

**IN THE ENVIRONMENT COURT
AT AUCKLAND**

ENV-2024-AKL-

**I MUA I TE KOOTI TAIAO O AOTEAROA
TĀMAKI MAKĀURAU**

IN THE MATTER of the Resource Management Act
1991 (the “RMA”)

AND

IN THE MATTER of an appeal under section 121 of the
RMA

BETWEEN **NORTHPORT LTD**

Appellant

AND **NORTHLAND REGIONAL COUNCIL**

Respondent

AND **WHANGAREI DISTRICT COUNCIL**

Respondent

**NOTICE OF APPEAL BY NORTHPORT LTD AGAINST DECISION OF NORTHLAND
REGIONAL COUNCIL AND WHANGAREI DISTRICT COUNCIL TO DECLINE
RESOURCE CONSENT**

29 July 2024

1 INTRODUCTION

- 1.1 Northport Limited (“Northport”) appeals against the decision of Northland Regional Council and Whangarei District Council dated 5 July 2024 to decline resource consents for a port expansion project at Marsden Point (the “Decision”).¹ The Decision relates to an application for resource consents to construct, operate, and maintain an expansion to the existing Northport port facility (the “Application”).
- 1.2 Northport is the applicant in relation to the Decision.
- 1.3 The Application was publicly notified in November 2022. 243 submissions were received: 176 in support; 10 neutral or not stated; and 57 in opposition. One submission was subsequently withdrawn.
- 1.4 Northport received notice of the Decision on 9 July 2024.
- 1.5 Northport has a right to appeal this Decision under section 120 of the RMA. The Decision is not one of those activities excluded by section 120(1A) or (1B) of the RMA.
- 1.6 Northport is not a trade competitor for the purposes of section 308D of the RMA.
- 1.7 Northport is appealing the Decision to decline resource consents. More particularly, Northport appeals the Decision in relation to its findings on:
- (a) cultural values and effects, particularly in the context of the applicable planning framework; and
 - (b) recreational/public access values and effects in the context of the applicable planning framework.
- 1.8 The area to which the Decision relates is the site of the existing Northport port facility at Ralph Trimmer Drive, Marsden Point, and the adjacent coastal margins and coastal marine area.

2 THE DECISION

- 2.1 The Decision identified that granting the Application would have important and significant positive effects nationally, including significant social and economic

¹ Noting that the Decision was issued by Independent Hearings Commissioners appointed by the respective councils.

benefits to Northland and New Zealand. The Decision accepted that granting the Application would:

- (a) result in benefits to the Northland region valued at \$34 million per year in direct value added, and \$1.194 billion per year in wider economic activity facilitated by the port;²
- (b) directly sustain the equivalent of 320 to 480 jobs annually, and between 14,800 and 16,100 jobs from the wider economic activity facilitated by the expanded port;³
- (c) enable a dedicated container terminal at Whangarei, providing access for a range of products and enabling a range of port-related development: that it would *“support Northland unlocking its potential and thereby improving the socio-economic well-being across the region”*;⁴ and
- (d) form part of an integral and efficient national network of safe ports, thereby improving the efficiency and resilience of the national port network.⁵

2.2 The Decision found that the applicable planning and policy framework (including the New Zealand Coastal Policy Statement 2010 (“NZCPS”), Northland Regional Policy Statement, Northland Regional Plan, and Whangarei District Plan) provides strong directive enabling support for port-related development at the precise location proposed; and that this *“genuinely is a case of ‘if not here, then where?’”*.⁶ Further, the Decision found that the Application would not be contrary to the relevant objectives and policies of the regional and district plans, and would satisfy section 104D of the RMA if it were a non-complying activity (noting that the Decision found that the Application was, overall, a discretionary activity).⁷

2.3 Notwithstanding these findings, the Decision concluded that:

- (a) The magnitude of adverse cultural effects will be significantly adverse, and that cultural impacts will not be sufficiently mitigated by the conditions proposed by Northport.⁸

² Decision, paragraph 116.

³ Decision, paragraph 115.

⁴ Decision, paragraph 117.

⁵ Decision, paragraphs 6, 114, and 121.

⁶ Decision, paragraph 103.

⁷ Decision, paragraphs 52-53, and 61-62.

⁸ Decision, paragraphs 1-2, and 290-292.

- (b) The loss of recreational values and public access would not be sufficiently mitigated by the proposed conditions of consent.⁹

2.4 The Hearing Panel found that any adverse effects relating to all other matters have been avoided or appropriately mitigated (or offset) and would be consistent with the relevant objectives and policies of the statutory planning documents.¹⁰ All other actual and potential effects associated with the Application were carefully examined by the Hearing Panel and found to be acceptable. The Decision to refuse consent was narrowly confined to the reasons outlined in paragraph 2.3 above.

2.5 The narrow grounds for refusal of consent are further evidenced by the Hearing Panel recording that, had it granted consent, the Panel would have imposed the suite of conditions proposed by Northport at the conclusion of the hearing, except in relation to cultural matters and recreation/public access; and lapse period.¹¹

3 GENERAL REASONS FOR THE APPEAL

3.1 Northport considers that the Decision to refuse consents for the Application:

- (a) will mean that none of the important and regionally and nationally significant positive benefits identified in the Decision will eventuate;
- (b) does not promote the sustainable management of resources, and is contrary to or inconsistent with Part 2 and other provisions of the RMA;
- (c) is inconsistent with, and does not afford adequate weight to the strong directive support for the Application provided in the applicable planning and policy documents;
- (d) does not represent the efficient use and development of natural and physical resources;
- (e) does not manage natural and physical resources in a manner that enables the community to provide for its social and economic wellbeing; and
- (f) will not meet the reasonably foreseeable needs of future generations.

⁹ Decision, paragraphs 3 and 353-354.

¹⁰ Decision, paragraph 7.

¹¹ Decision, paragraphs 8 and 424. The Decision records that the Hearing Panel would have imposed a ten-year lapse period.

4 SPECIFIC REASONS FOR APPEAL

4.1 Without limiting the generality of the above, Northport appeals the Decision on the basis that it errs with respect to:

- (a) findings on cultural values/effects, and the application of the relevant planning provisions relating to cultural values and effects; and
- (b) findings on recreational/public access values and effects, and the application of the relevant planning provisions relating to recreational/public access values and effects.

Cultural values and effects

4.2 The Decision accepted that Northport has appropriately engaged and consulted with iwi/hapū regarding the Application.¹² However, the Decision also:

- (a) Found that an undefined area subject to the Application is a site or place of significance to tāngata whenua, despite not being mapped as such in the district or regional plans.¹³
- (b) Appeared to accept the submission for Patuharakeke Te Iwi Trust Board (“PTITB”) that not only is a decision maker unable to substitute its view of cultural effects expressed by tāngata whenua, but further, that *“nor should a decision maker substitute its view for that of tāngata whenua as to whether such effects are able to be appropriately avoided, remedied or mitigated”*.¹⁴ A decision maker is required to undertake a careful evaluation of a proposed cultural effects mitigation approach. To accept an iwi/hapū position without doing so would effectively grant a veto, which the Environment Court has stated is not provided for in the RMA.¹⁵
- (c) Appeared to accept and inappropriately place weight on submissions and evidence for PTITB which was factually erroneous and/or related to considerations governed by separate statutory processes. Examples include the submission that the Application will *“sever Patuharakeke’s last remaining direct connection to the takutai moana”*,¹⁶ and evidence as to unknown

¹² Decision, paragraph 255.

¹³ Decision, paragraph 360.

¹⁴ Decision, paragraphs 269-270.

¹⁵ Refer the decision *Waste Management NZ Limited v Hauraki District Council* [2024] NZEnvC 047 at [246], following the earlier Court of Appeal decision *Watercare Services Ltd v Minhinick* [1998] NZLR 294, [1998] NZRMA 113 (CA).

¹⁶ Decision, paragraph 266.

potential future implications for applications under the Marine and Coastal Area (Takutai Moana) Act 2011.¹⁷

- (d) Without detailed interrogation of the competing plan provisions, and while accepting that the Application received specific and directive enabling support in the planning framework, the Decision effectively ‘read down’ that policy support in favour of the policies relating to tāngata whenua and because of the “significant and irreversible” effects of the reclamation.¹⁸ Among other failings, the Decision inadequately undertakes the structured analysis required to reconcile the conflicting policy directives in a manner consistent with the direction of the Supreme Court in *Port Otago*.¹⁹ More particularly, the Decision fails to sufficiently consider the directive NZCPS ports policy²⁰ in a structured approach that appropriately reconciles the ports policy and avoidance policies. This failure means that the Decision does not adequately recognise that a port network is required (meaning mandatory) and does not appropriately balance conflicting directive policies, in the context of Part 2 of the RMA.²¹
- (e) Without detailed consideration of the conditions proposed by Northport relating to cultural effects and their effectiveness in managing adverse impacts on cultural values,²² the Decision wrongly concluded that the magnitude of adverse cultural effects in the Application’s current form will be significantly adverse, and that they will not be sufficiently mitigated by the conditions proposed by Northport.²³

- 4.3 Northport considers the Hearing Panel erred in its findings above, and ultimately in declining consents for the Application based on concerns over potential cultural effects.

Recreational/public access values and effects

- 4.4 As noted at paragraph 2.4 above, the Decision recorded that adverse effects associated with all matters have been avoided or appropriately mitigated (or offset) and would be consistent with the relevant objectives and policies of the statutory

¹⁷ Decision, paragraph 275.

¹⁸ Decision, paragraphs 313-328.

¹⁹ *Port Otago Ltd v Environmental Defence Society & Ors* [2023] NZSC 112.

²⁰ Policy 9 of the NZCPS.

²¹ *Port Otago Ltd v Environmental Defence Society & Ors* [2023] NZSC 112, at [75]-[82].

²² Decision, paragraphs 3-7, 308 and 329.

²³ Decision, paras 1-2, and 290-292.

planning documents, except in relation to cultural and recreational/public access values and effects.

