a fourth berth and additional reclamation to the east of the existing berths which is shown in Figure 2 below.

[3] see: http://www.legislation.govt.nz/act/public/1987/0065/latest/DLM104078.html
http://www.legislation.govt.nz/act/public/2011/0003/latest/DLM3213334.html#DLM3213334

Figure 2: Northport Existing and Consented Port Area (from Economic Impact Assessment by M.E)

Northport's VFG documentation signals a desire to secure a development footprint with a maximum port area of 75.8 hectares and berth length of 1,400 metres (sixth berths) as shown in Figure 3 below. The footprint would see two new reclamations, one on each of the western and eastern sides of the existing facility. While wood exports have dominated trade at Northport to date, it is anticipated this function is likely to decline in the coming decades as forest harvest in Northland decreases. However, Northport is situated strategically in the high growth areas of the upper North Island, it is the nearest multi-purpose port to Auckland and the closest port to the majority of New Zealand's international markets. Ports of Auckland is likely to face capacity constraints over the long term. It is physically constrained and under significant pressure to limit its footprint both on land and in the Waitemata Harbour. This has implications for it's future growth (M.E., October 2018).

Northport took delivery of it's first container crane in 2015 and in January of this year a second mobile crane was acquired[4] to handle existing steady container traffic at the port. Forecasts anticipate container volumes at Northport could grow between 8-10% per annum over the coming decades. Other growth potentially signaled for Northport includes car imports, cruise ships and a ship repair dry dock, which is discussed further in subsequent sections of this report.

[4] https://northport.co.nz/node/12393

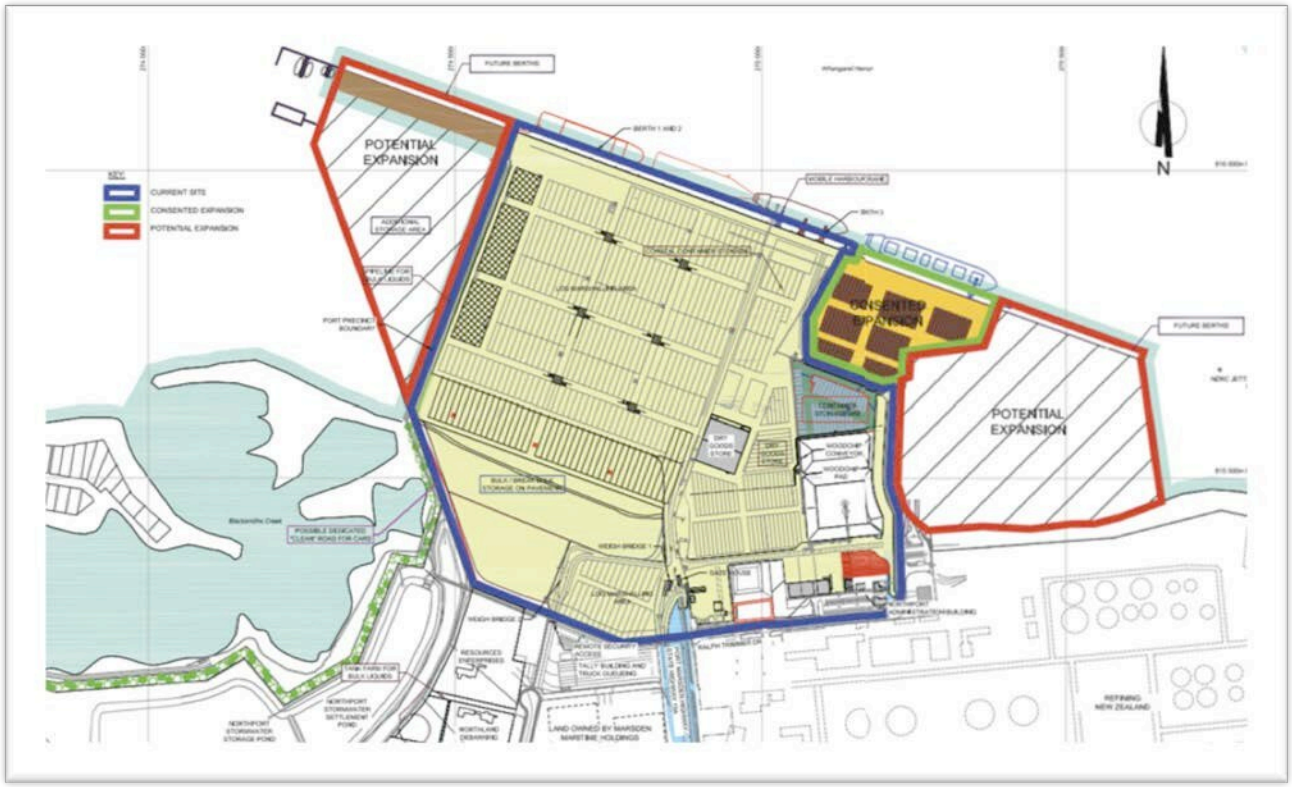

Figure 3: VFG Footprint with Additional Reclamations Outlined in Red (from Economic Impact Assessment by M.E)

3.3 Current Political Landscape

Towards the end of 2019 the Upper North Island Supply Chain Strategy (UNISCS) Working Group Report was released. The purpose of this 'logistics and freight review' was to ascertain whether New Zealand's supply chain will be fit for purpose in the longer-term. The Report examined issues around the future of the Port of Auckland ("POAL") and argued that strategically the best option was to move freight operations from Auckland to Northport.[5] This finding aligned well with NZ First's position. Associate Minister of Transport Shane Jones, enthusiastically backed the findings,[6] following quickly with announcements about upgrading rail and acquiring land for the rail spur from Oakleigh to Northport.[7]

The 3 Northland Mayors and the Chair of the NRC launched and fronted on behalf of private investors, a "Kia Kaha Northland" social media and communications campaign to bring five big infrastructure projects to the region, "for the benefit not just of Northland, but of Auckland and all of New Zealand."

[5] https://www.transport.govt.nz/multi-modal/keystrategiesandplans/upper-north-island-supply-chain-strategy/
[6] https://www.newsroom.co.nz/2019/11/21/913309/jones-lays-political-noose-threat-on-ports-ceo
[7] https://www.rnz.co.nz/news/political/408476/government-to-buy-land-for-rail-to-northport-and-marsden-point

The five Kia Kaha Northland-backed projects are:

- A new $240 million ship repair dry dock in Whangarei - to service ships from New Zealand and Australia, rather than Asia where they must currently go for this work.
- A new multimillion-dollar Royal New Zealand Navy base in Whangarei - to replace its current Devonport Naval base.
- The multimillion-dollar Northport, Whangarei expansion - for cars and containers currently entering New Zealand through Auckland, as well as for exports from Northland and elsewhere.
- The multimillion-dollar completion of a four-lane highway from Whangarei to
- Auckland, including the planned four-lane highway to Port Marsden.
- The fast-tracking of a doubled-tracked rail line from West Auckland to Whangarei, including the planned spur to Port Marsden, to carry freight.

The local politicians went so far as to say, "It would be a complete failure by this generation of Northlanders and a betrayal of all our 'mokopuna' to let this opportunity be lost." [8] As far as PTB are aware, the only Māori this group had approached to discuss the potential betrayal (or not) of 'their mokopuna' was the Tai Tokerau District Māori Council;[9] a committee that meet sporadically and sits under the umbrella of the NZ Māori Council. The NZ Māori Council has led important national actions in the past in relation to Treaty of Waitangi breaches before the High Court and Courts of Appeal and litigation relevant to Maori in the areas of forestry, fisheries and freshwater for example. Inappropriately, the Mayors Chair have not even approached their own existing established relationships with Māori partners i.e. Te Huinga or TTMAC, let alone Patuharakeke, their Treaty partner, the mana whenua and hau kainga of Poupouwhenua. Neither of these warrant appropriation of Maori terminology to back-fill a perception that a partnership approach had been entered with Maori let alone tangata whenua.

Amongst this posturing, PTB have been dismayed at the lack of early and full consultation by our Treaty Partner. The only conversations PTB have had regarding these proposals have been with Northport CEO and staff.

If the media reports are correct, the government is already seriously considering a proposal to relocate the Port of Auckland and, "cabinet has agreed unanimously that the 'status quo' is untenable". Cabinet had been advised by its officials that the UNISCS report lacked clear modelling and full analysis including assessing all potential options. It has since asked the Ministry of Transport to fully test the view of the working party that Auckland's port should move to Marsden Point within 10-15 years"[10]. PTB have raised these matters with the relevant ministers and still await a response.

What is notable in our view, is that over 2 decades after the Joint Hearing Committee's decision in 1997 to grant consent for the timber port at Marsden Point, the very reasons for grant of consent described by the Committee are again being advocated by the authors of the UNISCS report, Minister Jones and the Kia Kaha campaign, i.e. the "furthest outreach of settlement in Tai Tokerau and their productive lands will receive positive benefits from

[8] see https://www.nzherald.co.nz/northern-advocate/news/article.cfm?c_id=1503450&objectid=12305652
[9] https://maoricouncil.com/te-tai-tokerau/
[10] https://www.stuff.co.nz/auckland/118141726/auckland-port-move-government-to-explore-options-more-fully

the availability of the proposed port." One can only hope if such a move does go ahead it will be felt at the furthest outreach of Tai Tokerau this time around.

It only takes a glance at Northland's statistics for the Māori Community to see we have not fared any better, since the development of the port in 2002, and going right back to when successive Whangarei Harbour Board Acts started alienating our land and harbour from us. A 2015 report commissioned by Te Taitokerau Iwi Chief Executives' Consortium tellingly states,

"despite being 30% of the Northland population, the Taitokerau Maori economy contributes only 13% to the Northland economy, much of which is through government expenditure and household consumption. Achievement is 60% lower for Taitokerau Maori at all levels of the education system, which translates into lower paid, lower quality jobs. Statistics expose the continuous emigration of the youthful Taitokerau Maori workforce to Australia in pursuit of economic prosperity and oranga. Those who remain behind feature at the highest levels of socio-economic deprivation in the country, with few achieving retirement before being affected by health conditions directly associated with financial poverty as well as loss of hope. Life expectancy for Taitokerau Maori is 7-10 years less than non-Maori. Predominately Maori rural communities suffer from third-world diseases directly associated with economic deprivation." (Robinson et al, 2015).[11]

Patuharakeke have certainly experienced all of these factors, particularly the export of our young people to Australia over the past few decades.

4. Cultural Values Assessment Methodology

This Cultural Values Assessment (CVA) aims to identify tangata whenua values through our relationships with the site (and surrounds) subject to the VFG scenario. Cultural effects or values are often narrowly pigeon-holed as matters relating to waahi tapu or heritage, however for Patuharakeke these are only a subset of values or effects associated with a place or activity. In light of the definition of sustainable development in the RMA covering people and communities' social, economic and cultural wellbeing as well as environmental bottom lines, PTB consider the implications of a proposal across all of these wellbeings for Patuharakeke hapu. A matrix methodology is used (see Appendix A) to flesh out matters such as historical, traditional and contemporary relationships and uses associated with the VFG footprint. The matrix is based on the key provisions in Part II of the RMA as follows:

- Recognition and provision for: the relationships between Maori, their culture AND their traditions AND ancestral land, water, sites, waahi tapu and other taonga that might be affected by the proposal (as per s6(e) RMA);
- Recognition and provision for: the protection of protected customary rights (as per s6(g) RMA);
- Having particular regard to: the implications for the knowledge and practice of Kaitiakitanga by tangata whenua over their taonga of the proposal (as per s7(a) RMA);

[11] https://www.northlandnz.com/assets/Resource-Hub/Maori-Economy/2015-Tai-Tokerau-Maori-Growth-Strategy.pdf

- Taking into account: whether the principles of the Treaty of Waitangi are affected by the proposal (as per s8 RMA)[12].

4.1 Information Sources

Review of the baseline reports assisted in a broader understanding of potential constraints and impacts on cultural values and subsequent cross-overs within an expanded footprint. A full assessment of potential impacts on cultural values however is not planned until Northport makes a decision on what exactly they will make applications for (refer to stages 3 and 4 of Figure 1 "Engagement Process"). The reports included:

Ecological Reports by 4Sight Consulting Ltd, including:

- Baseline Nesting Bird Survey (January 2019)
- Wading Bird Survey (April 2018)
- Northport Sub-tidal Ecology Report – Rock Revetments (February 2018)
- Northport Sub-tidal Ecology Report – Preliminary Literature Review (March 2018)
- Northport Inter-tidal Ecology Report (May 2018)

Landscape Assessment by Stephen Brown (Brown NZ Ltd):

- Northport Vision for Growth – Draft Assessment of Landscape, Natural Character and Amenity Effects (February 2018)

Hydrodynamic Reports by Met Ocean Ltd:

- Hydrodynamic Modelling – Methodology, Validation and Simulations (April 2018)
- Morphodynamic Evolution Modelling for the Northport Environment – Predicted Morphological Response to Proposed Capital Dredging and Land Reclamation (April 2018)
- Northport Dredging Project– Dredging Plume Modelling (April 2018)

Economic Assessment by M.E. Consulting:

- A Vision for Growth - Economic Impact Assessment (October 2018)

Between 2014-2017 extensive work was undertaken by PTB and in collaboration with a range of whanaunga hapu and iwi of Whangarei Terenga Paraoa to provide cultural advice to Refining NZ and the relevant consent authorities in response to Refining NZ's proposal to deepen the shipping channel at the entrance to the Whangarei Harbour. A CVA was undertaken in the course of that process that involved a series of hui-a-hapu where the matrix methodology as described above was used[13]. Many of the cultural values identified in the Refining NZ CVA were known to overlap with the Northport VFG scenario, therefore for the purposes of this report a different approach was taken. It was decided to define the focus to matters and areas more particular to the Northport proposal, ie. potential reclamation sites, Te Rauiri/Blacksmith's Creek, Patangarahi/Snake Bank and Reotahi areas.

A single hui-a-hapu was held in November 2019 (see hui record in Appendix B). This was attended by Northport staff who gave an overview of the VFG along with key consultants who authored the baseline studies. It is anticipated that more hui-a-hapu will be arranged

[12] The matrix summarising "How are the principles of the Treaty affected by this proposal" will be completed as part of the Cultural Impact Assessment following completion of the technical studies
[13] https://deeperstory.co.nz/wp-content/uploads/2016/09/Cultural-Effects-Assessment.pdf

going forward as we reach subsequent engagement stages ie, technical review of AEE reports and Cultural Effects Assessment.

Along with the hui-a-hapu, this CVA process was further informed by a review of the baseline reports listed above and a review of additional documents including:

- Refining NZ Crude Freight Proposal – Tangata Whenua o Whangārei Terenga Paraoa Cultural Effects Assessment and other various CEA's produced by PTB
- Northland Port Corp Hearing Evidence from 1997 from various mana whenua submitters
- Patuharakeke Briefs of Evidence to the Waitangi Tribunal: Te Paparahi o te Raki District Inquiry. (October 2013 and February 2016)
- PTB MACA evidence in preparation
- PTB Customary Fisheries documentation
- Interviews with Kaumatua and other whanau members
- Unpublished Historical Reports prepared by Harry Midwood of Patuharakeke

The korero compiled from these sources has then been used to populate the attributes of the matrix in Appendix A - forming the basis for the ensuing sections of this report.