- 4.5 The expert planning evidence for Northport was that the various mitigations proposed by Northport were sufficient to address residual recreation effects, when considered in the context of the relevant planning provisions.
- 4.6 The Decision found that public access and recreational opportunities will still be provided, but that, in the Application's current form, the loss of recreational values and public access had not been sufficiently mitigated or offset. This is an error. The expert evidence for Northport does not support this finding and measures to appropriately mitigate these potential effects were proposed in the comprehensive consent conditions, which were not sufficiently taken into account by the Hearings Panel.
- 4.7 In reaching its findings on this issue the Hearing Panel:
- (a) inappropriately applied the relevant planning provisions,²⁴ including by failing to undertake the required structured analysis as described in paragraph 4.2(d) above; and
 - (b) failed to give sufficient weight to the mitigation and offsetting proposed by Northport through proposed consent conditions.

5 RELIEF SOUGHT

5.1 Northport seeks that:

- (a) the appeal be allowed;
- (b) resource consents for the Application be granted in their entirety subject to the conditions proposed by Northport at the conclusion of the hearing (or such amended conditions as may be proposed by Northport within the scope of the Application); and
- (c) costs.

6 ATTACHMENTS

6.1 The following documents are attached to this notice:²⁵

²⁴ Decision, paragraphs 347-354.

- (a) A copy of Northport's Application for resource consents.
- (b) A copy of the Decision.
- (c) A copy of the conditions proposed by Northport at the conclusion of the hearing.
- (d) A list of names and address of persons to be served with a copy of this notice.

NORTHPORT LTD by its solicitors, ChanceryGreen:



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29 July 2024

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To: The Registrar at the Environment Court in Auckland
And to: Northland Regional Council
And to: Whangarei District Council
And to: Submitters

²⁵ All application documents, including the AEE and attachments; the decision; and the conditions proposed by Northport at the conclusion of the hearing are available at the following link: <https://www.nrc.govt.nz/consents/resource-consent-hearings-documents/northport-limited-port-expansion-project-at-marsden-point-joint-notification/>

Advice to recipients of copy of notice

How to become party to proceedings

You may be a party to the appeal if,—

- within 15 working days after the period for lodging a notice of appeal ends, you lodge a notice of your wish to be a party to the proceedings (in form 33) with the Environment Court and serve copies of your notice on the relevant local authority and the appellant; and
- within 20 working days after the period for lodging a notice of appeal ends, you serve copies of your notice on all other parties.

Your right to be a party to the proceedings in the court may be limited by the trade competition provisions in section 274(1) and Part 11A of the Resource Management Act 1991.

You may apply to the Environment Court under section 281 of the Resource Management Act 1991 for a waiver of the above timing requirements (see form 38).

The copy of this notice served on you does not attach a copy of the relevant application or the relevant decision. These documents may be obtained, on request, from the appellant [and are also available at the links provided in this notice of appeal].

Advice

If you have any questions about this notice, contact the Environment Court in Auckland.

ATTACHMENT A: APPLICATION

Application for resource consents for the expansion of Northport




Northport

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Acronyms

AEE	Assessment of Environmental Effects
BAU	Business as Usual
BHD	Backhoe Dredger
BML	Boffa Miskell Limited
BNZL	Brown New Zealand Limited
C+A	Clough and Associates Limited
C+C	Coast and Catchment
CD	Chart Datum
CEA	Cultural Effects Assessment
CEMP	Construction and Environmental Management Plan
CI	Cawthron Institute
CINZL	Channel Infrastructure NZ Ltd
CMA	Coastal Marine Area
CMT	Customary Marine Title
COLL	Coastal Oil Logistics Limited
CVA	Cultural Values Assessment
CSD	Cutter Suction Dredger

DOC	Department of Conservation
DUKC	Dynamic Under Keel Clearance System
EIANZ	Environment Institute of Australia and New Zealand
EOC	Emergency Operations Centre
FIDOL	Frequency, Intensity, Duration, Offensiveness and Location assessment
HGL	Hawthorn Geddes Limited
IHS	Import Health Standard
LVL	Laminated Veneer Lumber
MACA	Marine and Coastal Area (Takutai Moana) Act 2011
MDL	Marshall Day Acoustics Ltd
ME	Market Economics Limited
MHWS	Mean High Water Springs
MMH	Marsden Maritime Holdings Limited
MMMP	Marine Mammal Management Plan
MMOs	Marine Mammal Observers
MMOZ	Marine Mammal Observation Zone
MNZ	Maritime New Zealand
MO	Met Ocean
MPAQS	Marsden Point Air Quality Strategy
MPI	Ministry for Primary Industries
NAV	Noise and Vibration chapter of the Whangarei District Plan
NESCS	Resource Management (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011
NESFM	Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NESFM)
NPSFM	National Policy Statement for Freshwater Management 2020
NRC	Northland Regional Council
NTITB	Ngatiwai Te Iwi Trust Board
NTL	North Tugz Ltd
NTU	Nephelometric Turbidity Unit (a measure of turbidity)
NZCPS	New Zealand Coastal Policy Statement
NZTCS	New Zealand Threat Classification System

NZILA	New Zealand Institute of Landscape Architects
OAQP	Operative Air Quality Plan for Northland
OHEZ	Outer Harbour Ecological Zone
ONF	Outstanding Natural Feature
ONLA	Outstanding Natural Landscape Area
ORAQP	Operative Regional Air Quality Plan
PDP	Pattle Delamore Partners Limited
PNMP	Port Noise Management Plan
POAL	Ports of Auckland Limited
PAH	Polycyclic Aromatic Hydrocarbons
POTL	Port of Tauranga Limited
PRP	Proposed Regional Plan
PTITB	Patuharakeke Te Iwi Trust Board
RCP	Operative Regional Coastal Plan for Northland
RGA	Robert Greenaway and Associates
RMA	Resource Management Act
RMZ	Riparian Management Zone
ROSC	Regional On-Scene Commander
RWSP	Operative Regional Water and Soil Plan for Northland
RPS	Regional Policy Statement
RSI	Regionally Significant Infrastructure
RTG	Rubber Tired Gantry Crane
SBA	Significant Bird Area
SEA	Significant Ecological Area
SG	Styles Group
SH1	State Highway 1
SH15	State Highway 15
SIPO	South Island pied oystercatcher
SMMSB	Significant Marine Mammal and Seabird Area
STS	Ship to Shore cranes
T+T	Tonkin and Taylor

TEU	Twenty-foot equivalent unit container (40' container is 2 TEU)
TSHD	Trailer Suction Hopper Dredger
TSS	Total Suspended Solids
UNI	Upper North Island
UNISA	Upper North Island Strategic Alliance
UNISCS	Upper North Island Supply Chain Strategy
VOC	Variable oystercatcher
WDC	Whangarei District Council
WDP	Whangarei District Plan
WHSMS	Whangarei Harbour Safety Management System

FORM 9

APPLICATION FOR RESOURCE CONSENTS UNDER SECTION 88 OF THE RESOURCE MANAGEMENT ACT 1991

To: **Northland Regional Council**

Private Bag 9021,

Whangarei 0110

Whangarei District Council

Private Bag 9023,

Whangarei 0148

- 1. Northport Ltd applies for the resource consents from the Northland Regional Council and Whangarei District Council¹ necessary to authorise the expansion of the existing Northport berth length and associated operations area towards the east, including the following:**

Northland Regional Council

Operative Regional Coastal Plan

- A coastal permit for a **discretionary activity** for reclamation.
- A coastal permit for a **discretionary activity** for capital dredging.
- A coastal permit for a **controlled activity** for maintenance dredging.
- A coastal permit for a **discretionary activity** for deposition associated with the proposed roosting area (sandbar) (Marine 2 zone).
- A coastal permit for a **discretionary activity** for dredging spoil disposal within the reclamation.
- A coastal permit for a **discretionary activity** for alteration or extension of authorised structures (wharf) not otherwise a controlled activity under Rule 31.7.3(n), and the use of these structures for port activities.
- A coastal permit for a **discretionary activity** to discharge stormwater from open cargo storage or handling areas, including wharves to the CMA via a stormwater treatment and disposal system.
- A coastal permit for a **discretionary activity** to establish a tug berthing facility.
- A coastal permit for a **discretionary activity** to establish a fishing pontoon.
- A coastal permit for a **discretionary activity**² to discharge decanted water from the reclamation during construction.

¹ Together with any other incidental consents required to enable the proposal.

² Section 87B Resource Management Act 1991 (innominate).

]Operative Regional Water and Soil Plan

- A land use consent for a **discretionary activity** for earthworks in the Riparian Management Zone.

Proposed Regional Plan

- A **coastal permit** for a **discretionary activity** for reclamation.
- A coastal permit for a **discretionary activity** for capital dredging.
- A coastal permit for a **controlled activity** for maintenance dredging.
- A coastal permit for a **discretionary activity** for deposition associated with the proposed roosting area (sandbar).
- A coastal permit for a **discretionary activity** for stormwater discharge from open cargo storage or handling areas including wharves to the CMA via a stormwater treatment and disposal system.
- A coastal permit for a **controlled activity** for alteration to existing authorised wall structures and the use of the structures for port activities.
- A coastal permit for a **restricted discretionary activity** to establish a g tug berthing facility.
- A coastal permit for a **restricted discretionary activity** to establish a fishing pontoon.

Whangarei District Council

- A land use consent for a **discretionary activity** for port operations on the expanded port.³
- A land use consent for a **discretionary activity** for port noise on the existing and expanded port.
- A land use consent for an (innominate) **discretionary activity** for cranes up to 85m in height (when working)⁴ on the yet to be constructed Berth 4 to align with the crane height rules in the Port Zone (applicable to Berths 1-3) and on the proposed expansion area.
- A land use consent for a **discretionary activity** for the construction of a building within 27m of MHWS in the Open Space Zone, being the relocated public toilet at the eastern end of the expanded port.
- A land use consent for a **discretionary activity** for earthworks exceeding 500m³, earthworks within sand dunes, and indigenous (dune) vegetation clearance, within the 'Coastal Area' (port development and public access/reserve).