5. RELATIONSHIP OF TANGATA WHENUA TO THE PROPOSAL SITE

5.1 Tangata Whenua o Whangarei Terenga Paraoa

There is a strong interrelatedness amongst the hapu and iwi of Whangarei Terenga Paraoa. Patuharakeke, as hau kainga and ahi kaa in the direct vicinity of the site acknowledge the mana of our whanaunga whanau, hapu and iwi that link both by whakapapa and physically and spiritually to the harbour. The list below of hapu and iwi that have interests in and around the proposal location was developed in 2014 through a series of hui-a-hapū. These relationships vary, for example: all are Māori, some are tangata whenua; some are mana whenua; some hold ahi kaa; some are hau kainga and kaitiaki; some have seasonal rights or rights of access/travel easement; some are ancient tribes that were there historically but no longer reside there today, or have been subsumed into modern tribes; and some are third generation manuhiri that moved into the area during the "Think Big" era (eg. construction of the Marsden Power Station); and finally some have relationships as customary fishers or hold title (or tupuna formerly held title) to the adjacent land. Within these groupings are also Maori Block owners and individual whanau seeking to engage with Northport.[14] This ancestral ownership extends into the marine and coastal area and any development in the takutai moana requires adequate recognition of the longstanding rights and interests of mana whenua in relation to the foreshore and seabed. Several hapu and iwi on the list are claimants under the MACA/Takutai Moana Act 2011 to the VFG site, claiming their rights to the area that have never been relinquished. The list is as follows:

- Patuharakeke
- Te Parawhau
- Te Parawhau/Toetoe
- Ngati Kahu o Torongare me Te Parawhau
- Te Waiariki
- Ngati Korora

[14] eg. Rewarewa D Block, Te Uri o Tautohe

- Ngati Tu
- Te Uriroroi
- Te Kumutu

- Ngatiwai
- Ngapuhi
- Ngati Whatua

- Ngai Tahuhu
- Ngati Manaia

- Manuhiri/ Hapori whānui (eg. non mana whenua Maori families at Marsden Village – including some who are third generation)

The various tangata whenua of Whangarei Terenga Paraoa all have relationships with the proposal location. These relationships were considered against the various categories listed in sections 6(e) and 6(g), and 7(a) of the RMA 1991: that is to say the relationship of tangata whenua and their culture and traditions with Whangarei Terenga Paraoa, sites and waahi tapu and other taonga in the vicinity of the VFG footprint; protection of customary rights; tangata whenua status as kaitiaki and practitioners of kaitiakitanga in regard to those resources; and the implications in relation to principles of the Treaty of Waitangi.

An important korero that commonly arises at hui and is woven throughout the literature reviewed is the interrelationships and connectivity of these matters. The underpinning themes - of *mauri* or life force on the one hand and the concept of the harbour as a whole and living entity - are woven through all matters concerning the relationship of Tangata Whenua o Whangarei Terenga Paraoa to the proposal location and surrounds.

Working through the matrix enabled identification of a wider range of indicators of the cultural relationships and values. These are discussed in more detail below.

5.2 The Relationship of Patuharakeke and their Culture and Traditions with their Ancestral Lands, Water, Sites, Waahi Tapu, and other Taonga

Patuharakeke are tangata whenua of the Poupouwhenua/Marsden Point area. This is demonstrated through: ahi ka roa, nohoanga, customary practices, korero purakau/tales/stories (eg. “pou ewe”); tuku whenua, marriage, ancestry, raupatu, customary tohu or signs (e.g. landmarks, tuahu and kohatu mauri on the land). The naming of water systems and land features is but one way that tangata whenua demonstrate the depth and closeness of their long traditional relationship with the proposal site and surrounding area. The harbour, and ranges and peaks that surround it are named in pepeha and tribal whakatauki and waiata provide further rich descriptors of the relationship of the people with this place and their historical ties to all resources within the area.

5.2.1 Ancestral Lands

Poupouwhenua

Poupouwhenua Block is depicted in Figure 5 below. This location was a extremely particularly important tauranga waka and was utilised often by various war parties stopping

there to prepare for battles further south. Preparations included training, and discussions of tactical warfare. The number of war parties varied between small groups of 20 to 50 to some numbering in the thousands (Clarke, 2001:2). Up until industrial development in the 1960's it was utilised by Patuharakeke and whanaunga tribes as a seasonal nohoanga where a rich harvest of kaimoana could be gathered and processed. In earlier times would have likely to have involved entire tribes particularly in times of peace. Patuharakeke have several claims before the Waitangi Tribunal, including key claims Wai 745 and Wai 1308. These claims were presented to the Waitangi Tribunal in October 2013 and February 2016. A key cause of action to which our Statement of Claim relates includes the undermining of the Tino Rangatiratanga of Patuharakeke through nineteenth century land alienation and confiscation.

"The 5000 acre Poupouwhenua block was confiscated by the Crown in late 1844. This was in compensation for a settler's house being burnt down in Matakana earlier that year by a group that included a chief from Patuharakeke owing to a dispute about the imperfect acquisition of the land by the settler. The Auckland Provincial Governor was later quoted in the Southern Cross Newspaper that following an investigation he was satisfied that the events in Matakana had been exaggerated - but the land was still taken. The underlying purpose of the 'confiscation' was to provide land for settlers" (Gudex, 2013).

Patuharakeke continue to wait for a finding from the Waitangi Tribunal, but essentially the hapu view is that the subject land is ancestral Māori land. As mentioned previously, the landward holdings of Northport and MMH were obtained illegally from the original owners and will eventually need to be addressed by the Crown.

On a positive note, Northport and PTB have developed a positive working relationship including recently formalising a Relationship Agreement. To date the relationship has mostly focused on operational matters, however it is our intention to strengthen the relationship across all levels of Northport part including at a governance level. In our view, the governance structure of Northport should ultimately reflect our status as mana whenua in this location.

5.2.2 Cultural Landscapes, Seascapes and Waahi Tapu

Several important markers in the area that form the cultural landscape and seascape include maunga such as Manaia, Matariki (Mt Lion), Te Whara (Bream Head) and other islands, reefs and rocks such as Motu Karoro, Taurikura, Motu Tapu (Calliope Island), Motu Panamaia - all have beliefs associated with them that are integral to our histories.

Traditional korero related to these sites was described in detail in the Refinery Crude Freight Proposal CVA[15]. Other important sites in the vicinity of Northport include;

- Ngaungara (High Island in McGregors Bay) – traditional korero relates that Ngati Manu fishers were stranded here on the rising tide after Ngāti Kahu o Torongare took their waka and they were rescued by Patuharakeke people;
- Otarakaihae (Mt Aubrey) – there is an assumption that this name which refers to jealousy is likely associated with the korero around Manaia and his wife's lover Paeko;

[15] refer to Refinery Dredging CVA for more detail https://deeperstory.co.nz/wp-content/uploads/2016/09/Cultural-Effects-Assessment.pdf

- Horomanga – the large pa of the Ngai Tahuhu paramount chief Hikurangi – which sits above Urquharts wharf)

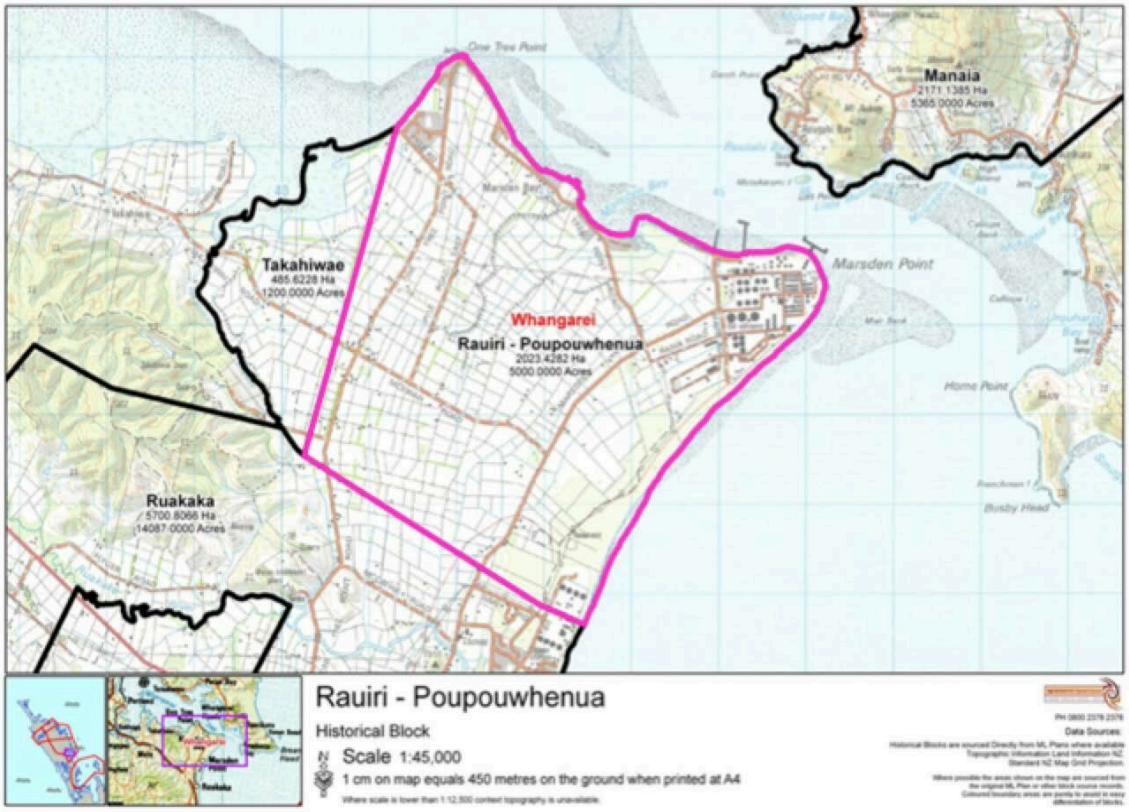

Figure 5: Poupouwhenua Block

Besides the strong associations with the tupuna Manaia, these sites bear important linkages through whakapapa and land ownership to the ancestor Torongare and the 19th century chiefs Pohe, Tirarau, Whakaariki and Motutara. As such these sites are of high cultural significance to Ngatiwai, Ngati Kahu o Torongare, Te Waiariki and Parawhau along with Patuharakeke and others.

On the southern side of the harbour the Takahiwai and Pukekauri, Kukunui and Piroa (Brynderwyn) ranges circle the landscape and the seascape is dominated by the tahuna or sand banks that are known not only for their significance as markers, but as mahinga mātaitai/kaimoana gathering places. These include Poupouwhenua/Mair and Marsden Bank, Patangarahi/ Snake Bank, Calliope Bank, McDonald Bank, and Tahuna Patupo (a historical Kuaka gathering spot).

Further, Patuharakeke held kohatu mauri (mauri stones) that were imbued with meaning and signify our ancient lineage to tupuna, whenua and moana. While there were historically a number of kohatu mauri throughout our rohe, the only one that remain with the hapū was set on the banks of Ruakaka Estuary in an alcove and is thought to have provided guidance in the traditional management of our rohe moana (see Figure 6 below).

Figure 6 Kohatu Mauri (and inset of detail) from Ruakaka River site (Harry Midwood)

According to kaumatua there are also unrecorded waahi tapu such as Waiana koiwi - underwater burial caves and ledges, the locations of which cannot be disclosed. Earlier Northland Port Corporation Hearing evidence[16] speaks of places where:

- *bathing and healing rituals were enacted;*
- *bodies were washed and bones prepared for final internment;*
- *warriors gathered to strategise;*
- *a powerful tohunga recited karakia to avenge his wife;*
- *an aging chief bathed and prophesized the future;*
- *battles occurred;*
- *war canoes gathered; and*
- *an ancestor called to a favoured sea mammal*

Besides providing physical sustenance, Whangarei Terenga Paraoa and its tributaries supported the spiritual and cultural practices of the various hapu. Specific parts of creeks or rivers were set aside for baptisms (eg. Rauiri/Blacksmiths Creek), while others were used for teaching children to swim and yet more places were renowned for their curative powers. Lakes and wetlands in the dune systems were harvest sites for tuna (eel) and waterfowl. Harakeke and muka and other plants used for weaving, and rongoa were also sourced there. Often sites such as these were used as a repository for taonga as well.

5.2.2.1 Taniwha and Tupua

Patuharakeke, in common with all other hapu, have purakau or tales or understandings of taniwha and tupua. Features of the landscape are imbued with names and associated

[16] Northland Port Corp Hearing Evidence of Jan Dobson 1997

stories of what these names represent and it is these purakau that help link the hapu back into the very beginnings of the ancient occupation of our rohe. Significant taniwha for this area include Te Rakepatupaiarehe and Pokapuwaiorehua. These names often serve as a cautionary reminder that there may be forces beyond our common understanding, or that there are areas or actions that may be off limits. Some areas hold presence that continue throughout the generations to remind us to be cautious in our intentions in the locale. Some such 'presences' are understood as taniwha or tupua and as such can be seen as beneficial. For example, "there is korero of a taniwha in that area [Marsden Point]. It is there to protect us." (Living Memories Hui, Takahiwai 1998).

With respect to the above-mentioned taniwha, it was also related at that same hui that a tupuna (circa 1950) had had a prophecy about the future construction of Marsden wharf. The exact wording of the prophecy is not generally known or recorded now, however its meaning related to the knowledge that the taniwha in that location was of a cautionary nature. Also, the location of the wharf had to be shifted because the piles kept disappearing or sinking. It is also recalled that three people lost their lives in the construction of the wharf.

In former days, the waters off our shores abounded with species of both seal and whale and in recent times, over the last hundred or so years much interest has been created by the occasional visits and even strandings of these creatures. For our people particular thought is given to the possible portent of what these visits and strandings may indicate because these creatures are regarded as the lineal descendants of the tribal taniwha of the ancient past.

In Patuharakeke lore it is told that when a whale stranded in our waterways a practice of old would be for the kuia of the tribe to embark on a waka, karanga or call to the whale and guide its safe passage out to sea again. This role would also have been performed by tohunga of the tribe and also at times when malevolent taniwha would endeavor to overcome people and the tohunga and his incantations would be at work either placating the taniwha or capturing or weakening the creature.

Whale strandings in particular were also emblematic (or tohu) that a person or persons of mana of our hapu or tribe had died. A stranding of a pod of Orca or Killer Whales occurred off Mair Bank probably 80 or more years ago when (so it is related that) the old male animals cried so it was heard for miles. These older whales lived for a week and the young ones of the pod lived three days longer. While this lasted 5 whales were seen swimming together up and down the beach outside until eventually they too stranded about 800 yards from the first lot (Fraser, 1928).