Consequential variations to some of the conditions of the two existing WDC land use consents for port operations on the existing and consented port⁵ are sought under Section 127 of the RMA 1991. These variations will take effect upon completion of the reclamation construction process or prior to port operations commencing on the expanded port.

³ Section 87B Resource Management Act 1991 (innominate).

⁴ No height limit is proposed for dormant cranes in line with the crane height rules for the Port Zone.

⁵ TP96/316 (Berths 1 and 2), RC37846 (Berths 3 and 4).

Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NESFM)

- Regulation 45 – Earthworks, and the diversion and discharge of water within a wetland associated with ‘specified infrastructure’ – **discretionary activity**.⁶

2. The activity to which the application relates is as follows:

The proposal is to expand the existing Northport operations area.

Key components of the proposal are:

- Reclamation of part of the Coastal Marine Area (CMA) to the immediate east of Northport, including associated deposition and discharge of decant water.
- Capital and associated maintenance dredging.
- Wharf structures on the northern (seaward) edge of the proposed reclamation.
- Sheet piling and rock revetment structures on the eastern edge of the reclamation.
- Treatment of operational stormwater via the existing pond-based stormwater system and/or proprietary systems, and subsequent discharge to the CMA.
- Port related activities on the proposed reclamation and wharves, and on parts of the proposed development above MHWS.
- Construction of additional beach roosting habitat to the west of Northport.
- Construction of a public access from the existing car park at the end of Ralph Trimmer Drive (to be replaced) through to a proposed reserve and related amenities at the eastern edge of the proposed reclamation.
- Construction of a tug berthing facility and fishing pontoon at the eastern edge of the proposed reclamation.

The assessment of environmental effects is supported by extensive technical and scientific investigations.

⁶ This consent is only required if the area within the expansion footprint qualifies as a wetland under the NESFM. Criteria for determining the presence and extent of coastal wetlands in New Zealand has not been developed. While seagrass is considered to be a coastal wetland species, its ephemeral nature makes classifying any particular area in the coastal marine areas as a wetland based on its presence or absence, very problematic. Northport’s ecologist has advised that it is more appropriate to class the habitat within the proposed reclamation as intertidal sandflat containing a small area of seagrass, in which case consent under the NESFM is not required.

3. The location of the proposed activities is:

- Ralph Trimmer Drive, Marsden Point.

4. The owner of the site is as follows:

- The crown (seabed and existing reclamation) (Northport as lessee)
- Northport (land adjoining existing reclamation)
- WDC (esplanade reserve).

5. There are no other activities to which this application relates.

6. No other resource consents are needed for the proposed activities.

7. An assessment of effects on the environment prepared in accordance with the Fourth Schedule of the RMA 1991 is attached.

8. As assessment of the proposed activity against the matters in Part 2 of the RMA 1991 in included with the application.

9. An assessment of the proposed activity against the various objectives, policies and rules of the relevant statutory planning documents is attached.

10. The application includes information that shows the area proposed to be reclaimed, including its location, the position of all new boundaries.



.....
Brett Hood

Planner/Director

6 October 2022

.....
Date

Address for service:

Reyburn and Bryant 1999 Ltd

PO Box 191, Whangarei

Telephone:

(09) 438 3563

Email:

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Contact person:

Brett Hood

1. Introduction

1.1 Executive summary

Introduction

Northport Ltd (Northport) has submitted applications to the Northland Regional Council and the Whangarei District Council for resource consents to construct, operate and maintain an expansion to the existing Northport facility at State Highway 15, Marsden Point.

In summary, the works include:

- A. Reclamation of part of the Coastal Marine Area (CMA) to the immediate east of the existing Port reclamation.
- B. Capital and associated maintenance dredging.
- C. Wharf structures on the northern (seaward) edge of the proposed reclamation.
- D. Sheet piling and rock revetment structures on the eastern edge of the reclamation.
- E. Beach renourishment to augment a sandy flood spit feature in the intertidal area in order to create suitable avifauna roosting habitat.
- F. Treatment and discharge of operational stormwater via the existing pond-based stormwater system and/or proprietary devices.
- G. Port related activities on the proposed reclamation and wharves, and on parts of the proposed development above MHWS.

The applications are supported by an Assessment of Effects on the Environment (AEE), prepared in accordance with the RMA and in particular the Fourth Schedule. This incorporates:

- A planning report including an assessment of relevant statutory planning provisions.
- Comprehensive supporting technical and assessment reports, prepared by suitably qualified and experienced independent experts engaged by Northport.

Background and rationale for the project

Since the completion of the existing port facilities (i.e. Berth 3) in 2007, Northport has investigated a range of alternative options for expanding its capacity, and in particular its ability to construct a dedicated container terminal. Options have been comprehensively evaluated over an extended period, both by Northport and externally, with multiple design options being prepared and reviewed by a range of port and environmental experts.

Numerous economic studies have been conducted on the future of the upper North Island supply chain and the implications for Ports of Auckland, the Port of Tauranga and Northport. In 2012 the Upper North Island Strategic Alliance (UNISA) completed a technical study of the supply and demand for ports and port-related infrastructure in the upper North Island. The report concluded that there is strong growth predicted in the three upper North Island ports over the next 30 years, and that establishing a new Port is likely to be significantly less cost-effective than incremental

growth at each port. A subsequent report commissioned by the government in 2018 entitled the Upper North Island Supply Chain Strategy (UNISCS) recommended a transition of Ports of Auckland Ltd (POAL) freight to Northport.

To accommodate the changes in freight tasks and to realise the benefits of the opportunities for the regional economy, Northport needs to expand into a facility capable of efficiently handling additional freight streams. A technical assessment of economic effects report prepared by Market Economics concluded that Northport would need to invest in infrastructure upgrades, including wharf extensions and port area reclamation, regardless of whether POAL freight is redirected to Northport. The need for additional port infrastructure to provide resilience was illustrated during the Covid-19 response.

In summary, ongoing national supply-chain pressures, long-lead times in the development of port infrastructure, and growing demand from shipping companies indicate that now is the appropriate time for Northport to expand its facilities. Expansion of Northport can deliver a purpose-built, modern, and efficient container terminal. An expanding port will also represent a catalyst for better infrastructure and services for Northland, as well as providing for regional economic growth by facilitating new industries and jobs for Northland. The proposed expansion of Northport's facilities will support the continued growth of Northland and add capacity to the UNISC by providing container freight services for North Auckland.

Project objectives

Northport's objectives for the project are:

1. To create a modern efficient terminal with a 700 m long container berth and sufficient terminal area to handle at least 500,000 TEU/annum.
2. Locate all container services on the new terminal to enable growth and diversification of other freight on the existing footprint.
3. Incorporate best practice operational and environmental controls to minimise effects on the surrounding environment and community.
4. Allow for the integration of rail freight following the construction of the Marsden Point spur.

Description of the project

Reclamation and wharf structures

Northport currently consists of three berths, with a fourth berth and associated reclamation consented but not yet constructed. Northport is currently considering the business case for the construction of the fourth berth.

The proposal is to construct a fifth berth extending a further 250m towards the east, together with an associated 11.7ha reclamation. The expanded port footprint will extend inland to include areas of beach and esplanade reserve immediately east of the existing port.

The eastern edge of the proposed reclamation will be constructed using a combination of sheet piling and rock revetments.

A tug berthing facility and fishing pontoon/water taxi berth will be constructed along the eastern revetment. The tugs are commercially operated by NorthTugz and are an essential requirement for safe navigation by vessels visiting both Northport and the Channel Infrastructure NZ Ltd (CINZ) fuel import terminal.

Public access

Public access from Ralph Trimmer Drive to the beach area between the expanded port and the CINZ jetties will be provided along the southern edge of the expanded port and along the eastern edge of the proposed reclamation. A pocket park and other amenities (including a carpark, public toilet, swimming steps, and the fishing pontoon) will be developed at the eastern end of the expanded port.

Due to port operational and health and safety requirements, including the need to ‘future proof’ port operations – including to provide for rail access – it is not practicable for any part of the area to be set aside as an esplanade reserve or esplanade strip.

Dredging

Capital and maintenance dredging is required to deepen the swing basin in order to safely enable vessels to navigate to, and berth at, the berth facility during all tides. The depth transitions from CD -14.5m at the western end to CD -16.0m at the eastern end. Some additional dredging is proposed around the fringes of the existing swing basis and in the vicinity of the tug berthing facility.

Approximately 1.7M m³ of material will be dredged during the capital dredge programme, with the majority used to form the reclamation. Any surplus or unsuitable material will be disposed of in an approved location.

Port activities

The expanded port will be used as a container terminal and for other port activities.

Port noise

Port noise will be controlled through noise limits and associated metrics consistent with NZS 6809:1999 Acoustics – ‘Port noise management and land use planning’.

A comprehensive port noise management plan has been prepared to manage noise and retain suitable levels of amenity for residential areas. The objectives of the plan are:

- To ensure the port complies with the relevant noise performance standards.
- To provide a framework for the measurement, monitoring, assessment, and management of noise.
- To identify and adopt the Best Practicable Option (BPO) for the management of noise effects.
- To require engagement with the community and timely management of complaints.

Day time port noise is expected to comply with permitted limits in the Whangarei District Plan. A key aspect of the port noise management plan is that if night-time port noise reaches (or is predicted to reach) predetermined levels at residential receivers in Reotahi, the port will offer to fund mechanical ventilation (i.e. air conditioning) to a suitable standard that will enable residents' windows and doors to be closed at night.

Stormwater

Stormwater from port operations areas will either be collected and treated in the existing port stormwater treatment system or treated with proprietary devices prior to discharge. The existing system involves directing all water to the treatment ponds located on Marsden Maritime Holdings Ltd land to the south of the port before subsequent discharge to the harbour. Monitoring of existing discharges shows that the system achieves the water quality standards specified in the existing conditions of consent and those in the Proposed Regional Plan. Proprietary systems are capable of achieving a similar level of treatment.

Assessment of effects on the environment

Coastal processes - Hydrodynamic modelling has predicted small changes to current velocities in the vicinity of the port. These changes are localised to the region where the dredging and reclamation works will be undertaken and will not materially affect navigation by either commercial or recreational vessels.