Another thing that may be said of taniwha, some of which may be whales or other creatures of the sea is that they may also be viewed or understood as being emblematic of the mana and authority of our people. In May,1823 Messrs Butler, Shepherd and Hall set off in the St. Michael with the Wesleyan Messrs Leigh and White to look for a suitable location to establish their mission. They examined Whangarei but because of the depredations of the passing war parties, decided against it and chose Whangaroa harbour instead. In tribal lore it is told that a taniwha resides near Te Wahapu o Whangarei and truth is added to the belief, in recorded history at least when in 1823 the St Michael founded on a shallow sandbank, possibly the Calliope Bank on an ebb tide when almost all came to grief. Tangata whenua witnessed this occurrence and clamoured loudly as they took canoes out to rescue the crew "he taniwha – he taniwha", or in other words, the monster had gotten hold of the ship and was taking it down.

On the opposite bank almost 150 years later there occurred another incident. When constructing the Marsden Point wharf and when ramming home the piles for the wharf it is recalled that in certain places the piles simply would not reach hard ground or bottom. The piles would seemingly disappear into a bottomless pit and men of the tribe were known to remark that the taniwha was working its magic in its displeasure at the development in its domain.

Taniwha can be understood also as portents of disaster, e.g. when a village or pa is about to be stormed and taken and even in times of impending illness such as a severe epidemic such as smallpox or influenza. Sometimes taniwha will appear to the entire community and at other times to only one person, perhaps the tribal tohunga, and at other times to a few persons of the tribe in various guises or manifestations. However the taniwha may be perceived or apprehended there is hardly ever any doubt that a portent can be anything other than just that, a portent. What is crucial in tribal matters of understanding is how the portent or omen is interpreted and acted upon, this is usually the domain of the wise old heads of the tribe.

5.2.2.2 Comment on Stephen Brown Landscape Assessment

The Refinery, Northport and Marsden Cove Marina have irrevocably altered our cultural landscape and seascape in this location. After perusing the Assessment by Stephen Brown, and following discussions with him at the hui, hapū members hold a few reservations about his approach.

Firstly, we are concerned about the tone of the assessment that uses descriptors such as "the highly modified, development dominated aesthetic" which whether unintentionally or not, acts to justify the type of effects likely to be generated by the VFG. There is also a gap in understanding of the interconnectedness between the landscape markers he outlines (eg. Manaia, Te Whara), as well as those within the harbour itself (ie Tahuna/banks, Rauiri etc). For Patuharakeke, it is very difficult to compartmentalise the components of our cultural landscape and seascape, and taken as a whole, even with the scars of the Refinery and existing port. For us, it is an outstanding landscape and remains central to our identity.

PTB recently gave evidence at the Whangarei District Council Urban and Services Plan Changes Hearing about limits for crane heights at the Port given that there is no certainty as to how many cranes could be located there or where on the footprint they would be located. Even if viewshafts from certain locations, such as Takahiwai marae and kainga could be mapped and potentially protected, as mentioned, cultural landscape elements are interconnected, and the cultural landscape of Whangārei Terenga Paraoa is looked at holistically. Therefore, while you may still be able to see Manaia, will you be able to see Te Wahapu o Whangarei Terenga Paraoa from other sites/ vantage points?

Some matters that could assist the hapū in better understanding the potential landscape effects from a cultural perspective and aid in constructing a Cultural Effects Assessment at a later stage include:

- Mr Brown undertaking a further assessment and visual simulations from additional viewpoints in more distant parts of our rohe, ie. Takahiwai Marae, kainga, the end of Takahiwai Road, and Piroa (Brynderwyns); and

- Northport supporting PTB to appoint a landscape professional to carry out an independent peer review of the landscape and visual assessment.
- Further discussion with Patuharakeke on the proposed mitigation concepts as per attachment 3 of Mr Brown's report, to ensure any landscape effects, mitigation does not occur at the cost of ecological values, and is in fact designed to achieve multiple functions, for example, to provide high tide roosting habitat for shorebirds, to facilitate public access to the coast and so forth.

Figure 7 Attachment 3 of Northport Vision for Growth – Draft Assessment of Landscape, Natural Character and Amenity Effects – Mitigation Concepts

Finally, there is an erroneous statement in the report in the evaluation table[17] where the Experiential Values Criteria "Spiritual, Cultural and Historical Associations" includes a note that,

> *"consultation was initiated during the mapping process, but has not led to any feedback during the required period…"*

PTB are unaware of any contact made by Stephen Brown or Northport in relation to, or during his mapping process. We note however, that this particular criteria was given the highest ranking of 5 which we agree with.

[17] Stephen Brown: Northport Vision for Growth AEE Report (Draft 1) 2018 page 22

5.2.2.3 Heritage Sites

In addition to the waahi tapu described previously, the map below illustrates the concentrations of recorded heritage sites in the vicinity of Northport. The map supports the korero of our tupuna on the importance of Rauiri and Poupouwhenua as kainga and nohoanga historically. At this point in time it is unclear whether there will be any effects on these heritage sites. Should Northport proceed to seeking consent for the VFG proposal, a precautionary approach would suggest that a Heritage Management Plan should be developed in conjunction with PTB to deal with matters such as:

- Determining whether any recorded sites will be impacted
- Archaeological investigation if required
- Establishment of mitigation measures, namely avoidance in the first instance, cultural monitoring and accidental discovery protocols;
- Means of incorporating cultural interpretation and storytelling into design

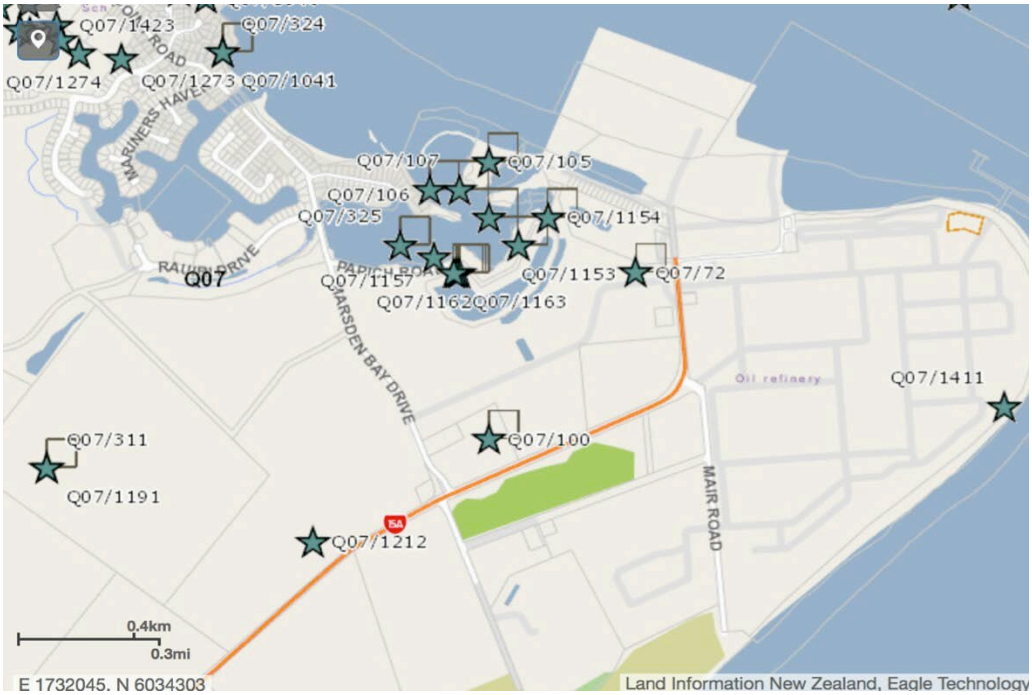

Figure 8: NZAA "Archsite" Map of Locality

5.2.3 Sites - Mahinga Mataitai

The preceding descriptions identify a rich tapestry of signifiers of traditional relationships with the Northport area. This includes the relationship of Whangarei Terenga Paraoa as a bountiful and rich food basket or 'Pataka' that hosted seasonal migrations of descendants from in and around the harbour and related inland hapu to harvest kaimoana. According to Patuharakeke elders, prior to the construction of the Refinery, a substantial mussel bed covered the takutai adjacent to the site, ranging from the edge of the channel in to shallow water and running from Mair Bank along to the Port Jetty.

> *"When an easterly gale blew you could just roll carpets of mussels into your sack."*
> (Living Memories Hui, Rangiora, Takahiwai 1998).

This was widely utilised for customary and recreational harvesting and was considered a "jewel in the crown" of a harbour abundant with resources. Much of the area along the foreshore and dunes between the Marsden Point Wharf and Refinery Jetty was used as a nohoanga regularly by Patuharakeke and other whanaunga from the Whangarei area up until the development of the site began to restrict this practice in the 1960's.

Other key traditional mahinga mataitai and fishing grounds include Patangarahi ("Snake Bank") which was, and remains a tahuna (bank) for pipi and particularly hūai (cockles). Patangarahi is discussed in more detail below. Another significant traditional site near Marsden Point was known as Patupo, a tahuna Kuaka (sandbank where Godwits fed and rested on their migratory journey). Kuaka or Godwits are considered to be a kaitiaki and an indicator of cultural health in this area. They also feature prominently in Ngai Tahuhu mythology and tradition and are considered to have guided the path of the ancestral migration to Aotearoa from Hawaiki. The hapu listed above shared seasonal rights over these resources as well as Parera (Ducks), Manu Oi (Shearwaters/Mutton Birds) and Kopua Mango or Shark Fishing Grounds that were located at the entrance to the harbour.

Rauiri or Blacksmiths Creek was the site of the seasonal eel weir and pa harakeke cultivated and farmed by Patuharakeke. This was also a large and important pipi bank – it is where Northport is today. A number of other important Mahinga Mataitai were located at Marsden Bay, McDonald Bank, Mair Bank, Marsden Bank, Calliope Bank and Urquharts Bay, along the coastline from Reotahi to Taurikura as well as Smugglers Bay, Peach Cove and Bream Bay. Species harvested at these various locations and habitats included pipi, kokota, tio, koura, kina, paua, tuatua and kutai. Tauranga ika were also common at these locations, mullet and flounder were generally sought further up the harbour but snapper, tarakihi, gurnard, trevally, kahawai and kingfish were all common in these areas. Some of these locations, such as Mair Bank, also have an important role to play in providing structural stability for the harbour entrance and therefore provide significant ecosystem services.

The waters of Whangarei Terenga Paraoa are a taonga gifted by our tupuna which today's kaitiaki have a duty to conserve and protect for their mokopuna. These waters once teemed with kaimoana such as those species listed above. However, since colonisation, more than a century of poor environmental management practices has seen an immense decline in marine species as a result of degraded water quality, habitat loss and harvest pressure. The decline of kaimoana species, is accompanied by a decline in traditional knowledge in regard to those species, their uses and management practices. This impacts on the duty of tangata whenua as Kaitiaki and displaces an important role and function for our tamariki and mokopuna. Their mana as tangata whenua, is further diminished by an inability to practise manaakitanga to gather kai moana for the table both for their families and manuhiri. Not only does this impact on the cultural wellbeing of Tangata Whenua o Whangarei Terenga Paraoa, but it has economic or subsistence consequences, as it restricts the ability of whanau to put kaimoana on the dinner table, a practice that has always supplemented low incomes.

Therefore the Northport's ongoing technical information gathering exercise will need to be cognisant of the fact that the harbour ecosystem, and particularly our mahinga mataitai, are already in a significantly degraded state. The desire of Tangata Whenua o Whangarei Terenga Paraoa is to restore key mahinga kai and any activity that causes further deterioration will be difficult to accept.

5.2.3.1 Rauiri (Blacksmiths Creek)

Rauiri is a place of particular significance to Patuharakeke. This estuarine catchment once contained a very important eel fishery or weir. Situated at the bottom of the catchment for the Puehaenga Swamp from which ran many rivulets and tributaries with all leading eventually to the Rauiri or what is now known as Blacksmith's Creek outlet. South of the Puehaenga Swamp and running parallel to the coast inside of the sand dunes also ran what has become known in recent years as Lake Ruakaka, and this ancient marshland links up on its southern and western sides with the vast Waiwarawara wetlands and the marshlands at the feet of the Kukunui Ranges.

The early maps of Ruakaka and Poupouwhenua shown in Figure 9 below highlight these significant historical wetland areas in our rohe. In times past all these swamp and marshlands teemed with bird and aquatic life and especially eels which had natural instincts to migrate to sea through either one or two outlets, one being the Ruakaka estuary and the other through the Rauiri or Blacksmiths Creek outlet or over land. Naturally this outlet provided an extremely prolific fishery and consequent nursery where our people could build catchments to hold this valuable resource in great numbers and also to grow them within. The 'eel pens' would have been arrayed at quite possibly a number of areas, usually in the lee or sheltered part of the creek ways and would be accessed from a myriad of points and pathways that would wend themselves throughout the swamp and marshland that bounded the outlets. To the east of the mouth of Te Rauiri was the rich pipi bed referenced earlier that now lies beneath the current Northport reclamation.

5.2.3.2 Patangarahi (Snake Bank)

Patangarahi, in the centre of the harbour is a key mahinga mātaitai (fishing ground or shellfish bed) for the harbour tribes. Patuharakeke's Gazetted Rohe Moana extends partially over the tahuna. This is a customary fisheries management process recognized by government. It is understood that Ngati Tu are engaging with whanaunga hapū on the northern side of the harbour to advance a rohe moana application that will adjoin Patuharakeke's gazetted rohe moana boundary and will enable collaborative customary fisheries management across the entire harbour. Notification of this new rohe moana application is imminent (Ricky Solomon, pers comm. March 2020).

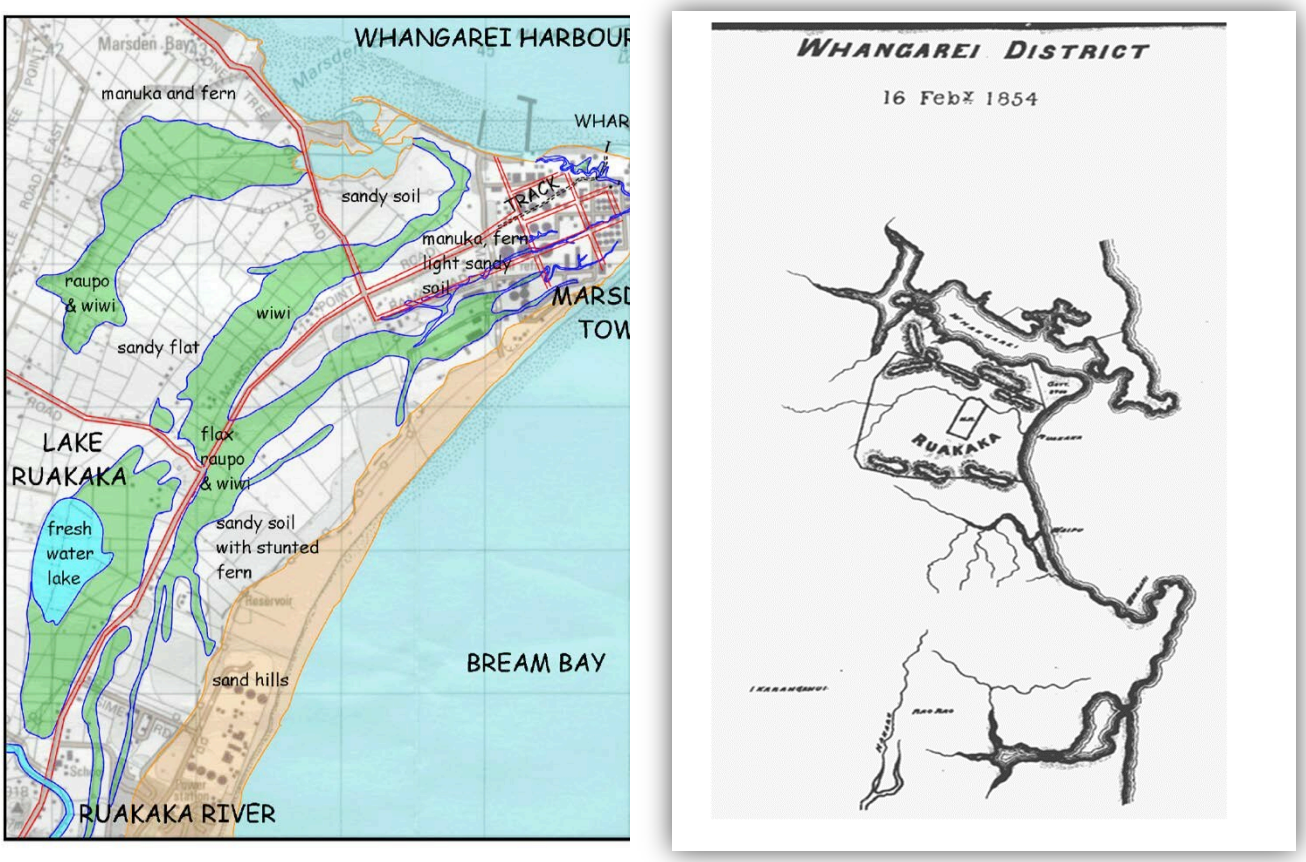

Figure 9: 1854 Figure 4 – Map of Poupouwhenua around 1910, compiled from early survey plans super imposed on a modern topographic map[18] and Map of Ruakaka[19]

Anecdotally, we have been hearing from whanau members for some time that cockles/huai were becoming more scarce on the bank and it no longer supported the large sized cockles the bank was renowned for in the past. This trend is evidenced by the 2012 closure of the Snake Bank commercial cockle fishery that had operated from the early 1980s. Catches were in excess of 500 tonnes initially but dropped progressively over time to less than 50 tonnes in the year before the Ministry of Fisheries elected to close it in 2012 due to low biomass.[20]

5.2.3.3 Comment on Met Ocean Assessments

A review of the VFG baseline reports prepared by Met Ocean indicate that localised morphological changes as a result of the dredging to increase the size and length of the

[18] From Marsden B Repowering Project – Archaeological Assessment (2005). Dr Caroline Phillips (Auckland University).
[19] From attachments to Dr Guy Gudex Brief of Evidence to Waitangi Tribunal 1040 Paparahi o Te Raki, Northland Inquiry October 2013
[20] https://deeperstory.co.nz/wp-content/uploads/2017/09/Commercial-Fisheries-Report-Final.pdf

current turning basin and a 13 ha reclamation westward were anticipated, including a gradual eastward migration of the toe of Snake Bank. This is an existing pattern caused by the swinging basin that is predicted to increase slightly following expansion. Localised accretion of sand and other morphological changes are predicted in Marsden Bay and adjacent to the reclamation. Overall the sediment transport characteristics over the harbour are not expected to change fundamentally. During the hui-a-hapū in November whanau raised the following concern:

"For mana whenua, none of these minute changes are problematic, it's the compounding effects that matter to us, subtle changes here add extra stress to an already stressed environment."

This has been our experience with changes at Mair and Marsden Bank, which when considered in isolation by the various experts are held to be "minor"., however they both appear to have come together in a "perfect storm" resulting in pipi population collapse that is still showing few signs of recovery after almost 10 years of closure to harvest. This tells us the harvest pressure simply cannot be the only cause of its depletion, and the changing morphology of Mair and Marsden Bank may be responsible for less area of suitable habitat for pipi (Williams et al, 2014 & 2017). This is an outcome we will do our utmost to avoid at Patangarahi. While commercial harvest is no longer viable, customary and recreational gathering of hūai/cockle is still possible there. Too many kaimoana species and therefore food resources in Whangarei Terenga Paraoa have been lost to tangata whenua. Section 5.2.6.1 of this report discusses Snake Bank in more detail, in the context of kaitiakitanga.

5.2.3.4 Comment on 4Sight Subtidal and Intertidal Ecology Assessments

PTB have concerns about the methodology employed for intertidal surveys in that while a number of samples were taken they were limited to just a few transect lines within the zones to potentially be reclaimed rather than a larger sample area to provide better information and context. Patuharakeke have always been of the view that ideally, restoration of the Rauiri pipi bed should occur as far as practicable. As such, intertidal surveys are needed that provide confidence that a representative sample across the extent of the potential western reclamation. In the greater context it is becoming increasingly important to understand the dynamics of larval transport and dispersion patterns to identify the role that port structures and dredging activities might have on their distribution and population.

Subtidal surveys were restricted to the artificially created rock revetments of the existing port, however we were told at the November 2019 hui that more subtidal sampling was underway. The survey results confirmed the high macroinvertebrate abundance and diversity indicative of the biologically rich character of the intertidal flats and a diverse range of species inhabiting the revetments.

The area to the west of Northport is currently subject to Proposed Regional Plan appeal process as it was formerly mapped as Significant Ecological Area ("SEA") and revised to Port Zone. Forest and Bird however have appealed this and are seeking this zone to be reinstated as a SEA in the Proposed Regional Plan. PTB are a s274 (RMA) interested party to Forest and Bird's appeal. From our perspective, the site still meets the criteria for SEA and we agree it should be mapped as such and given a high level of protection under the RMA, the NZ Coastal Policy Statement and the Regional Plan. We envisage that there will

be a need for Patuharakeke to work closely with Northport to help build understanding and have input into any further studies in this area.

5.2.4 Other Taonga – Taonga Species

5.2.4.1 Tohora, Paraoa

The importance of the presence of whale species in the harbour is significant to Patuharakeke. Whales are a very obvious indicator of ecological health and therefore the cultural health and wellbeing of the environment and tangata whenua. It is a significant indicator that we have met our ongoing duties as Kaitiaki being able to manage human activity and to protect and nurture the environment. Its significance is reflected in the naming of the harbour and marks historical associations and practices associated with whales. Whales as omens have been canvassed earlier in this document.

The stranding of the young male sperm whale Tāhuhu Potiki on Mair Bank in 2017 at the time when a CEA for the Refinery Crude Oil dredging application was being finalized by PTB was seen as a tohu (sign) to take heed and a cautious approach as kaitiaki in our obligations to care for our rohe moana. In the last month, a female Gray's beaked whale (named Tupehau by our kaumatua after the area behind the fore dune along Bream Bay where she came ashore) beached and died at Bream Bay. This was also an event seen as being portentous in light of all the development proposed for the area. During the flensing process our Taiao/Resource Management Unit team (RMU) observed a mark on the whale and significant bruising but were unable to determine whether she was a victim of ship strike. A second beaching occurred within a week of Tupehau's stranding, involving a pod of 4 Pygmy Sperm Whales near Waipu Cove. The Department of Conservation made the decision to euthanize them (Taryn Shirkey pers. comm 10/3/20).

Patuharakeke and other whanaunga hapu have ongoing concerns about the impacts of human modification of the "riu" or passageways of whales and other marine mammals in our harbour, including the semi resident pods of Orca and Dolphins. These concerns have been raised in numerous engagement hui, most recently during the November 2019 Northport hui and the earlier Refinery NZ hui on their dredging application.

During these engagements kaumatua described the seabed ecosystem as being likened to a sub marine map and they wondered whether altering it (together with sediment plumes and pollutants entering the system) could be a causal factor in marine mammal strandings. This was also discussed at the November 2019 presentation by the Noise expert, Craig Fitzgerald on potential acoustic impacts. Increased shipping will also increase the probability of whales being affected by ship strike.

From our perspective, these are matters that need more detailed examination at CEA stage. Potential effects of port expansion both during construction, maintenance and operations clearly warrant potential effects on Marine Mammals forming part of any assessment of effects carried out by Northport in support of this proposal.

While PTB have not yet sighted a baseline Acoustics Report, we noted that the work to date had not covered underwater acoustics. This will be essential going forward from a cultural environmental perspective because of potential impacts on marine mammals and sharks that are sensitive to noise.

The future development of the footprint also has a bearing on this, for example, if the Navy was to relocate any of its activities and utilise Whangarei Terenga Paraoa, tangata whenua would want to ensure a restricted regime around the use of sonar (i.e. not inside the harbour and Bream Bay) was in place.

PTB recommend that a marine mammal assessment of the project is undertaken and our Taiao/RMU are provided the opportunity to participate in any marine mammal assessment going forward and in later phases of the VFG process, are supported to inform any mitigation plans in relation to marine mammals.

5.2.4.2 Manu – Shore Birds, Wading Birds

The estuarine areas and sandbanks surrounding Northport were traditionally important bird harvesting sites. Species such as Kuaka and manu oi or Pakaha (types of shearwater) were seasonally harvested. During the early part of the breeding season the areas to which birds migrated became strictly tapu and a rahui was placed on the area so that no one would be allowed to approach the breeding grounds. When the birds came into good condition the rahui was lifted. Other shore and wading bird species were also highly sought after by our hapu who relished the delicacies and resources the species offered e.g. feathers and bones. Birds had other important cultural and environmental functions such as being seasonal markers associated with maramataka or the seasonal calendar and providing tohu or indicators for when particular activities were to be undertaken. In contemporary times, these species are mostly in decline due to habitat loss and other factors. We have been working with maramataka and other Maori knowledge systems, Matauranga Maori to help us to better understand their lifecycle patterns and how we can remediate the environment to improve their chances for survival which then improves human wellbeing.

5.2.4.3 Comment on 4Sight Bird Assessments:

As outlined in the baseline studies, the VFG footprint, including the current port facility and Rauiri/Blacksmiths Creek is highly utilised during the period from high to low tide for feeding, resting, roosting and nesting by a range of species that are nationally ranked under the New Zealand threat classification system (eg. Dotterel, Variable Oystercatcher, Red Billed gulls). These species routinely utilise the port, refinery and other areas as high tide roosts. The future development of Northport and MMH properties that to date have mainly retained as farmland will further restrict available habitat, particularly in the face of climate change and rising sea levels.

As kaitiaki of these taonga species we concur with the 4Sight reports that longitudinal monitoring of bird species using the area is required to get a robust picture of broad-scale ecological patterns. We consider the potential effects of port expansion on threatened bird species to be a major constraint that needs serious consideration going forward. Importantly, Policy 11 of the New Zealand Coastal Policy Statement requires avoidance of adverse effects of activities on indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists.

If the port expansion was to proceed, we envisage that considerable effort will be needed to address provision for and protection of habitat for these taonga species. PTB recommend

that our Taiao/RMU are provided the opportunity to participate in any bird surveys going forward and in later phases of the VFG process, are supported to inform any mitigation plans in relation to bird habitat.

5.2.4 Contemporary Cultural Relationships

Patuharakeke also retain a contemporary cultural relationship with the site and its surrounds. Notions of mana whenua, mana moana and mana tangata are based on historical connection and whakapapa and is an enduring, permanent relationship. The modern descendants of those ancestors therefore see this inter-relationship as a dynamic, living and contemporary relationship and not just as a traditional or historic memory or story.

The marae at Takahiwai continues to hold its dominant position in the landscape and is a living and dynamic institution in continual use as a cultural centre for the surrounding district. Ahi kaa is maintained through the continued and unbroken residence of families of direct descendants domiciled on ancestral land. Whanau/families maintain practices such as maintenance of the ancestral house as a living and vibrant institution and 'entity', gathering and harvesting of traditional foods, the maintenance of the urupa and guardianship of tikanga associated with both place and people. Tangata whenua still rely on the use of a wide range of species from both land and water as part of their customary relationship – including kai and rongoa/healing practices. Whanau take their tamariki and mokopuna to swim, walk, play, dive and fish (as does the wider community) throughout the harbour and on the beach to the east and west of Northport that would be directly affected by the VFG footprint.

Other hapu and whanau residing outside the immediate area of Patuharakeke also participate in these practices demonstrating the continued cultural, social and physical linkages to their traditional rohe and area of origin. These linkages are maintained not only by story telling, whakapapa, wananga, waiata and whaikorero and participating in all types of hui/gatherings but also through the interaction with the physical environment within the VFG location.

5.2.5 Relationship through Kaitiakitanga

As Kaitiaki, Patuharakeke are responsible for both the knowledge (matauranga) and the practice (tikanga) of kaitiakitanga in relation to resources. This relationship is a responsibility rather than a right – a duty kaitiaki are bound to by both culture, whakapapa and tradition to maintain. This relationship and obligation has been in place since time immemorial and the continuous connection to the whenua and moana enabled development of a sophisticated resource management paradigm. Patuharakeke are highly cognisant of the cost of the historical period of colonisation on both aspects of kaitiakitanga. There has been a large historical loss of knowledge of kaitiakitanga – both the "whys" and "hows" – as a result of colonisation.

Prior to the Treaty, kaitiakitanga was THE resource management system for controlling the effects of people on the environment. However, rather than an indigenous resource management system, kaitiakitanga was often seen by the early missionaries and many of their followers as akin to practicing witchcraft or devil worship. The Tohunga Suppression

Act 1907 also had a detrimental impact on the practice and transference of kaitiakitanga to subsequent generations.

The capacity to practice kaitiakitanga has been further eroded over subsequent decades by the loss of title to large tracts of ancestral land such as Poupouwhenua and the progressive introduction of increasing layers of government control over resources and their management. Land ownership laws, western science, fisheries control regulations, harbour boards enactments, reserve and wildlife legislation and more recently district and regional councils, departments of conservation and heritage agencies all have largely competing priorities to tangata whenua and have impacted on the ability to effectively practice kaitiakitanga in its pure form. This is is the right to action management practices which would ensure the ongoing viability of species management and preservation.

Conversely, it has been the tight-knit character and isolation of the small communities of these areas that have seen kaitiakitanga maintained in the face of these external pressures. Further, it has been the sheer volume of industry on our 'front doorstep' that has further mobilised the hapu to assert our rights and responsibilities regarding kaitiakitanga, in order to preserve the sustainability of our environment and resources.