While changes to sediment transport rates are predicted within the harbour, morphological modelling and subsequent analysis suggests no significant changes to harbour morphology. Some sediment deposition is expected between the expanded port and the CINZ wharves.

Air discharges – During construction, there is limited potential for air discharges to cause off-site effects at the nearest residential dwellings. Air quality during construction will be managed through conditions of consent, including management plan(s). No significant discharges are expected from the operation of the expanded container port, particularly as much of the port equipment will be electrified (or capable of electrification).

Water quality – Discharges to the CMA during construction of the reclamation will be managed via detailed and comprehensive sediment control measures specified in a Construction Management Plan. This plan will include measures to avoid sediment discharge and to manage the discharge of decant water from the reclamation.

Discharges during capital and maintenance dredging will be subject to turbidity and dredge management plans prepared and certified prior to construction commencing. The plans will be implemented to minimise dredge plumes, and the associated adverse effects on water quality and marine ecology. They will contain a series of monitoring 'trigger' levels and appropriate management and monitoring responses in order to provide confidence to Council, mana whenua and the community that turbidity effects will be appropriately managed.

Discharges of stormwater from future port operations will achieve the water quality standards in the Proposed Regional Plan.

Landscape, natural character, and amenity values - The proposal will have some adverse effects on landscape, natural character, and amenity values. When considered in the context of the existing environment, the magnitude of these effects has been determined to be as follows:

Landscape values

Potential effects on landscape values have been assessed as ranging between less than minor and significant. The significant effects are limited to Marsden Point Beach. More than minor effects are predicted from Reotahi and the adjoining harbour. Importantly, there are no Outstanding Natural Landscape Areas directly affected by the Northport proposal

Natural Character values

Potential effects on natural character values have been assessed as ranging between more than minor and negligible. There are no Outstanding or High Natural Character Areas directly affected by the proposal.

Amenity values

Potential effects on amenity values have been assessed as being significant for the Marsden Point Beach area, more than minor for Reotahi, and otherwise less than minor for the wider harbour.

Avifauna – There are some at-risk and/or threatened bird species known to use the beach and intertidal area on the eastern side of the port. A bird roosting area will be constructed on the western side of the port, ahead of construction of the reclamation itself, to provide suitable roosting habitat for various species, including NZ Dotterel and Variable Oystercatcher. This, together with a range of measures to be included in the CEMP, will ensure that the effects on avifauna will be minor or less.

Marine mammals - Potential effects on marine mammals are related to underwater noise during construction, and the very low potential for ship strike during port operations.

Underwater noise has been modelled, and the associated effects assessed by a marine mammal expert.

Sound modelling indicates that for most species (except for visiting baleen whales), pile-driving noise without any mitigation has the potential to cause temporary hearing impairment only within close proximity of the piling source. While the potential is greater for visiting baleen whales and leopard seals, very few individuals visit these waters in any one year (1-3 animals) and these species tend to have a stronger seasonal presence (winter migrations for whales). Therefore, the likelihood of any adverse displacement or behavioural effects occurring is considered to be low and any hearing injury effects are not applicable based on modelling results. Furthermore, with the range of management measures detailed in the proposed Marine Mammal Management Plan, including the establishment of marine mammal observation zones (MMOZ) and soft start/ramping up procedures, any residual effects are expected to be nil to less than minor.

In regard to effects associated with changes to mammal habitat and prey species, due to the limited effect (both spatially and temporally) that the proposed construction activities are

expected to have on local habitats and associated prey resources there are unlikely to be any long-term flow-on effects to local marine mammals.

Other marine ecology – The proposed reclamation will remove intertidal and subtidal ecology located within the reclamation footprint. Dredging will also have direct and indirect effects on marine ecology. Marine ecological effects have been carefully considered at the appropriate scale, as expressly directed by the Proposed Regional Plan. The potential adverse effects (including cumulative effects) on marine ecology resulting from reclamation, dredging, and stormwater discharges, have been assessed as ranging between low to moderate to high, however, potential effects on threatened and/or at-risk species and/or potential areas of significant indigenous vegetation and habitats of indigenous fauna under Appendix 5 of the RPS will/can be kept within minor and/or transitory levels subject to the implementation of best practice management of dredging effects.

Navigation and marine spill risk – Extensive ship simulation studies have concluded that general navigation to and from the Northport berths and the CINZ jetties will not be materially impacted. The increase in shipping movements can be managed by existing maritime services.

The risk of marine oil spill associated with the proposal involves vessel collision or grounding. While there is a potential increase in the risk of a larger vessel being grounded, the ship simulation assessment, coupled with the existing operational Dynamic Under Keel Clearance system (DUKC), demonstrate that the risk will not increase appreciably as a result of the port expansion. Existing oil spill response plans are considered to be robust, and they will be regularly reviewed in accordance with s297 of the Maritime Transport Act 1994.

The navigation and marine spill risk assessments have considered the scenario both with, and without, the channel realignment and deepening consented by CINZ.

Biosecurity – There are several potential biosecurity risks associated with the proposed expansion. Broadly, these risks arise through:

- Expansion of port infrastructure and the operational activities (including specialised vessel movements) involved during the construction phase.
- Potential changes in the frequency and geographic origin of shipping associated with the ability of the port to accommodate larger and different vessel types during routine operations.

Biosecurity risks associated with construction vessels will be managed through compliance with measures contained in the CEMP.

Biosecurity risks associated with international ships will also be managed in accordance with the requirements of the Import Health Standards administered by MPI, the Marine Pathways Plan, and Proposed Regional Plan rules administered by the Northland Regional Council.

Archaeology - There are no known archaeological sites within the proposed works area.

Cultural values - The project is located in an area that is rich in Māori history.

Mana Whenua have been a key stakeholder in the development of the project, and this has enabled the inclusion of values and aspirations, and where practicable, the avoidance/management of

adverse cultural effects, through the project design and/or mitigation measures. Consultation with mana whenua remains ongoing post-lodgement, with a view to determining appropriate cultural mitigation.

Economic - The project will deliver significant benefits to the local and regional economy. These benefits will depend on a range of economic, environmental, and political factors, and specifically the extent to which Northport is required to support freight logistics associated with Auckland's growth.

A range of possible futures have been considered, including one where Northport provides for regional demand only ('Business as usual' – BAU), and one where it handles trade from outside the region (North Auckland Imports – NAI) - which appears most likely due to issues associated with other key ports in the Upper North Island.

The assessment shows that, with the proposed expansion, Northport's role in the Northland economy is likely to result in at least \$1,094 million GDP and 14,800 jobs by 2050 (based on the most conservative BAU future).

Operational port noise - An expansion of existing port operations may result in additional noise generation. This could translate to an adverse effect on sensitive (residential) receivers, particularly in the Albany Road and Reotahi areas.

Conditions of consent are proposed, requiring the port to adhere to specified noise limits in accordance with NZS 6809:1999 Acoustics – 'Port noise management and land use planning'. A Port Noise Management Plan has been prepared, and will be required, to minimise port noise through best practice. If night-time port noise reaches (or is predicted to reach) predetermined levels at residential receivers in Reotahi, the port will offer to fund mechanical ventilation (i.e. air conditioning) to enable windows and doors to be closed at night.

Subject to the mitigation measures outlined above, the effects of port noise will be minor or less.

Recreation - The reclamation will involve removal of an area of beach and esplanade reserve to the immediate east of Northport. Public access from Ralph Trimmer Drive to the beach area between the expanded port and the CINZ jetties will be provided along the southern edge of the expanded port and along the eastern edge of the proposed reclamation. A pocket park and other amenities (including a carpark, public toilet, swimming steps, and the fishing pontoon) will be developed at the eastern end of the expanded port. Notwithstanding the mitigation measures described above, adverse recreation effects on the beach to the east of Northport will remain due to the loss of beach area and diminution of the scale of the setting. These effects are likely to be significant for recreational beach users. However, when considered with respect to wider contexts (for example at the scale of local, district-wide, and region-wide recreation activity), the recreational effects will be more than minor at worst (locally) through to less than minor (regionally).

Carbon emissions - Northport has been actively reducing its carbon footprint for some time now. Examples include the replacement of fleet vehicles with electric vehicles, and changes to the procurement process whereby new equipment is preferred over older equipment that does not

meet modern emission standards. Northport remains committed to reducing carbon emissions on the expanded port.

Measures to manage effects on the environment

The following measures are proposed to manage adverse effects on the environment:

- **Construction and Environmental Management Plan (CEMP)** – preparation, certification, and implementation of a CEMP containing chapters covering a range of matters including:
 - **Sediment discharge during reclamation construction** – detailing best practice measures to control sediment discharges from the reclamation and the associated discharge of decant water.
 - **Air discharges** – detailing dust management practices to minimise the risk of the discharge of dust causing an offensive or objectionable effect beyond the boundary of the works area.
 - **Marine Mammals** – The CEMP includes a Marine Mammal Management Plan (MMMP) containing measures to avoid and otherwise minimise adverse effects on marine mammals during the construction and subsequent operations phases of the project. A draft MMMP is attached to this application. The MMMP will include several best management practices and management actions (including source noise reduction options, use of observers, shut down zones, and seasonal consideration of piling stages). Ongoing acoustic monitoring is proposed to verify *in situ* piling sound levels and ensure the effectiveness of the mitigation measures employed.
 - **Avifauna** – detailing measures to avoid and otherwise minimise adverse effects on avifauna during the construction phase of the project.
 - **Biosecurity** – detailing measures to manage the risk of biosecurity incursions associated with construction vessels.

For vessels using the expanded port once operational, the standard MPI and NRC biosecurity controls will apply.

A draft CEMP is included with this AEE (see **Appendix 5**).

- **Port noise** – A Port Noise Management Plan will be prepared in accordance with Section 8 of NZS 6809:1999. The PNMP will be a ‘living document’ that is expanded and updated as appropriate.

If night-time port noise reaches (or is predicted to reach) predetermined levels at residential receivers in Reotahi, the port will offer to fund mechanical ventilation (i.e air conditioning) to enable windows and doors to be closed at night.