Patuharakeke are committed to ensuring that today's Kaitiaki and those of the future will play a significant role in the monitoring and protection of the health of the harbour catchment and the effects of developments such as the expansion of Northport on the health of its ecosystems. This includes forming collaborative partnerships with all relevant agencies, scientific bodies, developers and the wider community to develop and implement sustainable catchment plans to restore the health of the waterways and coast.

5.2.5.1 Contemporary Kaitiakitanga in Whangarei Te Rerenga Paraoa

Figure 10 below depicts the gazetted rohe moana of Patuharakeke. Our Mana Moana committee (including kaitiaki from several other hapu around the harbour) has sought to develop collaborative partnerships with all relevant agencies, scientific bodies, developers and the wider community to develop and implement a rohe moana management plan to restore the health of our rohe moana. A primary focus for PTB for the last decade, has been research, monitoring and restoration of our various mahinga mātaitai. We are also very concerned about the potential impacts of marine pests on our taonga species and habitats. Our multi-pronged approach to kaitiakitanga of Mair/Marsden Banks has involved instigating fisheries closures under Fisheries legislation, leading a community pipi monitoring project (including a Cultural Health Indicator Framework) and applying traditional customary tools such as rāhui to all shellfish within the Poupouwhenua mātaitai. This approach to kaitiakitanga involved a tireless exercise of fostering relationships, education, and advocacy. The overall community support and collaboration has been an outcome in itself, as has the considerable increase in hapū capacity and the revitalisation of Mātauranga Māori. Along with regular surveying of the mātaitai this work has allowed PTB to assess pipi populations and patterns of shellfish recruitment and to develop long term management strategies.

Over the last 12 months we have extended our research and monitoring activities and are now looking at other key mataitai sites such as Patangarahi/Snake Bank (see below), Takahiwai and Pariwaka/Waipu Cove in partnership with NIWA. Patuharakeke are involved in the Sustainable Coastlines Litter Monitoring Project with a nominated site at Marsden

Bay. Further, we are participating in the Cawthron Institute–led "Marine Biosecurity Toolbox" 5 year research programme funded by Ministry of Business Innovation and Employment's Endeavour fund and working closely with NRC in the area of marine biosecurity due to our concerns regarding the potential impacts of marine pests on our taonga species and habitats.

Our engagement and input into planning processes, such as resource consent applications are also another contemporary exercise of kaitiakitanga for Patuharakeke. PTB have provided feedback and advice on a number of Northport consent matters in recent times. Northport have also supported our kaupapa, such as the rahui at Poupouwhenua, Mair/Marsden Banks. Our relationship with Northport will be fundamental in supporting us to continue the exercise our kaitiakitanga in the face of the anticipated growth of Northport.

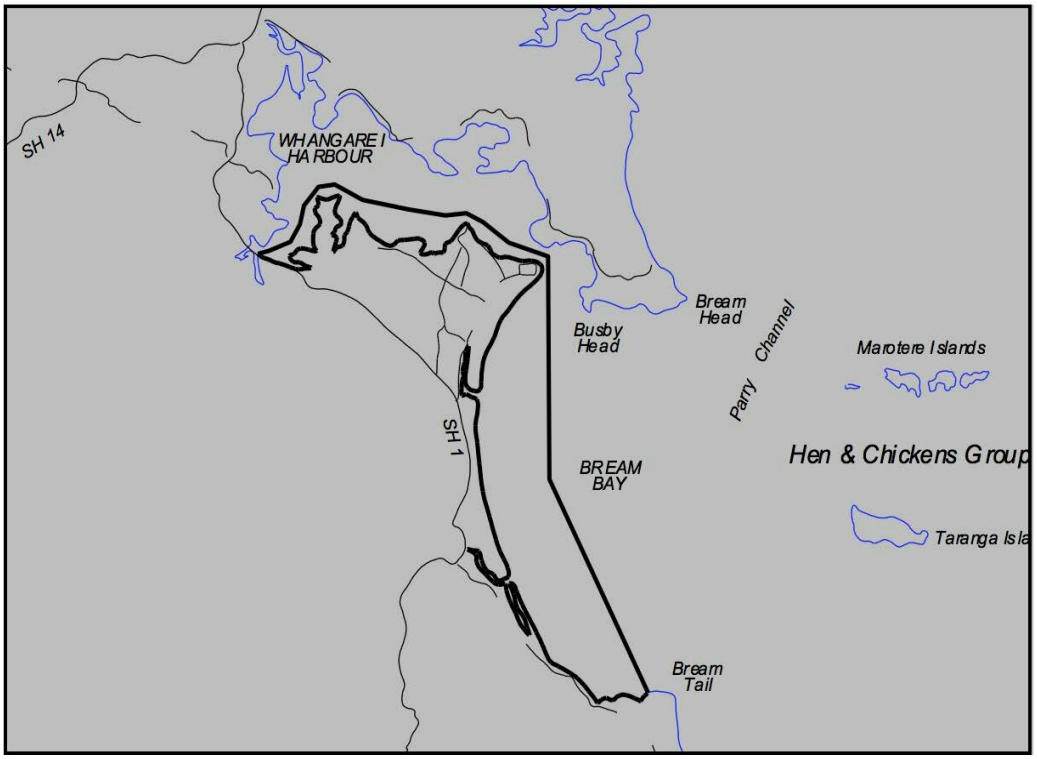

Figure 10: Patuharakeke Rohe Moana Gazetted Boundaries

Patangarahi Survey 2019

As mentioned, Patuharakeke instigated a survey at Snake Bank in early December 2019. This was partly prompted by the fact that to our knowledge, no shellfish surveys had been undertaken since 2014 (Griffiths and Eyre, 2014). It is prudent in light of the VFG proposal and the findings of the Met Ocean Reports prepared for the VFG with respect to the morphology of Snake Bank potentially being affected. A summary of the Patuharakeke survey is attached in Appendix C. The overall findings indicate that the cockle population at Snake Bank is in a relatively healthy, stable state. There is a good abundance of cockles on the bank, and an even spread of size classes. However, there was concern that very few individuals appear to be reaching large sizes, which is what this bank was formerly renowned for. Reasons for this could include environmental conditions (temperature increases, bank morphology, access to vital nutrients and water quality), habitat

characteristics, natural fluctuations of the bank, or other factors that we are not aware of yet. This prompts the need for further studies on these populations to return these to their natural thriving state, pre-dating anthropogenic influences. Patuharakeke have further work planned for this location including integration of this site into longitudinal studies and looking to revive local kaimoana populations.

Further aspirations for work in this area include understanding the population dynamics and stability of Patangarahi, alongside understanding the key envrionmental and anthropogenic stressors this bank faces. Understanding these issues will shed light onto the overall resilience of this mātaitai, and how to further assist its rejuvenation into the future (Shirkey, 2020).

Without pre-empting the analysis of a future CEA as part of the VFG process, PTB consider that should the VFG progress to consenting, further longitudinal studies on the geomorphology and shellfish populations of Patangarahi should be supported by Northport.

Figure 11: Patuharakeke and NIWA Survey Patangarahi Snake Bank December 2019

5.2.7.1 The Whangarei Harbour Kaitiaki Roopu

The history and limitations of the Whangarei Harbour Kaitiaki Roopu a condition of the NPC's Resource consent to construct the present Port terminal in 1997 (RC 11) has been covered extensively in Patuharakeke Briefs of Evidence to the Waitangi Tribunal in the Northland Inquiry/Paparahi o Te Raki 1040 hearings and in CEA's such as for Refining NZ's Crude Freight Proposal.

Condition 11 states:

> *"The consent holder shall pay to the Northland Regional Council $50,000 per annum for 10 years. The first such payment shall be made 12 months after the date on which the port construction works commence. The funds shall be administered by the Northland Regional Council and allocated after consultation with a kaitiaki group established by the Northland Regional Council for that purpose. The purposes for the fund are to enable improvements to the health of the Whangarei Harbour, and the study and/or mitigation of the effects of the port development on waahi tapu, taonga, and other features of special interest to tangata whenua, and may include:*
>
> - *Re-seeding shellfish beds*

- *Study of New Zealand Dotterel nesting/roosting/feeding areas*
- *Creating new feeding habitat for new Zealand Dotterel*
- *concerns of tangata whenua."*

It provided a mechanism to set up a kaitiaki roopu made up of representatives from various hapu around the harbour called the Whangarei Harbour Health Improvement Fund ("WHHIF"). At the time, there was a genuine belief held by tangata whenua that the environmental mitigation fund would assist in building capacity as kaitiaki and promoting the participation of tangata whenua in the management of the harbour. The general view of mana whenua following close to 2 decades of working with the consent holder and NRC to attempt to allocate this fund is that the mitigation offered by the fund hasn't come close to compensating for the loss and degradation inflicted upon the harbour and upon mana whenua, mana moana. While small steps have been made to lift hapu capacity and capability through use of the fund, issues including the administration of the fund, perceived influence of the funder and dynamics within the make up of the kaitiaki roopu have caused challenges. Ultimately, the vast majority of funding went to Crown Research Agencies, limiting the ability for tangata whenua to build capacity or greater understanding of the harbour ecology, the methods necessary to mitigate this impact and develop and locate appropriate and important knowledge in our rohe.

The recent Refining NZ Crude Freight Proposal Decision has imposed similar consent conditions requiring the establishment of a Kaitiaki Group. It is reasonably likely that should the VFG go through a successful consenting process, a similar approach would be employed. To ensure the best possible outcomes occur for the harbour ecology, it will be essential that Northport and Patuharakeke continue to foster a positive working relationship regardless of whether both parties have differences of opinion going forward. Likewise, Northport will need to continue to develop relationships with other harbour hapu. This should assist in a greater likelihood of success of any such a forum in future.

It is important to note that any regimes for mitigation, offsetting or compensation for ecological and subsequent cultural losses will not address the fundamental issue of ownership and loss of the takutai moana and its management. This is a separate issue that, as discussed previously, is before the courts under a different jurisdiction and separate political and legislative process. While this is a somewhat of a convenience for applicants seeking coastal permits and resource consents at this time, it is still of relevance to Patuharakeke and informs our responses. The lip service that the RMA gives to this matter is wholly inadequate. We discuss this matter further in the following section.

6. TAKUTAI MOANA PROTECTED CUSTOMARY RIGHTS AND TE TIRITI

S6(g) of the RMA requires RMA decision-makers to recognise and provide for the protection of protected customary rights and s.8 requires RMA decision-makers to take into account the principles of the Treaty of Waitangi.

PTB has two MACA applications under the Marine and Coastal Area (Takutai Moana) Act 2011 (MACA), currently before the High Court:

- CIV-2017-485-281 – An application for Customary Marine Title (CMT) - we refer to as the "Takahiwai application"; and
- CIV-2017-485-286 – An application for Protected Customary Rights (PCR) - we refer to as the "Bream Bay application".

For this CMT, the statutory criteria in section 58 of the MACA requires proof that Patuharakeke holds the specified area in accordance with tikanga and has exclusively used and occupied it from 1840 to the present day without substantial interruption (i.e. whether Patuharakeke owns abutting land from 1840 to the present day is an important consideration). PTB have previously submitted to the Courts and the Crown on these points, considering the tests to prove non-territorial or territorial interest are too onerous as in most instances our "exclusive use and occupancy" has been disturbed due to breaches of Te Tiriti o Waitangi. CMT tests are therefore likely to be met at Takahiwai but not in other areas of our rohe moana, hence our Bream Bay application for PCR rather than CMT which includes One Tree Point coastline to the mouth of the harbour and Bream Bay beyond.

With regard to the PCR, section 51 of the MACA sets out the criteria for protected customary rights: requiring the rights to have been exercised since 1840; and that they continue to be exercised in a particular part of the common marine and coastal area in accordance with tikanga by the applicant group; whether it continues to be exercised in exactly the same or a similar way; or evolves over time. For PCR an applicant group does not need to have an interest in land in or abutting the application area in order to establish protected customary rights.

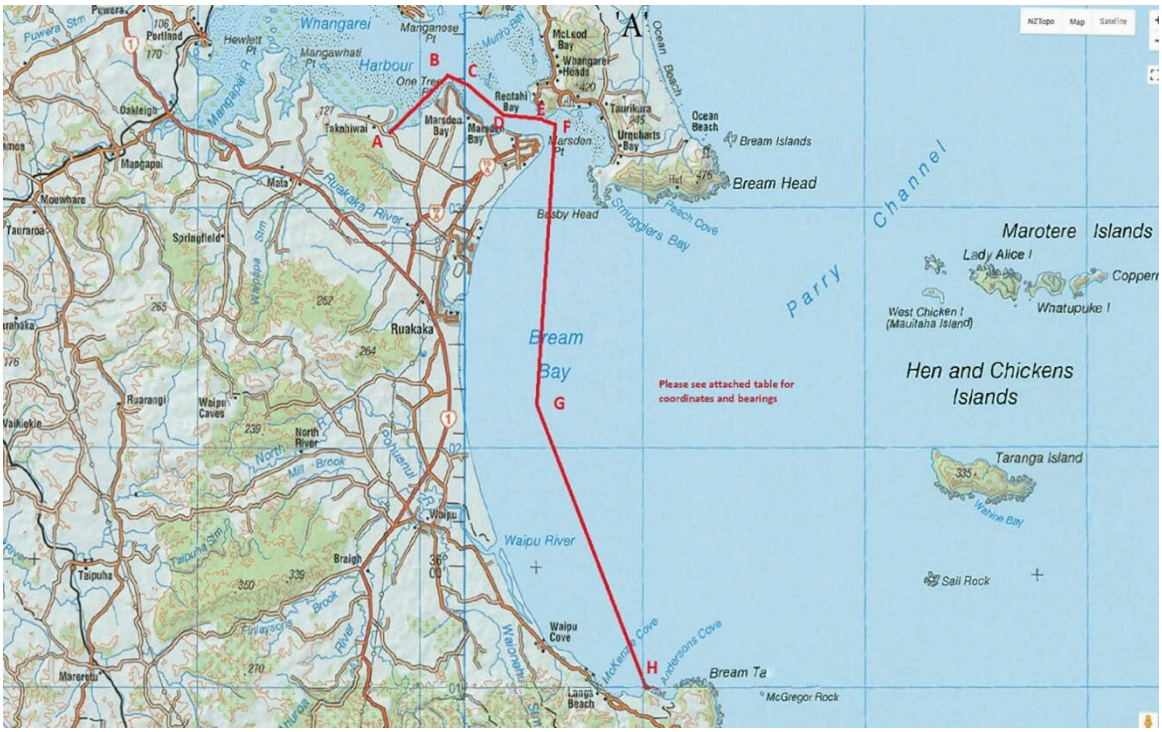

Figure 12: Patuharakeke Protected Customary Rights Application Area

From our perspective, unfortunately, the MACA still provides inadequate recognition of the longstanding rights and interests of Patuharakeke in relation to our foreshore and seabed. In our opinion this area sits within our dominion and mana, contemporarily this means we remain the owners and custodians of the foreshore and seabed within our rohe as we were prior to and on the 6th of February 1840 and we have never relinquished this traditional 'title'. While recognition of PCR would be an improvement on the current situation, unfortunately, developments that have major effects on the takutai moana (i.e. existing

Northport and the Marina and canal development) have already occurred and will continue to occur as a grant of PCR is probably some years away due to the lengthy, expensive and onerous court proceedings we are now involved in.