- **Dredging** – Dredge management plans, including a plan to manage turbidity, will be prepared for capital and maintenance dredging operations. The dredge plans will require implementation of best practice management measures and specify how dredging practices and procedures will ensure that any actual or potential adverse effects on the marine

receiving environment, including due to turbidity, are avoided, or otherwise managed to the greatest extent practicable.

- **Stormwater discharges (operational)** – Stormwater from operational port areas will be collected and directed to the existing port stormwater treatment ponds prior to discharge to the CMA. Proprietary treatment devices may also be incorporated. Subsequent stormwater discharged to the CMA will be routinely monitored for compliance with the water quality standards specified in the conditions of consent.

Statutory assessment

The project has been assessed against the relevant statutory planning documents.

The project aligns with key provisions in the New Zealand Coastal Policy Statement (NZCPS), and specifically the experts engaged by Northport have specifically considered the “avoid” policies, as contextualised for Northland in the Regional Policy Statement (RPS) and Proposed Regional Plan (PRP). It also aligns with the RPS and PRP provisions relating to economic growth and Regionally Significant Infrastructure. This is because of the predicted economic benefits expected to accrue from the expansion, and the role that the port plays in supporting economic growth in the region.

There will be some adverse effects on the environment, most notably in respect to indigenous biodiversity (marine mammals, avifauna, and other marine ecology). The effects on indigenous biodiversity have been assessed as minor or less when considered at the system-wide scale as directed by the PRP (Policy D.2.18(5)) and taking account of the comprehensive effects management package proposed by Northport. A range of measures are proposed to ensure that effects of the proposal, including with respect to construction, stormwater discharges, dredging, recreation, and noise are avoided or managed in accordance with these documents.

The statutory assessment concludes that the proposal is overall consistent with the objectives and policies of the relevant statutory plans, most notably the RPS and PRP. Specifically, the proposal fully aligns with the cornerstone economic well-being and regionally significant infrastructure provisions in both plans, while appropriate management measures are proposed to avoid and/or otherwise manage adverse effects on the environment.

1.2 Overview

Northport Ltd is the owner and operating company for the multi-purpose cargo port at Marsden Point (Northport). Northport is New Zealand’s northern-most deep-water commercial port. It is the closest port to most international markets and located less than two hours by road or rail from Auckland.

Northport currently facilitates \$438 million in value added and the equivalent of 6,300 jobs in the Northland economy. It is significant in the Northland region, and nationally, because of its commercial, transportation, and infrastructure functions, and its overall contribution to economic sustainability and growth.

This assessment of environmental effects (AEE) has been prepared in support of a resource consent application prepared under the Resource Management Act 1991 (RMA) to expand the existing Northport berth length and associated operations area towards the east. Consents are required from both the Northland Regional Council (NRC) and Whangarei District Council (WDC).

The applications have been prepared in accordance with Section 88 and the Fourth Schedule of the Resource Management Act (RMA). Section 88 of the RMA requires that resource consent applications be accompanied by an AEE prepared in accordance with the Fourth Schedule. A Fourth Schedule checklist is attached at **Appendix 1**.

1.3 Background

1.3.1 History of Northport

For over a century the ports in Whangarei harbour have been of primary importance for the Northland economy. Until construction of the port at Marsden Point, most of the trade was handled by facilities in the upper harbour area, first at the existing town basin, and then Port Whangarei (developed in 1920s).

Over the following four decades it became increasingly difficult to maintain the channel depth in the upper harbour, particularly as cargo vessels increased in size. As a consequence, in the late 1960s the Northland Harbour Board proposed to move the port facility to Marsden Point. Marsden Point has natural deep water, ideal for a commercial port facility.

Technical studies for the Marsden Point location were completed more than a decade later, in 1976. During the 1980's the planned move lost traction. However, as Northland's forestry industry began to increase production in the 1990's, this proved to be the catalyst for the development of Northport.

In 2000 the move to Marsden Point was achieved by a joint venture⁷ which formed Northport. Northport began trading in July 2002 as the port operating company when it took over the port activities of Northland Port Corporation (NZ) Ltd (now Marsden Maritime Holdings) at both Marsden Point and Port Whangarei. Over the following five years three berths were constructed at Marsden Point and all cargo operations were progressively transferred from Port Whangarei to Northport.

Northport is currently a three-berth facility, with a fourth berth consented but not yet constructed. The first two berths were consented in 2000, with construction completed in 2002. The third and fourth berths were consented in 2004, with construction of the third berth completed in 2007.

⁷ Marsden Maritime Holdings and Port of Tauranga.

1.3.2 Ownership

Northport is the port owner and operating company for the multi-purpose cargo port at Marsden Point (Northport). Northport is 50% owned by Marsden Maritime Holdings Ltd (MMH) and 50% by Port of Tauranga Limited (POTL).

Pilotage and tug services for ships arriving at Northport (and CINZL some 750m to the east) is provided by North Tugz Limited (NTL) (a joint venture between Northport and Ports of Auckland).

The overall Northport footprint is made up of multiple titles owned by Northport and a lease over reclaimed land vested in the Crown (see **Figure 1** below).



Figure 1: Northport land ownership

1.3.3 Regional and national significance

Northport is significant in the Northland region, and nationally, because of its commercial, transportation and infrastructure functions. This is reinforced by Policy 9: 'Ports' of the New Zealand Coastal Policy Statement (NZCPS), and through provisions in the Regional Policy Statement for Northland (RPS), Proposed Regional Plan (PRP), and the Port Zone of the Whangarei District Plan (WDP).

Northport, including the adjoining land used for the movement and storage of cargo, is identified as 'Regionally Significant Infrastructure' (RSI) in Appendix 3 of the RPS. RSI has elevated importance in the RPS, including objectives and policies that require specific weight to be given to

the benefits of RSI when considering applications for resource consent and plan changes. It also qualifies as 'Specified Infrastructure' under the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NESFM).

1.4 Project rationale

1.4.1 Project objectives

The objectives for the proposed port expansion are as follows:

- To create a modern efficient terminal with a 700 m long container berth and sufficient terminal area to handle at least 500,000 TEU⁸/annum.
- Locate all container services on the new terminal to enable growth and diversification of other freight on the existing footprint.
- Incorporate best practice operational and environmental controls to minimise effects on the surrounding environment and community.
- Allow for the integration of rail freight following the construction of the Marsden Point spur.

1.4.2 Project rationale

The project rationale for the proposed port expansion is to enable Northport to support Ports of Auckland (POAL) and Port of Tauranga (POTL) in providing for the predicted freight needs of the upper North Island, and to continue to support the economic growth of north Auckland and the Northland region (refer to Northport's Issues and Options report for the proposed expansion at **Appendix 2**).

There have been several independent reports on port capacity in the upper North Island. In 2012 a UNISA⁹ commissioned report determined¹⁰ to meet the projected freight task associated with growth over the next 30 years. This report concluded that *"substantial, systemic change to the UNI port system within the next 30 years (for example, establishing a new UNI port) is likely to be significantly less cost effective than incremental change"* and *"that the most efficient and cost-effective options for meeting the projected freight task is likely to be based around improved efficiency, incremental growth at each port, planned improvements in the land transport system, complemented by changes in relative prices that direct customers to where spare capacity exists in the UNI port system"*.

Two further reports (the Upper North Island Supply Chain Strategy (UNISCS), 2018 and Sapere report, 2020) determined that POAL has limited capacity to cater for the future freight needs of the

⁸ Twenty-foot equivalent unit container.

⁹ Upper North Island Strategic Alliance (consisting of Northland, Waikato, and Bay of Plenty Regional Councils, Auckland Council, Whangarei District Council, Hamilton, and Tauranga City Councils).

¹⁰ Northport, Port of Auckland, Port of Tauranga.

Auckland region, reinforcing the need for Northport to develop additional capacity to assist POAL, when it is needed, and in a timely manner.

Constructing or expanding ports in New Zealand is an uncertain, time-consuming, and expensive process. The period from conception to completion is typically in the order of 10 years, excluding business case development and funding processes. For Northport to be able to react to changes in market or political conditions within a timeframe that does not result in significant regional or national economic and social disruption and costs, the resource consents need to be in place well in advance of the additional port capacity being needed. This requires a proactive, long-term view on the need and demand for expansion, rather than a reactive approach after the fact.

1.5 Resource consents required

All necessary resource consents are sought from both the NRC and the WDC to enable the construction and operation of the expanded port. The rules in the district and regional plans that trigger the requirement for resource consent include:

Northland Regional Council

Table 1: Regional Plans resource consent identification and activity status

Rule	Consent type	Description	Activity Status
Operative Regional Coastal Plan			
Rule 31.7.5(a)	Coastal permit	Reclamation (‘Marine 5 (Port Facilities) Management Area’)	Discretionary
Rule 31.7.8(b)	Coastal permit	Capital Dredging (‘Marine 5 (Port Facilities) Management Area’)	Discretionary
Rule 31.7.8(a)	Coastal permit	Maintenance dredging (‘Marine 5 (Port Facilities) Management Area’)	Controlled
Rule 31.7.8(c)	Coastal permit	Dredging spoil disposal (in reclamation) (‘Marine 5 (Port Facilities) Management Area’)	Discretionary

Rule 31.4.8(e)	Coastal permit	The deposition of marine sediment on the foreshore for the purposes of beach replenishment (roost area). ('Marine 2 (Conservation) Management Area').	Discretionary
Rule 31.7.4(o)	Coastal permit	Alteration or extension of authorised structures (wharf) not otherwise a controlled activity under Rule 31.7.3(n), and the use of these structures for port activities.	Discretionary
Section 87B Resource Management Act 1991	Coastal permit	Discharge decant water from reclamation during construction. ('Marine 5 (Port Facilities) Management Area')	Discretionary (innominate)
Rule 31.7.6(g)	Coastal Permit	Discharge stormwater from open cargo storage or handling areas, including wharves to the CMA via a stormwater treatment and disposal system.	Discretionary
Rule 31.7.4(p)	Coastal permit	Tug berthing, water taxi and fishing pontoon and the related occupation of space. ('Marine 5 (Port Facilities) Management Area')	Discretionary
Regional Water and Soil Plan			
Rule 34.3(1)	Land use consent	Earthworks in the RMZ (on WDC esplanade reserve)	Discretionary
Proposed Regional Plan			
Rule C.1.6.3	Coastal permit	Reclamation	Discretionary

	(reclamation)		
Rule C.1.5.12	Coastal permit (dredging)	Capital dredging	Discretionary
Rule C.1.5.9	Coastal permit (dredging)	Maintenance dredging	Controlled
Rule 6.4.4 (High Risk Industrial or Trade Premises) ¹¹	Coastal permit (discharge)	Stormwater discharge from open cargo storage or handling areas, including wharves to the CMA via a stormwater treatment and disposal system.	Discretionary
Rule C.1.1.11	Coastal permit (structures)	Alteration to existing authorised wharf structures and the use of these structures for port activities.	Controlled
Rule C.1.1.16	Coastal permit (Structures in the Marsden Point Port Zone)	Floating tug berthing facility, water taxi and fishing pontoon, including the related occupation of space.	Restricted discretionary
Rule C.1.5.11	Coastal permit (Deposition of material for beneficial purposes)	The deposition of marine sediment on the foreshore for the purposes of beach replenishment (roost area)	Restricted discretionary

¹¹ Boat maintenance and port activities are identified as High Risk Industrial or Trade Premises in the PRP (Decisions Version).

Whangarei District Council

Table 2: Whangarei District Plan resource consent identification and activity status

Rule	Description	Activity Status
Operative Whangarei District Plan		
Section 87B Resource Management Act 1991	Port operations on the expanded port.	Discretionary (innominate)
NAV.7	Port noise (existing and expanded port)	Discretionary
Innominate (no applicable zone or rule)	Land use consent for cranes up to 85m in height (when working) ¹² on the yet to be constructed Berth 4 to align with the crane height rules in the Port Zone (applicable to Berths 1-3) and on the proposed expansion area.	Discretionary (innominate)
OSZ-R5	Land use consent for the construction of a building within 27m of MHWS in the Open Space Zone, being the relocated public toilet at the eastern end of the expanded port.	Discretionary
CA.2.3(2) CA.2.3(3) CA.2.3(4)	Land use consent for a discretionary activity for earthworks exceeding 500m ³ , earthworks within sand dunes, and indigenous (dune) vegetation clearance, within the 'Coastal Area' (port development and public access/reserve).	Discretionary

Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NESFM)

A consent is only required under the NESFM if the area within the expansion footprint and/or roost deposition area qualifies as a wetland as defined in the NPSFM and/or is located within 100m of a wetland.

Criteria for determining the presence and extent of coastal wetlands in New Zealand has not been developed. While seagrass is considered to be a coastal wetland species, its ephemeral nature

¹² No height limit is proposed for dormant cranes in line with the crane height rules for the Port Zone.

makes classifying any particular area in the coastal marine areas as a wetland based on its presence or absence, very problematic. Northport's ecologist has advised that it is more appropriate to class the habitat within the proposed reclamation and roost deposition areas as intertidal sandflats containing a small area of seagrass, in which case consent under the NESFM is not required.

Accordingly, while consent under the NESFM is not deemed necessary, out of an abundance of caution the necessary assessment is included in this AEE.

1.6 Variation to WDC land use consents

Several conditions in the existing WDC land use consents for Berths 1-2¹³ and 3-4¹⁴ respectively require consequential amendment pursuant to Section 127 of the RMA.

The proposed conditions that are to be varied and the associated rationale are identified in the following tables:

Table 3: Proposed variations to Berth 1 & 2 consents

Condition(s) #	Proposed variation	Rationale
12-18	Delete or vary so new noise provisions to take effect when port activities commence on either Berth 4 or 5.	These conditions relate to port noise on Berths 1-2. They are proposed to be deleted in favour of a new resource consent covering noise across the entire port. This variation will only take effect when port activities commence on either Berth 4 or 5.
20	Delete.	This condition relates to access to the eastern side of Berth 2. This condition has already been superseded by the Berth 3-4 consent and will be replaced by a new condition of the Berth 5 consent.
23	Vary to remove reference to landscape planting on the eastern side the port (to take effect when the Berth 5 reclamation	This condition relates to landscaping on the eastern edge of Berth 2. This condition has already been superseded by the Berth 3-4 consent.

¹³ Decision #17 – Whangarei District Council: Land Use Consent No.3.

¹⁴ Decision #11 – Whangarei District Council: Land Use Consent No.1.

	works are complete). The reference to landscaping on the western side is to be retained.	
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Table 4: Proposed variations to Berth 3 & 4 consents

Condition(s) #	Proposed variation	Rationale
7	Delete or vary so new noise provisions to take effect when port activities commence on either Berth 4 or 5.	This condition relates to port noise on Berths 3-4. It is proposed to be deleted in favour of a new resource consent covering noise across the entire port. This variation will only take effect when port activities commence on either Berth 4 or 5.
9-12	Delete (to take effect when the Berth 5 construction works commence.	These conditions relate to landscaping on the eastern edge of Berth 4. They are proposed to be deleted as the subsequent construction of Berth 5 will require the removal of this landscaping.

1.7 Surrender of CON20090505532 (stormwater discharge)

It is proposed to surrender the existing stormwater discharge consent CON20090505532 upon completion of the expanded port (Berth 5) pursuant to Section 138 of the RMA. This consent will be replaced by a new consent covering the existing and expanded port.

1.8 Report structure

This report is structured as follows:

Section 1: Introduction

Section 2: Evaluation of alternative options and methods.

Section 3: Description of the proposal, including the extent of reclamation, dredging, structures, and activities.

Section 4: Description of the existing environment.

Section 5: Assessment of effects on the environment.

Section 6: Statutory planning assessment.

Section 7: Engagement with mana whenua.

Section 8: Public consultation.

2. Evaluation of Alternatives

2.1 Introduction

A consideration of alternatives is required under the Fourth Schedule of the RMA and under various provisions of the relevant planning documents (as outlined below). In particular, there is a policy framework flowing through the statutory documents from Part 2 of the RMA to the New Zealand Coastal Policy Statement (NZCPS) and the PRP that directs the consideration of alternatives, particularly when considering reclamation and activities in the coastal environment. These matters are addressed both in this chapter and in the other relevant sections of this AEE.

In formulating the project, Northport evaluated several options and alternatives to achieve the overall objective of expanding the container port. These options and alternatives are detailed in the Issues and Options report (**Appendix 2**). The report is summarised in the following sections of this AEE.

2.2 Design evolution

Northport has developed the proposal that is the subject of this consent application over many years of design development and assessment of alternative options. The proposal's design progression, alternatives assessed, and the preferred design are set out in the Issues and Options report. In summary, several broad options were considered by Northport when evaluating how and where additional port capacity could be located, including:

- A location other than Northport.
- Reconfiguring existing port operations.
- Extending the port footprint either west, north, south, or east.

A summary of the evaluation process is set out in the Issues and Options report. Ultimately, an eastern expansion was chosen as the preferred option, for the reasons outlined in the report.

2.3 Terminal design

Any expansion and redevelopment of Northport is required to integrate with existing port operations and surrounding constraints. To that end, Northport commissioned WSP to provide initial, high-level advice on whether to undertake reclamation, or to construct a piled wharf. WSP advised that reclamation is the only practicable option, for a range of reasons outlined in the Issues and Options report.

Northport also commissioned WSP to prepare a Concept Design Report which records the user requirements, constraints, and selection criteria (and assessment against them) for several wharf designs. Based on the relevant criteria, an open piled marginal wharf with rock revetment was the chosen option, for the reasons outlined in the Issues and Options report.

Detailed design will be undertaken prior to construction. The Concept Design Report also identifies the proposed construction methodology for the indicative wharf design. A range of other wharf design options were considered and discounted, as described in the report.

2.4 Stormwater discharges

Two primary options were considered for the management of stormwater from the expanded port. These were:

- Use of the existing canal and pond-based system.
- Proprietary devices.

The existing canal and pond-based system is intended to continue to be used for the existing port footprint because it has demonstrable compliance with the water quality conditions in the existing discharge consent, and therefore will achieve the water quality standards in the PRP.

The expanded port footprint may also utilise the existing system for the following reasons:

- There is sufficient capacity to deal with the water from the expanded port.
- Utilisation of the existing canal and pond-based system is an efficient use of existing infrastructure.

It is possible, following detailed design, that proprietary devices may also be incorporated in the management of stormwater from the expanded port.

Both methods can achieve the water quality outcomes specified in the PRP.

3. Project Description

3.1 General

Northport proposes to expand its existing facilities to increase freight storage and handling capacity to support the future freight needs of the upper North Island.

The proposal includes:

- Reclamation within the Coastal Marine Area (CMA) and earthworks to the immediate east of the existing reclamation to expand Northport's footprint by approximately 13.8 hectares. This comprises 11.7ha of reclamation within the CMA and 2ha of earthworks outside the CMA (on the WDC esplanade reserve).
- Capital and associated maintenance dredging to enlarge and deepen the existing swing basin, and to enable construction of the extended wharf and tug berthing facility.
- Construction of additional beach/roosting habitat.
- A 250m long wharf (excluding the consented but not yet constructed 270m long Berth 4) constructed on the northern (seaward) face of the proposed reclamation.
- Sheet piling and rock revetment structures on the eastern edge of the proposed reclamation.
- Treatment of operational stormwater via the existing pond-based stormwater system and/or proprietary devices.
- Port-related activities on the proposed expansion and wharves.
- Lighting to facilitate night-time operations.
- Construction of a new tug berthing facility.
- Replacement of the existing floating pontoon, public access, and public facilities.

The construction of the reclamation, wharf and associated structures is expected to include some or all the following activities:

- Capital dredging, using a trailer suction hopper dredger (TSHD) and/or cutter suction dredger (CSD), to remove an anticipated volume of approximately 1.72 million m³ of dredge spoil.
- Reclamation, using the dredge spoil, and discharge of decant water.
- Construction dredging, using a backhoe dredger (BHD), to create the desired underwater profile and allow for construction of the batter slope.
- Excavation, placement of material and compaction.
- Construction work to construct seawalls and abutments (work above and below MHWS).
- Staging of construction equipment, including piling to create work platforms and install pile gates.