The RMA still provides us with a pathway to engage in this particular issue in a meaningful way. Sections 6(g) and 8 RMA as outlined above and in our Patuharakeke Hapu Environmental Management Plan (HEMP). Our HEMP further assists others to meet obligations under Part 2 by providing a general understanding of mana whenua values and interests and understanding potential effects of a proposed activity through addressing cultural values when making an application for resource consent.

A full analysis of the VFG using our HEMP will be carried out during the CEA process should the VFG proposal proceed to resource consent stage. Outside of the RMA process we can also influence through building effective relationships with parties such as Northport.

With regard to wider Treaty issues, The hapū view is that the subject land (ie. the entire VFG footprint both above and below MHWS and also the adjacent MMH landholdings) is ancestral Māori land. As mentioned previously, Poupouwhenua was obtained illegally from the original owners, and is a focus of the Patuharakeke claim to the Waitangi Tribunal. It will therefore be incumbent on the relevant agencies and the Northport to consider the implications of its application in the context of Section 8 of the RMA, "taking into account the Treaty of Waitangi/Te Tiriti O Waitangi in relation to managing the use, development and protection of natural and physical resources."

Part of the future CEA exercise will be to consider how Patuharakeke's role is reflected in planning and decision-making related to the Northport's strategy and operations. Past experience with developments in Patuharakeke's rohe has provided little confidence that the interests of the hapū are being actively protected. There is a growing understanding of how the Treaty principles are applicable through case law however there remain differences in opinion and therefore inconsistent commitment as to who is required to apply them in decision-making. However, PTB generally seek that relationships they enter into (particularly when engaging under the RMA) are guided by Treaty Principles such as reasonable co-operation, rangātiratanga, equality, partnership and the principle of mutual benefit.

In the current political climate and amid the clamouring in the business community to maximise all development opportunities on offer as referred to previously in section 3.3 of this report, this is extremely taxing for PTB to engage in, and our Treaty Partner has thus far been very poor at adhering to these principles which does not bode well.

However, Northport can address these Treaty principles through the mechanism of our Relationship Agreement by engaging appropriately with PTB, recognising the need for our fully informed input and allowing adequate time and other resources for us to conduct the analysis and assessment work required and engage meaningfully with our hapu and whanaunga hapu of Whangarei Terenga Paraoa. This engagement and recognition that Patuharakeke need to address cultural issues also recognises our rangatiratanga over traditional lands and waters.

Ongoing dialogue through the Relationship Agreement will need to provide for engagement that involves regular kanohi ki te kanohi (face to face) discussions at all organisational

levels as well as joint identification of opportunities where collaboration and partnership can occur. This will be essential going forward if principles of the Treaty are genuinely to be taken into account in this process and implemented appropriately.

6.1 Socio-Economic Considerations

6.1.1 Comment on M.E. Economic Assessment

Patuharakeke is currently developing a Hapu Strategic Plan that categorises the four wellbeings discussed earlier into further subsets, and have identified strategic pou or pillars that will underpin the strategic plan. These are:

- Whānau Health
- Taiao
- Business
- Culture
- Education
- Succession

These type of matters, for example, socio-economic implications, were raised at the November hui-a-hapu and will be explored in more detail during the CEA development as part of an assessment of all wellbeings requiring assessment (Environmental, Cultural, Social, Economic and Spiritual).

It is however, useful to signal at this juncture that in our view, standard economic reporting as per the ME report are limited in that they do not factor in non-market values including ecosystem services. Moreover, the UNISCS Final Report dedicates a mere couple of paragraphs to environmental and socio-economic factors.[21] The report makes numerous, bold and unsubstantiated statements such as, *"the transition from a road to rail-based configuration for Upper North Island ports will reduce carbon emissions and other pollution"* without any data or analysis to back this up.

Also, NZTA have since announced that the 4-laning project for State Highway One is being resumed[22] which ultimately undermines the UNISCS report's assertions that their focus on rail would impact on carbon emission rates. The UNISCS report makes a number of other presumed environmental gains without any clear understanding of the Whangarei harbour's current capacity or status or its indigenous communities. It claims that further dredging of the Waitemata seabed is seen as,

> *"unacceptable to many Aucklanders, not least its tangata whenua/tangata moana. No such dredging is required at Northport as Suezmax ships already visit."*

No mention is made of the additional reclamation required at Marsden Point, the impact of the new proposed activities or the local tangata whenua/tangata moana. The assumption

[21] see page 26 https://www.transport.govt.nz/assets/Import/Uploads/Research/Documents/Cabinet-Papers/1.-MOT10025-UNISCS-Final-Report_final_8-11-19.pdf
[22] https://www.nzherald.co.nz/local-democracy/news/article.cfm?c_id=1504814&objectid=12308267

seems to be that it is a "zero sum" game where no future impacts would occur with the shift to Whangarei harbour and while there is no social and cultural licence to continue to operate in Auckland Harbour, it would somehow be completely acceptable at Poupouwhenua.

From our perspective earlier developmental/political "trade-offs" that occurred for reclamation and dredging in Whangarei Terenga Paraoa never included data or estimations of the financial loss to tangata whenua and the community of diminished recreational and customary fisheries, the inability to benefit from sale or lease of land confiscated from mana whenua and numerous other values, let alone spiritual, existential matters.

There are numerous questions that need consideration, for example;.

- How will the VFG, potential POAL relocation and associated infrastructure projects manifest from a socio-economic perspective in our rohe?
- How will this benefit locals?
- How will it add to existing pressures on affordable housing, the road network, our 'at capacity' schools, stretched health care and social services needs?
- How does it plan for community parks and facilities and the like?
- Will it hasten the deployment of the "3rd world" wastewater treatment ocean outfall discharge that the local authorities consented in 2011 in direct contravention of our cultural values?

Essentially our position is that an Integrated, holistic modelling approach is required to assess the proposal and a Triple bottom line method of financial auditing and reporting with the addition of a cultural component should be utilised.[23] There are a number of experts in Aotearoa New Zealand that are now incorporating such methods into assessments of projects, mitigation, and interventions including specific inclusion of cultural data and valuations (Calum Redfem, Proxima Global & Richard Yao, Scion. Pers. comm. March 2020).

7. CONCLUSION AND RECOMMENDATIONS

This report synthesizes information and korero gathered from hui and a number of documented sources to describe the traditional and contemporary cultural relationships of Patuharakeke with the Northport site and surrounds. It illustrates that these relationships remain well established, entrenched and easily demonstrated and acknowledged.

Whangarei Terenga Paraoa was known to Patuharakeke and other Whangarei tribes as a bountiful and rich food basket or 'Kapata kai'. The mahinga mataitai, waahi tapu, and cultural landscapes and seascapes remain of utmost significance today. Their use still revolves around maintaining customary practices and feeding whanau, hapu and manuhiri as in the past. The layers of matauranga and management through katiakitanga have been stripped back due to a number of factors, such as alienation of rights and access, imposition of government controls, subsequent mismanagement, pollution, industrialisation and overfishing. Consequently, today's kaitiaki seek increased control over the management of these places and resources. Our key focus is to prevent further diminishing of the mauri or life force of the harbour and to enhance and restore the important mahinga mataitai that remain.

[23] ie. https://www.globalreporting.org/standards/getting-started-with-the-gri-standards/

In terms of any adverse effects as a result of this VFG proposal, it is tangata whenua who have, and will continue to bear ultimate responsibility and impact for the effects on our environment. Tangata whenua will once again lose access to more of the traditional takutai moana. Therefore, they are concerned with ensuring a precautionary approach is taken with any activities that have the potential to create further adverse effects. Northport's technical studies will need to take these factors into account. These studies will need to consider the potential biophysical effects of an additional 26 ha of reclamation, capital dredging, effects of additional cranes, containerisation and noise on the landscape and under water, and amenity. However, these need to be considered in a much larger context of the wider socio-economic effects and weighed up. Our role will be to apply a cultural lens that will consider the effects of the VFG on Patuharakeke across the multiple wellbeings including the strategic pou outlined previously (Whānau Health, Taiao, Business, Culture, Education, Succession). Similarly, because of our holistic view and approach, the uncertainty and "political noise" surrounding the relocation of POAL and other major infrastructure projects is very difficult for us to separate out from the VFG itself.

Accordingly it is therefore recommended that PTB have a continued role and provide input throughout the scoping and undertaking of any further technical studies required throughout the consenting stages of project. Further, PTB recommend that Northport look to engage with our whanaunga hapu and iwi with interests in Whangarei Terenga Paraoa A number of more specific recommendations suggested in sub sections of 5.2 of this report for Northport's consideration are summarised as follows:

- Instigate further landscape assessment and visual simulations from additional viewpoints in more distant parts of our rohe, ie. Takahiwai Marae, kainga, the end of Takahiwai Road, and Piroa (Brynderwyns); and
- Support for PTB to appoint a landscape professional to carry out an independent peer review of the landscape and visual assessment.
- Further discussion with Patuharakeke on the proposed landscape mitigation concepts
- Development of a Heritage Management Plan in collaboration with PTB
- Undertake a marine mammal assessment of the project with PTB participation
- Enable PTB participation in any bird surveys going forward and any mitigation plans in relation to bird habitat.
- Support further longitudinal studies on the geomorphology and shellfish populations of Patangarahi Snake Bank
- Investigate use of an holistic modelling approach including triple bottom line financial auditing and reporting taking cultural values into account.
- Ongoing commitment to impmentation of the Relatioship Agreement, particularly through regular kanohi ki te kanohi meetings
- Northport undertake wider engagement with our whanaunga whanau, hapu, iwi of the harbour with our support where possible or if necessary.

This Cultural Values Assessment and subsequent specific technical detail provided will then inform the CEA that is to be developed. The engagement so far between Northport and Patuharakeke has been positive and productive. It will be essential to maintain an open and transparent dialogue to build this relationship going forward, and would be useful if Northport could assist if necessary in brokering our inclusion in wider discussions with other parties involved in the future use of the port and associated infrastructure.

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9. GLOSSARY

Atua - God, deities
Hapu - sub-tribe, holding traditional, ultimate authority for their people, original signatories to Te Tiriti o Waitangi/Treaty of Waitangi/TOW
Harakeke – flax
Hi inga ika - fishing grounds (also called tauranga ika)
Huai - Cockles
Ihe – piper
Ika - fish
Iwi - tribe
Kai - food
Kaimoana - seafood
Kainga - home, village, settlement
Kaitiaki - iwi, hapu or whanau group with the responsibility of kaitiakitanga; also with reference to the Customary Fishing Regulations 1998 = individuals who can authorise customary fishing
Kanae - mullet
Karakia - prayer, incantation, ceremony
Kaupapa - theme, policy
Kaumatua - elders
Kina - sea urchin
Koiwi tangata - human bones
Kokata – shellfish
Kopua Mango - shark fishing grounds
Koura – crayfish
Kuaka - Godwit
Kutai - mussel
Mahinga kai - food and other resources, and the areas they are sourced from
Mahinga Mataitai - customary seafood gathering site, shellfish bed
Mana - authority, prestige, respect, dignity, influence
Manaaki - to take care of
Manaakitanga - hospitality, kindness, caring (for people)
Manaia – Eponymous ancestor and Mountain
Manawhenua - those who have customary authority over a traditional area
Manuhuri – visitors
Manu Oi - Shearwaters/Mutton Birds
Matariki - Mt Lion
Matauranga – knowledge, body of knowledge
Matauranga Maori – Maori epistemologies, traditional knowledge systems
Patiki – flounder
Paraoa – Whale
Piharau - Lamprey
Pioke - Dogfish
Pingao - golden sand sedge
Pipi - clam
Pupu – mud snail
Rahui - restriction or control on an area
Rangatira - chief, leader
Rangatiratanga - chieftanship; sovereignty (includes right to self determination)
Rongoa – Maori traditional healing and medicinal plants
Riu – passageway
Taiao - Environment
Takutai moana – Foreshore and seabed
Tangaroa - God of the sea
Tangata whenua – indigenous people of the land
Taniwha kaitiaki - supernatural beings valued as a protective guardians
Tamure - snapper
Taonga - treasures
Tauranga waka - canoe landing site
Te Whara - Bream Head
Te Ao Maori – Maori world view
Tikanga – Maori customary values and practices
Tio – oyster
Tipa – scallop
Tohora – Whale
Tohunga - Traditional Maori experts imbued with certain capabilities, characteristics entrenched in Te Ao Maori – Maori world view
Tuaki - cockle
Tuatua – shellfish/surf clam
Tuahu kohatu – marker stone
Tuna - eel
Tupuna - ancestors
Turangawaewae - a person's right to stand on particular land and be heard on matters affecting that place and their relationship to it.
Urupa - burial site
Ingoa wahi - place names
Waahi taonga - places and things that are treasured and valued
Waahi tapu - places and things that are sacred
Waiana koiwi - underwater burial caves,

Maunga - mountain
Mauri - the essential life force of all things, spiritual essence
Mokopuna grandchildren
Nohoanga - seasonal occupation sites, places where food is gathered
Pa - fortified settlement site
Pa harakeke - flax garden
Pakaha – Fluttering Shearwater
Papaka – crab
Parera - Duck
ledges
Wairua - spirit
Waka - canoe
Wananga - seminar, workshop
Whakapapa - genealogy, cultural identity
Whakatauki- proverb
Whanau - family
Whangarei Te Rerenga Paraoa – Whangarei Harbour, Gathering place of Whales, Chiefs
Whare tupuna - ancestral meeting house
Whenua - land