- Pile-driving, using methods including vibro and top-driven impact hammers. This will involve cranes (shore based and/or mounted on jack-up barges), excavators and power packs (generators and hydraulic pumps).
- Placement of formwork, tying reinforcing steel and laying of ducts and pipework.
- Pouring of concrete for the port deck and discharge of concrete curing water.
- Construction of pavement surfaces.
- Installation of wharf furniture (bollards, fenders etc).
- Installation of services and other infrastructure on the expansion area.

The final design will be confirmed during the detailed design phase. Further detailed information can be found below.

3.2 Port activities

3.2.1 Container terminal

Northport proposes to increase its freight storage and handling capacity to support the future freight needs of the upper North Island.

The terminal design is modular with the port being progressively developed into a high-density container terminal. The initial design is based on the use of reach stackers for container handling, eventually transitioning to a high-density design based on the use of Rubber Tyre Gantry cranes (RTGs) (see **Figure 2** below).

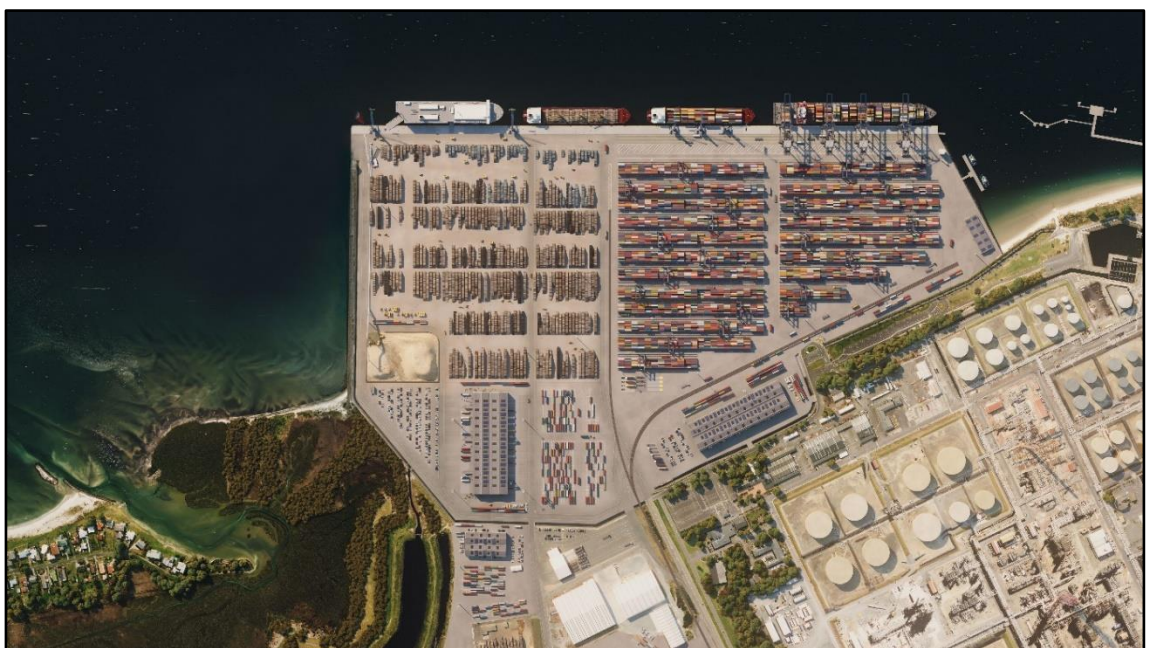


Figure 2: High-density port design (long-term)

3.2.2 Other facilities

The following associated/ancillary facilities are anticipated on the port, and the resource consent applications have been framed to also facilitate these:

- Harbour control facilities.
- Coastguard facilities.
- Biosecurity facilities.
- Boarder control/customs facilities.
- Quarantine facilities.
- Tug and pilot facilities.
- Offices, workshops, and other facilities to support the above.

3.2.3 Cranes

As the number of containers handled by Northport increases, crane handling equipment is also expected to change. Cranes expected to be used in the container terminal are detailed below.

Mobile harbour cranes

Northport currently operates two mobile harbour cranes for loading and unloading containers. They have a maximum height of 68m when fully extended (see **Figure 3** below).

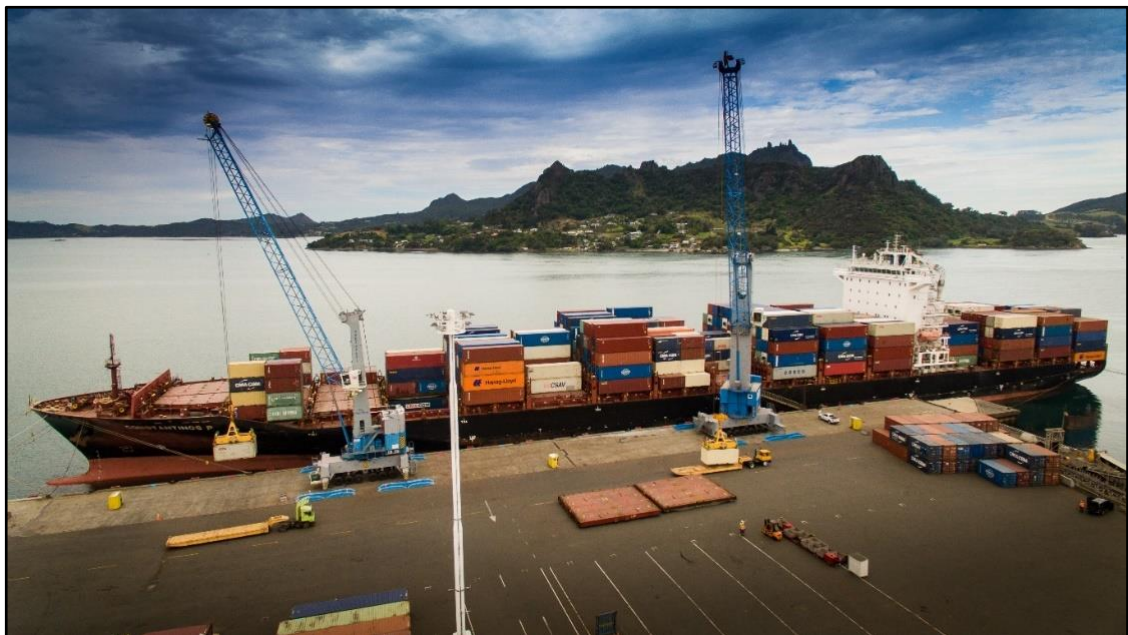


Figure 3: Mobile harbour cranes at Northport

Ship to shore gantry cranes

As the number of containers handled by Northport increases, ship to shore gantry cranes (similar to those at Ports of Auckland) will be required (see **Figure 4** below). These cranes have a height of approximately 83m when they are being used, and approximately 117m when dormant (i.e. the main boom is raised).



Figure 4: Ship to shore gantry cranes at Ports of Auckland

3.2.4 Road transport

In the absence of a rail link to the port, all import and export cargo will continue to be transported to and from Northport via SH15 which links directly with SH1.

3.2.5 Rail transport

There is currently no rail link to Northport. However, Kiwirail has designated a spur line from Northport to the main trunk line. While there are currently no firm plans to construct the line, the existence of the designation means that Northport remains hopeful that a rail link will be available to service Northport in the future. The proposal has therefore been designed to facilitate the transport of cargo by rail, as well as road.

3.2.6 Lighting

Northport is a 24-hour operation and lighting on the port is essential. The details of the lighting layout will depend on the final layout of the storage areas and the type of equipment used to handle the cargo. It is anticipated that the new lighting system will use LED technology and lighting poles with a height of approximately 36m. LED technology has been selected because it allows for better control of light spill as well as the use of variable brightness for operational and non-operational times.

3.2.7 Proposed conditions relating to port structures

Proposed conditions relating to port operations are summarised as follows:

- **Maximum building height** (excluding public utilities, light towers, silos, aerials, cranes, cargo handling equipment, containers, and tanks): 20m above deck level.
- **Maximum height for public utilities, light towers, silos, aerials, and tanks** (excluding cranes and containers): 60m above deck level.
- **Maximum height for containers:** 30m.
- **Maximum operational height¹⁵ for cranes:** 85m above ground level.
- **Storage/stockpile height:** 20m above deck level.

These conditions are aligned with the permitted activity rules for the Port Zone (currently applicable to the existing Berths 1-3).

3.3 Marine structures

3.3.1 General

To support the reclamation and provide berthage for ships, several marine structures are proposed. The exact dimensions and structural form of these structures will be determined during the detailed design stage, but they will be contained within the envelope shown on the WSP design drawings in **Appendix 3**. The general nature and location of the structures are known and are broadly described below.

3.3.2 Revetment and seawalls

The eastern edge of the reclamation (which meets the natural shoreline) will, for the most part, be a rock revetment, of similar look and construction to the existing eastern edge of the port. The revetment will be covered in armouring which protects the reclamation from erosion and will most likely comprise of large rocks. To provide additional strength, piles may be driven behind the revetment to create a retaining structure. In some instances, most likely on the north portion of the eastern face, the edge of the reclamation may need to be formed with a vertical seawall, either of steel (sheet pile) or concrete construction.

3.3.3 Wharf structures

A 250m wharf extension (in addition to the consented but not constructed Berth 4 wharf) will be constructed on the northern face of the proposed reclamation. The wharf will be designed to secure and work cargo vessels, primarily container vessels.

¹⁵ There is no maximum height for cranes that are not in operation.

The structural form of the wharf will be confirmed during detailed design, but is likely to be:

- A grid of driven piles (steel or concrete) with a cast in-situ reinforced concrete deck (similar to Northport Berths 1 and 2). This could include a sheet-piled (or concrete) seawall atop a rock revetment to form the slope down to the seabed under the wharf.
- A diaphragm wall (two parallel walls, tied together with the space between backfilled) as used for Northport Berth 3 (**Figure 5**).