10. APPENDICES

APPENDIX A: MATRICES

Matrix 1.1 Tangata Whenua Relationship Matrix

Relationships that must be recognised and provided for	*Subcategory*	*Ancestral Land*	*Water*	*Sites*	*Wahi Tapu*	*Other Taonga*
Māori	Mana Whenua Patuharakeke Te Parawhau Te Parawhau/Toetoe Ngati Kahu o Torongare me Te Parawhau Te Waiariki Ngati Korora Ngati Tu Te Uriroroi Ancient tribes: Ngai Tahuhu Ngati Manaia Ngati Ruangaio Ngatiwai Ngapuhi Ngati Whatua Tangata Whenua Kaitiaki Whanau Ahi Kaa Hau Kainga	Mana Whenua - Kaitiaki Patuharakeke are tangata whenua of Poupouwhenua (Marsden Point) area -ahi ka roa -nohoanga -long-established customary practices -korero purakau -tuku whenua -raupatu -customary tohu (signs e.g. landmarks, tuahu -kohatu mauri on the land) Patuharakeke hold kohatu mauri that are imbued with	Mana Moana - Kaitiaki Mana whenua have never relinquished their rights to the foreshore and seabed, Patuharakeke and other hapū and whanau have applications for Customary Marine Title or Protected Customary Rights under the MACA/Marine and Coastal Area (Takutai Moana) Act 2011 The proposal affects the gazetted rohe moana of Patuharakeke and traditional rohe moana of tangata whenua groups Mahinga Mataitai are adjacent to the site	Poupouwhenua Te Koutu Manaia Tangata kaitiaki for all heritage sites and sites of significance within the proposal area middens (recorded or unrecorded), nesting sites for manu (birds). “Riu” or passageway for Tohorā (whales). Concern for modification of passageways, changes to bathymetry, increasing occurrence of beaching. Patuharakeke recollection of Rauiri (across from the Whangārei Heads) was a massive pipi bank, has disappeared in the last	Patuharakeke hold kohatu mauri that are imbued with meaning and signify their ancient lineage to tupuna, whenua and moana. Kaitiaki Connections to the water including tapu; baptisms; healing practices (Bickler, Clough and Macready, 2013, p34) states that due to severe erosion over many years, the foreshore and cliff areas that once contained many hundreds of metres of shell and other refuse have disappeared, thereby rendering it very difficult to obtain a true reading of how densely populated the area ranging from One Tree Point through to Marsden Point was. It is stated that “hundreds of square metres of archaeological deposit may have been lost without any dating or structural information being obtained.”	Kaitiaki of all taonga e.g. marine species – kaimoana including: pipi/kōkota; hūai (cockles); tipa (scallops); pūpū (sea snails); kūtai (mussels); tio (oysters) Patuharakeke also highly regard staple kaimoana (from purakau) including: pioke (dogfish); piharau (lamprey); tuna (native eel); pāpaka (paddlecrabs); and various other species of ika (fish) including tāmure (snapper), kahawai, kanae (mullet). These species are already exposed to a plethora of anthropogenic

	Hapu Iwi Landowners Customary Fishers Maori non-mana whenua eg. Families at Marsden Village (some are 3rd generation)	meaning and signify their ancient lineage to tupuna, and connection with whenua and moana.	e.g. pipi and cockle beds, scallop beds, historic fishing sites Shared seasonal rights: Patunga Kuaka, Parera, Kopua Mango, Manu Oi	60 years. Marsden Bay, the beach adjacent to current port footprint to the west and east historically and contemporary times remain important recreational locations for whanau, hapu and wider community. Provide important safe swimming locations, handline and casting fishing opportunities.		stressors in contemporary times. Other taonga from the moana include tohorā (whales), native bird species, associated native vegetation and native landscapes. Kuaka - important bird species to Maori of the district as well as Pakaha or the Fluttering Shearwater which our people would take the young birds and pot them in their own fat (extended korero – Harry Midwood).
Relationships that must be recognised and provided for	***Subcategory***	***Ancestral Land***	***Water***	***Sites***	***Wahi Tapu***	***Other Taonga***
Culture		The relationship with ancestral land (whenua) gives meaning to "tangata whenua" (literally people of the land)	Ability to manaaki manuhiri, reciprocity (give, take, receive) results from relationship with moana Those with Mana whenua, mana moana	Te Whara, Home Point, Taranga, Manaia – highly significant cultural lansdcape and seascape to all Whangarei hapu and iwi Motu-o-Tauā, the Island of Tauā, the gathering of	Patuharakeke have many wahi tapu including ancient urupa that still contain the remains of important and illustrious forebears. Patuharekeke are kaitiaki of these urupa. These are mainly on the coastal fringes and some have been either eroded away or subsumed already by	Histories and stories Patuharakeke in common with all other Maori hapū have purakau or tales or understandings of taniwha and tupua.

		Adverse effects on the mauri and mana of the land and the mana of the sea reflect on the mauri and mana of the people Rauiri - some types of pā that our people utilised were 'lake pā' or low-lying 'swamp' and also 'riverside pā', all of which had their uses peculiar to the terrain and nearby resources. Adjacent or near to swamp, lake or marsh areas the waters were particularly favoured due to them being extremely rich in nutrients and organic matter. Swamps and lakes were also particularly favoured as repositories or	will bear ultimate responsibility for the health of the harbour and Bream Bay through continued duties and obligations inherent in their role as Kaitiaki. At the mouth of the Rauiri was a rich pipi and other shellfish bed that no longer exists. Mana whenua consider that through development (eg Northport, Hopper's Marina and Canal) the pipis have been directly affected i.e. smothered by reclamation or dredging, or affected by a number of other factors such as changing hydrology	the whales, who came upon the winds of the ocean. Rauiri Creek is a place of particular significance to Patuharakeke as this estuarine catchment once contained a very important eel fishery or weir. Situated as it was it would act as a catchment for the Puehaenga Swamp from which ran many rivulets and tributaries – all leading eventually to the Rauiri or what is now known as Blacksmith's Creek outlet.	encroaching mangrove mudflats and in some case dense overgrowth. Tupuna who are buried or interred in these ancient urupa are links of old that connect families of our hapu together, whether these whanau are from Tangiteroria, Maunu, Poroti, Otaika, Kaikuhi, Toetoe, Te Waiti, Raumanga, Hukerenui, Te Rawhiti, Whangaruru, Mokau or Dargaville. Motu Tapu (Calliope Island), Motu Panamaia, Motu Karoro are islands across the harbour from Marsden Point and all have heritage, histories and beliefs associated with them that are integral to our histories.	Some areas hold presence or mauri that continue throughout the generations to remind us to be cautious in our intentions/operations in the locale. "there is korero of a taniwha in that area [Marsden Pt] It is there to protect us." (Living Memories Hui, Takahiwai 1998). Taonga raranga sites Natural material, dyes/paru for weaving etc. Pingao used specifically to make piper nets was gathered in Poupouwhenua and Rauiri areas.

		even safe 'hides' for tribal heirlooms such as carvings				
Relationships that must be recognised and provided for	***Subcategory***	***Ancestral Land***	***Water***	***Sites***	***Wahi Tapu***	***Other Taonga***
Traditions	Whilst the hapu has undergone a number of reconfigurations more akin to a confederation of hapu, through our understanding of Patuharakeke whakapapa and the abundance of archaeological ground evidence our hapū can demonstrate that we have been in occupation of much of our rohe for more than 20 generations, most probably longer. Patuharakeke have not only occupied the areas in consideration and question but have	Gathering of pingao and other resources to weave etc for nets (eg. for Piper/Takeke/Ihe) Sustainability maintained through kaitiakitanga – colonization colonisation has diminished role of kaitiaki – resulting in poor health of harbour cost of development (Bickler, Clough and Macready, 2013) states "The density of occupation in the Whangarei	Whangarei Terenga Paraoa, names and traditions associated with this harbour (i.e. Gathering place of chiefs, whales). Holistic view of harbour as an entity (personhood) Traditional mahinga mataitai and fishing grounds: Patangarahi (Snake Bank) – a tahuna hūai (cockles) Patupo-a-tahuna Kuaka or sandbank at Marsden Point Rauiri, Te (Tarawiri) – the seasonal eel weir and flax plantation farmed and cultivated by Patuharakeke. This was also an important pipi bank (where	Tupuna Maunga, mataitai and other sites listed make up an interwoven cultural seascape and landscape that is central to tribal identity of Patuharakeke and other harbour tribes. These places are referred to in pepeha, waiata, whakatauki etc Traditional Toka or rocks and reefs for fishing, were named and known Home Point – Pā of tupuna Rangatira Hikurangi Otarakaihae (Mt Aubrey)- Ngati Tu – alludes to jealousy could refer to Paeko and Manaia korero Motu Taua – Kukupa's	Our histories tell of places where: • bathing and healing rituals were enacted • bodies were washed and bones prepared for final internment • warriors gathered to strategise • a powerful tohunga recited karakia to avenge his wife • an ageing chief bathed and prophesized the future including developments and events that have occurred in the area (Te Ikanui) • battles occurred • war canoes gathered • an ancestor called to a favoured sea mammal • our tupuna chanted the whales to safety Bird harvesting sites: During the early part of the breeding season for these birds the areas to which they migrated became strictly tapu and rahui were place so no one would be allowed to approach the breeding grounds. When the birds	Dunes are a Respository for Tohorā bones Nevin (1984) reports a wide range and large number of archaeological sites south of Whangārei harbour consisting of vast deposits of shell refuse that communities of old had added to - probably over many hundreds of years. Further inland were extensive peaty marsh and rich swamplands which would have been teeming with both bird and aquatic life such as migratory kuaka, native parera and tuna, koura and inanga.

	done so intensively over a very long period of time. Of note too is that although remnants of ancient pa sites may still be clearly evident on the landscape, the more seasonal kainga and camps, by virtue of the materials used, would fall quickly to decay, become overgrown and leave little trace of their former use until the ground was either burnt off or cleared for occupation once again as circumstance permitted	Harbour area was the result of a combination of factors that favoured settlement: i.e. access to marine and freshwater resources, fertile soils, water transport routes, and a sheltered and defendable harbour. There are many high-altitude areas that are suitable for the strategic siting of defensive sites with views out over the harbour and the approaches to it." Also mentioned is that "Development of the oil refinery at Marsden point has obliterated the former archaeological landscape, but it is likely to have been similar to	timber port is today); Mahinga Mataitai at: McDonald Bank Mair Bank/Marsden Bank (Te Poupouwhenua) Calliope Bank/Urquharts Coastline from Reotahi to Taurikura Mussel/Kutai beds formerly along Marsden Point to site of Refinery Jetty Outside of harbour = Smugglers, Peach Cove, Hapuka Grounds – Taranga Island 3 mile reef fishing ground Mid-to-upper harbour = Mangawhati, Titahi, Parua Bay, Matakohe/Limestone among others	Pa. "the gathering of the Whales" – the meeting place for Ngapuhi including local hapu chiefs to gather and strategise for battle. Waka taua would assemble in places like Smugglers Bay, Poupouwhenua before going up to Motu Tawa; Also referred in other harbour tribes korero as referring to whale pathways in the harbour Taurikura – Korero around Manaia's daughter Tangata whenua are developing cultural monitoring tools/audit/programme based on maramataka, Mātauranga Māori. Seasonal birdlife in our rohe: The Kuaka is one migratory bird that was once a regular source of nutrition to the hapu until the advent of pollution i.e. Portland Cement Works fines discharges and loss of	came into good condition then the rahui signifying the tapu was lifted. The Sooty Shearwater (Titi or Oi) Mutton Bird, the Sooty Albatross, the Bullers Shearwater, Flesh-Footed Shearwater, Taiko/Kuia (Black Petrel), the Kaki (Black Stilt), the Hakoakoa (Sea Hawk or Southern Skua), the Pycrofts Petrel, Cooks Petrel, the Korure or Rainbird, the White-Headed Petrel, the Grey-Faced Petrel , the Bounty Island Mollyhawk, the Puweto/Putoto (Spotless Crake), Kokako, the Wandering Albatross, the Kawau-Paka, the Karuhiruhi (Pied Shag), the Parekareka (Spotted Shag), the Ngutu Parore (Wrybill Plover), the Little Barrier Snipe, the Huahou (Eastern Knot), the Kotare (New Zealand Sacred Kingfisher), the Pipiwharauroa (Shining Cuckoo), the Riroriro (New Zealand Grey Warbler), the Koekoea/Kawekawea/Koheperoa (Long-Tailed Cuckoo), the Ruru (Morepork), the Kaka/Kaka-kura, the Kakapo, the Kakariki (Red-fronted Parakeet), the Moa, the Korora (Penguin), the Tui, the Korimako, the Tauhou, the Kukupa (native pigeon), the Kuaka/Katatai (Eastern Bar-tailed Godwit) have abounded on the shores and islands off the coast of	Interweaved among the swamps and lakes would have been small pā that would have served as kainga mahi or semi-defensive work stations that could be occupied by either individuals or entire whanau as seasonal abundance necessitated. Families would live mainly on the coast for a rich harvest of kaimoana. Food gathering would involve entire tribes at times and operations such as netting or fishing both inland and out to sea. Net making and its requisite care and maintenance, line fishing, waka building and management through to fisheries management of the multitude of eel catchments (rauiri) and birdlife capture and preparation all required a large degree of skill, preparation and concerted effort. Much

		the midden-dominated landscape at One Tree Point further to the west. This area of relatively low-lying sand dunes appears to have been used seasonally to exploit the rich resources of the coast. A large number of pa, pit and terrace sites are recorded to the west in the Takahiwai hills, and to the south near the Ruakaka river, indicating that these areas were the main focus of permanent settlement."		habitat in NZ and worldwide. Kuaka in much smaller numbers do still make their annual migration and were seen at Takahiwai in Spring/Summer 2019 (Grant Pirihi pers. comm).	Whangarei, particularly on the islands of the Poor Knights, Aotea (Great Barrier), Hauturu (Little Barrier), Hen & Chickens, Mokohinau, Marotiri and so on..	of the hapu's energies revolved around the planting of kai e.g. kumara, taro, uwhi and kamokamo etc... and, together with the seasonal kaimoana harvests our communities of old would have had busy and industrious lifestyles and lives. Many of the listed manu (bird) species would be highly sought after by our hapu who relished the delicacies and utilities e.g. feathers and bones that many of these birds offered.

Matrix 1.2 Kaitiakitanga

particular regard must be had for:	***Knowledge of***	***Practice of***
Kaitiakitanga	Kaitiakitanga has been diminished through inability to practice – loss of control and	The loss of mahinga mataitai, kaimoana through industrialiszation, (reclamation, dredging), pollution, biosecurity risks, poor fisheries management etc has affected the ability to practice kaitiakitanga in a more

	full management of resources and access to them… eg. Western knowledge has dominated epistemologies and minimised or ignored mātauranga. Knowledge still held/maintained by kaumatua/kuia and reflected in the tikanga of the people today	meaningful way. Eg. mataitai under Northport reclamation, Motukaroro marine reserve – (alienated) Mair and Marsden Banks severely threatened, Snake Bank at risk. What is the status of the mauri of Whangarei Terenga Paraoa. The warnings of tangata whenua at original Northport hearings went unheeded. All said, "we will lose Mair Bank, Snake Bank…" etc – this has come to pass. Kaitiaki Roopu was supposed to mitigate and address desire to restore mauri – some projects have been positive but have not addressed decline, and NIWA and other agencies have had true benefit of funding while kaitiaki capacity and capability has not been built. For adverse effects- impact and liability remains with tangata whenua regardless of RMA, agency roles. Kaitiakitanga remains subservient to government management practices/processes. Marae/hapu still attempt to maintain kaitiakitanga e.g. Through Patuharakeke HEMP, Rohe Moana Management Plan, Whangarei Harbour Kaitiaki Roopu and hapu resource management entities/technicians

Matrix 1.3 Principles of Treaty of Waitangi[1]

take into account principles of:	**Are these impacted by the proposed activity?**
Sovereignty &Kawanatanga[2]	We are the owners of the Takutai; MACA Applications of relevance Adjacent Crown Land We aspire to be future landowners and landlords in this area
Exclusive Possession &Rangatiratanga[3]	Rangatiratanga has been usurped by confiscation of Poupouwhenua block, reclamations and successive councils, policy, development.
Partnership[4]	Northport and PTB Relationship Agreement provides a level of partnership. Are there future opportunities for greater participation, monitoring, restoration? What about co-design and true decision-making power?
Active Protection[5]	Incompetence demonstrated by past work of councils, inudstry, developers; Disenfranchised from actual decision-making, only opportunity is "engagement" in Council's process. Tangata Whenua still seek real decision-making power Will this development affect our future aspirations for sustaonable hapu development?

[1] definitions of the principles of the Treaty given in "*Taking into Account the Principles of the Treaty of Waitangi: Ideas for Implementation of Section 8 of the RMA 1991*" MfE
[2] including an obligation to protect Maori interests
[3] including an obligation to legally recognised tribal Rangatiratanga
[4] including a responsibility to exercise good faith, to conduct early consultation and to meet the needs of both Maori and the wider community
[5] including the active protection of Maori people in the use of their resources and other guaranteed taonga to the fullest extent practicable

APPENDIX B: NORTHPORT: VISION FOR GROWTH - TANGATA WHENUA ENGAGEMENT PROCESS HUI

Hui Record 23/11/19:

Agenda

- 12.30pm Mihi Whakatau
- 13.00pm Lunch
- 13.30pm Presentations/Q&A session with technical experts
- *13:30 Northport Introduction (incl 2 x video presentations)*
- *13:45 Ecology*
- *14:00 Visual Impact*
- *14:15 Hydrodynamic etc*
- *14:30 Noise*
- 14:45 Summary – Final Q & A to panel
- 15.00pm Next Steps – Outline process for Cultural Values and Impact Assessment

Overview from Northport CEO Jon Moore and Greg Blomfield

- Vision video shown
- see brochure
- Much in the news about future of port in politics and media, but this footprint shows what is actually physically feasible on the site.
- affordable housing remains a major issue – where future industry/workers live

Mark Poytner -Ecology/water quality

- Spoke to his historical and wider involvement ie. WDC reconsenting Whangarei WWTP
- birds, surveying
- intertidal high abundance of species/ taxa. Cockles
- Not sure of cultural value and use here, requires further info (from us)
- Revetments/seawalls: surveyed. Colonised with varierty of species
- Seabed/subtidal, just surveyed, still drafting report.
- Stormwater system is high quality management
- Historical data dates = cumulative impact
- "Choke point or throat- traffic jams."
- Matua Mike Kake - interested in upper harbour impacts. We're all part of the wider harbour whanau. Is this hui a Patuharakeke hui or Ngā hapu o Whangarei Terenga Paraoa? (reply open initial information hui for all)
- Look at what the impacts the upper harbour development (navy base) might have on the port area and at the harbour mouth.
- Donna - housing and number of people growth impact on ecology.
- Will Kaitiaki be included in surveying and monitoring
- Mark Poynter: for those 'threatened species' and 'at risk' bird species who currently occupy that area, what does it look like to 'accompany them' if this sort of development goes ahead? Must have to be pretty significant to be displacing historic nesting areas.

Stephen Brown - Visual Impact /Landscape Assessment

- Before & after slides/photomontages were shown
- Albany rd impacts
- Existing visual impacts, have a look at new impacts.

- Cranes - 100m height, running on rails
- Amenity e.g. lighting
- Takahiwai impacts. Do a model view from there/ map viewshafts?
- Manaia/ connections to components of the cultural landscape
- Harry - ppt eludes to saying it slips/blends into existing structures. (Is this grandparenting?)
- Get some photo shafts done from cultural areas e.g. Brynderwyns/Piroa and others.
- What colours would the cranes be?
- Taryn comment: must be more culturally sensitive and considerate about changes to the area. Had a pretty strong emphasis on "what's a little more industrialization" viewpoint. Might be his personal view but our cultural values, for those who live up here and have already lost kaimoana beds and likely to exaggerate already degraded waters, things are much different.

Brett Beamsley – Hydrodynamic Modelling

- Snake bank potential issues?
- Outlined staged approach
- Sediment deposition issues
- Is there any difference with multiple vessels? Increased activities.
- Potential plume impacts modelled and discussed different types of dredges w.g. backhoe vs suction/vacuum (ie. Sediment function of diffusion at bottom of hose to avoid plumes)
- Sediment will be used for reclamation.
- Greg - first maintenance dredging in 17 years occurred last year so not anticipated often
- Climate change - sea-level rise. Inside harbour is not susceptible to sea level rise. In a hydromorphological sense more relevant is the velocity of tides.
- Ray Wassel the eastern side is lost! Vision for Growth will turn the western side into mud because the flow will stop. Maybe partial piles rather than reclamation?
- Jon Moore replied issues with piles are = Costly, sediment buildup, timeframe, noise from pile driving
- Taryn comment - Difficult to identify problems when all these effects are looked at in such isolation. For mana whenua, none of these minute changes are problematic, it's the compounding effects that matter to us, subtle changes here add extra stress to an already stressed environment.

Craig Fitzgerald - Acoustics

- Gave an outline of experience at other ports.
- Existing - humming noise, and bangs from log loading.
- WDC District Plan noise standards are relevant, include requirements for Port Noise Management Plans and Noise control boundaries - Inner boundary 65db - Outer 55db; Db levels are penalised at night to avoid high night activity.
- Juliane/Taryn - underwater acoustics are important to us, Te Rerenga Paraoa/ whales/mammals etc
- This is an operational assessment. Does not include underwater. But they can look at that as well.

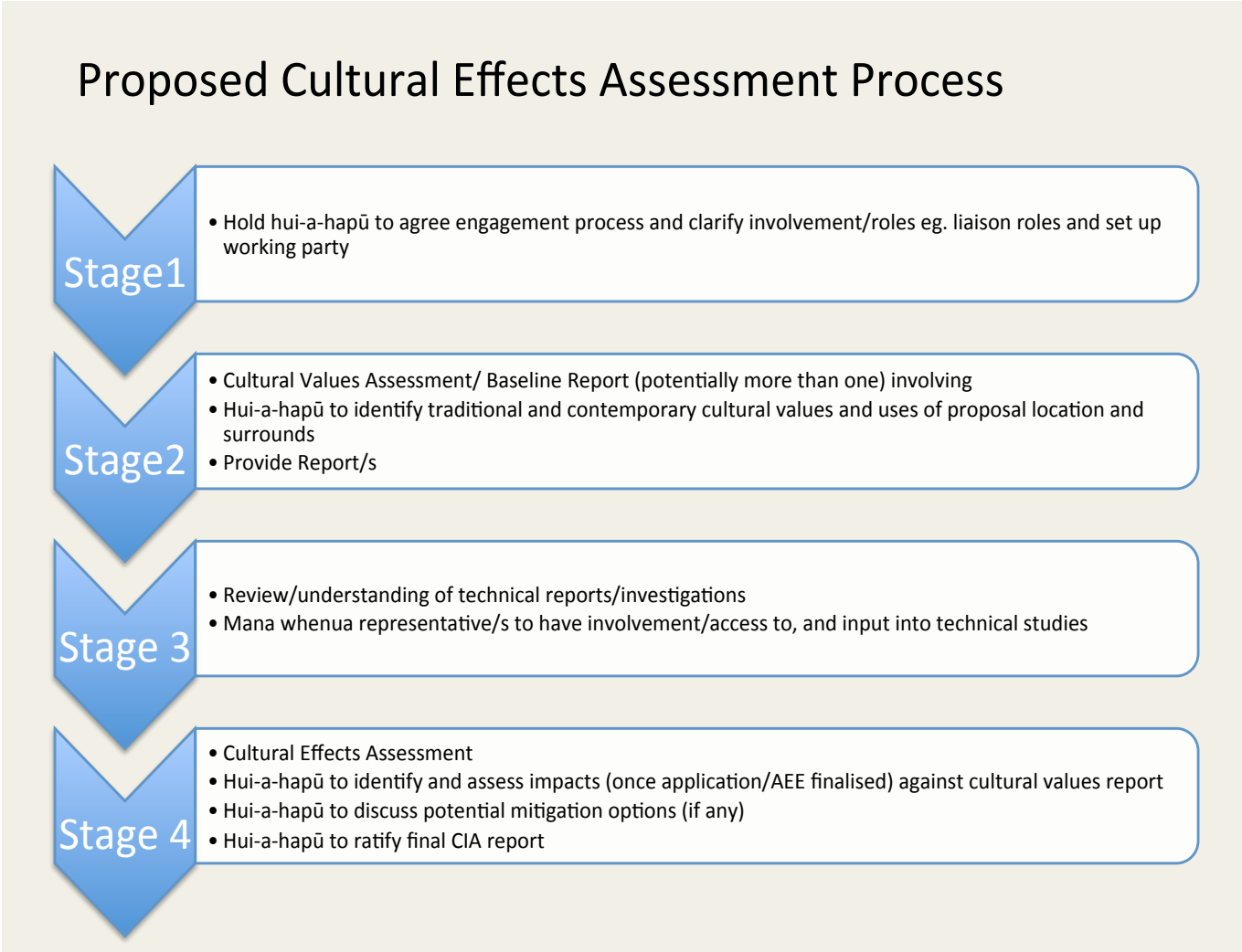
Other

- Donna - social impacts/obligations must be considered
- Harry – outcomes sought = co-governance, co-management kaitiakitanga. Relationship building.
- Gil – consideration of maramataka in assessments
- Ray wassel – Long term and future proofing required

Cultural Assessment Process (see below)

- Juliane and Dave gave an overview including Resource Management Act context.
- Queries about “mana whenua”, who is doing report etc
- Clarification that PTB and Northport have agreed for PTB to provide CVA. This is a “baseline” report along the lines of the other technical reports, focusing on identifying cultural values and relationships to the harbour and particularly port vicinity not assessing impacts as yet. Opportunity for hapū to work collaboratively (could be review, tautoko, working party approach or input into certain areas of the report), or further down the track ie. when approach is decided (ie. if Northport apply for consents) to have individual hui and produce CIA reports.
- Tamihana inictaed an interest to be part of a working party. Mike Kake (on behalf Rewarewa D etc) wanted to be kept in the loop as well.
- All in attendance to be sent hui record and Jon Moore (Northport CEO) invited anyone interested to come and do a port tour. Presentations will be up on Northport website soon.
- Further hui to come in new year

16.30pm Kua Mutu/ Karakia



Patuharakeke Te Iwi Trust Board - Hui

NORTHPORT HUI ATTENDANCE LIST

23rd November 2019 12.30 pm held at Bream Bay Community Trust

	Attendee Name
1	Crete Milner
2	Luana Pirihi
3	Ari Carrington
4	Jeanette Wilson
5	Taryn Shirkey
6	Juliane Chetham
7	Harry Maki-Midwood
8	Manaaki Maki-Midwood
9	Mike Kake
10	Tamihana Paki
11	Donna Flower
12	David Milner
13	Ngawai Haitana Tuhoro
14	Manu Tuhoro
15	Taimania Toia
16	Brendon Chetham
17	Shilane Shirkey
18	Leon Kereopa
19	Xzavier Watson

APPENDIX C: SNAKE BANK (PATANGARAHI) INTERTIDAL SURVEY

Patuharakeke Taiao Unit in collaboration with NIWA

Preliminary Description, February 2020 (by Taryn Shirkey)

Study site

Date: 3/12/2019

Location: Snake Bank (Patangarahi), Whangārei Harbour

Map of area:

Source: LINZ, NZ Topo Map, Snake Bank – https://www.topomap.co.nz/NZTopoMap/nz7517/Snake-Bank/

Methodology

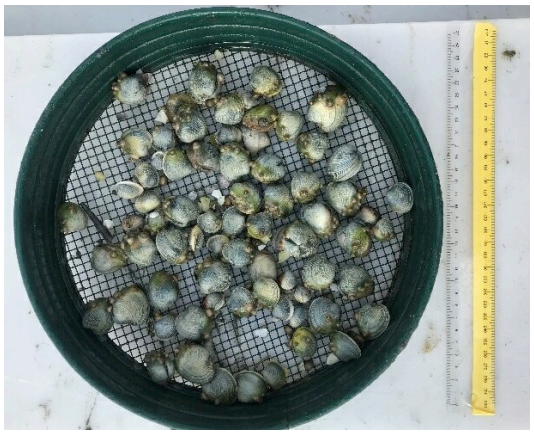
The site was randomly sampled by two pairs, who set out to cover the entire bank in a haphazard sampling manner. Working towards each other from opposite ends of the bank. At each randomly located site, a quadrat was laid (figure 1). The survey covered approximately 40 sites, with two different methods employed.

1) For most sites, one quarter corner of the quadrat was cleared by hand and cockles were > 20 mm were counted. Those with totals larger than 20 individuals, were denoted as "cockle bed present." If there were less than 20 individuals < 20 mm in that one quarter, then we'd assume the absence of a cockle bed.
2) For every fourth site, two cores (15 cm wide, 30 cm deep) within the quadrat. Cockles from these two cores were laid out next to a ruler and photographed using a geotagged camera for future length analysis. Two sediment samples were taken within the quadrat using a 3 cm wide, 15 cm deep corer – to be tested for Chlorophyll A and B, as well as separate sediment characteristics (such as sediment size and infaunal biota presence/absence).

Results

The complete results from this survey are yet to be processed, however, some preliminary comments can be made from attending the survey and gathering field notes.

- Greater than 80 % of the sites sampled showed presence of a relatively stable cockle population (denoted as "presence of 20 or more individuals > 20 mm in shell length")
- Many sites showed good numbers (50 – 100 individuals) of middle size classes (ranging 20 – 35 mm shell length)



- Very few sites showed an abundance of large individuals (no individuals > 45 mm shell length)
- Few sites showed a range of size classes represented - whakawhanaungatanga (see below photo)

Overall, the cockle population at Snake Bank is in a relatively healthy, stable state. There is a good abundance of cockles on the bank, and there seems to be an even spread of size classes. However, it is concerning that there are very few individuals reaching large sizes, which is what this bank was formerly renowned for. Reasons for this could include environmental conditions (temperature increases, bank morphology, access to vital nutrients and water quality), habitat characteristics, natural fluctuations of the bank, or other factors that we are not aware of yet. This prompts the need for further study on these populations to return these to their natural thriving state, pre-dating anthropogenic influences.

There is further works planned for this location including integration of this site into longitudinal studies looking to reviving local kaimoana populations, including two avenues of works:

1) Annual hapū led intertidal surveying works co-designed by NIWA and Patuharakeke Taiao Unit
2) Vision Mātauranga Capability Fund (VMCF) “Ka pū te ruha, Ka hao te Rangatahi” project looking into revival of taonga species in the rohe moana, undertaken by Taryn (of Patuharakeke Taiao Unit)

Further aspirations for work in this area include understanding the population dynamics and stability of this bank, alongside understanding the key envrionmental and anthropogenic stressors this bank faces. Understanding these will shed light onto the overall resilience of this bank, and how to further assist its rejuvenation into the future.