Figure 5: Berth 3 under construction showing the two parallel steel walls prior to backfilling

Some, or all the following activities would be needed for each option:

- Construction dredging to create the desired underwater profile and allow for construction of the batter slope.
- Excavation, placement of material and compaction.
- Construction work to construct seawalls and abutments (work above and below MLWS).
- Staging of construction equipment, including piling to create work platforms and install pile gates.
- Driving of piles, using a variety of methods including vibro and top driven impact hammers. This involves cranes (shore based and/or mounted on jack-up barges), excavators and power packs (generators and hydraulic pumps).
- Placement of formwork, tying reinforcing steel and laying of ducts and pipework.
- Pouring of concrete for the port deck and discharge of concrete curing water.
- Installation of wharf furniture (bollards, fenders etc).

The final wharf design will be confirmed at the detailed design stage.

3.3.4 New tug berthing facility

A new tug berthing facility providing berthage for tugs, work boats, and pilot vessels is proposed to replace the existing tug wharf at the eastern end of Northport. The tugs are commercially operated by NTL and are an essential requirement for safe navigation and berthing by vessels visiting both Northport and the CINZL fuel import terminal.

The berthing facility will be located generally as shown on **Figure 6** below. The final tug facility design will be confirmed at the detailed design stage.

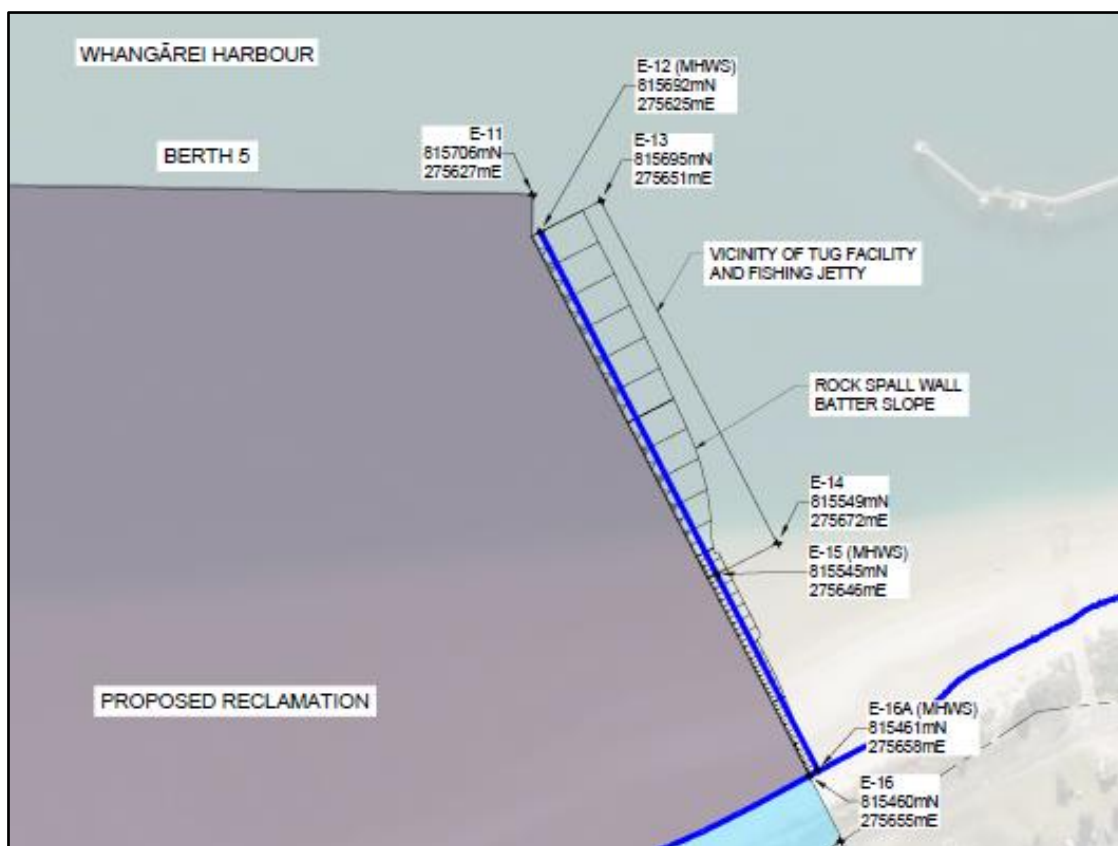


Figure 6: Location of proposed tug berthing facility

3.3.5 New fishing and water taxi pontoon

A new public fishing pontoon will be established on the eastern side of the expanded port, near to and/or in conjunction with the tug berthing facility. Access to the pontoon will be incorporated with access to the public reserve/park proposed at the eastern end of the port (see **Figure 16** in Section 3.9 of this report). The pontoon may also be used by water taxis associated with the Te Araroa trail.

3.4 Port noise

3.4.1 General

The proposal is to manage the noise associated with the existing and expanded port with a noise management framework developed in general accordance with New Zealand Standard 6809:1999 Acoustics – Port noise management and land use planning.

Key features of the proposed noise conditions are as follows:

- Specified limits for port noise applicable in residential zones and at the notional boundary of any residential unit in other zones.
- A requirement for the port to offer noise mitigation when monitored or predicted noise reaches a specified level at the façade of a residential unit.
- The introduction of a Port Noise Management Plan designed to minimise port noise through best practice and ongoing community liaison. The proposed noise conditions (including limits) relate to noise generated in 'Port Operations Area A' as shown on **Figure 7** below, and on Berth 4 (consented) and 5 (proposed).¹⁶

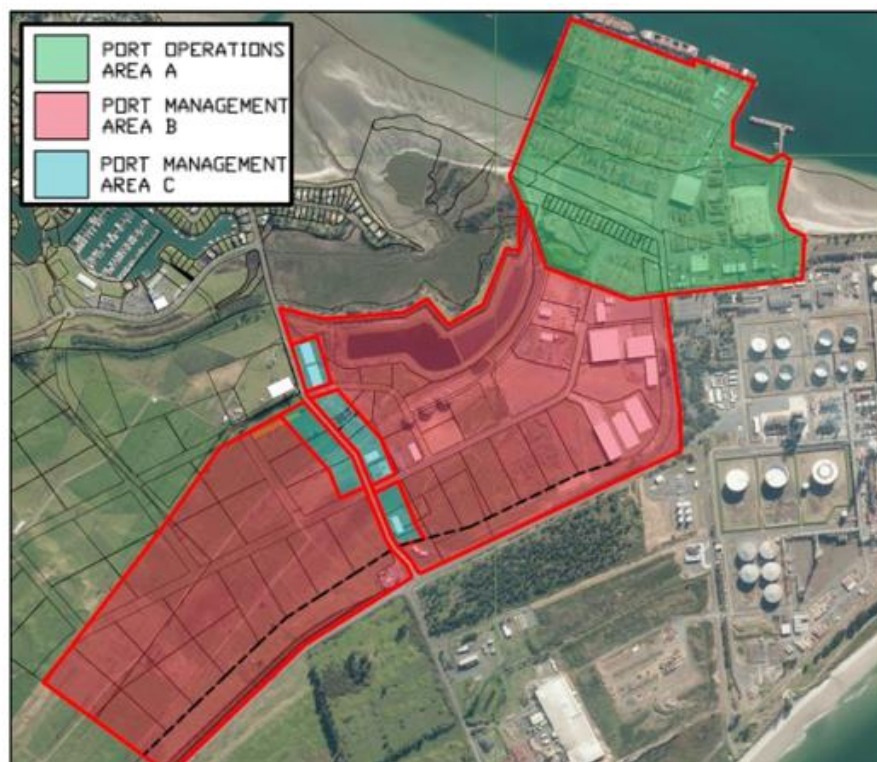


Figure 7: Port Operations Area A (Source: Whangarei District Plan)

¹⁶ It is intended that Port Operations Area A will eventually be extended to include the expanded port via a future plan change.

3.4.2 Proposed noise limits

The proposed noise limits for noise generated in 'Port Operations Area A' and on Berth 4 (consented) and Berth 5 (proposed) applicable at any point on land in the General Residential and Rural Village Residential Zones are as follows:

Day-night (Long Term)

58 dB L_{dn} (5-day)

61 dB L_{dn} (1-day)

Night-time (Short term)

53 dB L_{Aeq} (9 hrs)

58 dB L_{Aeq} (15 min)

75 dB L_{AFmax}

3.4.3 Port Noise Management Plan

As recommended in NZS6809:1999, a Port Noise Management Plan (PNMP) is proposed to ensure that noise emissions from the port are minimised, consistent with practicality, safety, and the efficient operation, use and development of the port.

A draft PNMP is included with the MDL report in **Appendix 4**.

The objectives of the PNMP are to:

- Ensure the port complies with the relevant noise performance standards.
- Provide a framework for the measurement, monitoring, assessment, and management of noise.
- Identify and adopt the Best Practicable Option (BPO) for the management of noise effects.
- Require engagement with the community and timely management of complaints.

The PNMP will include a port noise contour map, to be updated annually. The purpose of the map is to identify properties that are likely to be affected by actual or modelled (predicted) port noise.

The PNMP will apply at all times. It is a 'living document' that is expanded and updated as appropriate. It will be reviewed annually in consultation with the community, including the current port noise contour map.

3.4.4 Port assisted mitigation

A condition of consent is proposed whereby, following the annual review of the noise contours in the PNMP, Northport will offer to mitigate any dwellings exposed to port noise levels above 55 dB L_{dn} (5-day). This threshold aligns with Port Noise Standard C1.4 where it states: "*mitigation measures may be necessary when the day-night average sound level in a resident community exceeds 55 dBA L_{dn}* ".

Because dwellings would need windows to be closed at night to achieve 40 dB L_{dn} (5-day) inside, Northport will offer to fund mechanical ventilation and cooling of habitable rooms. The proposed mitigation must achieve a spatial average indoor design sound level of 40 dB L_{dn} (5-day) in all habitable spaces. This is 5 decibels more stringent than the Port Noise Standard requirement for existing ports of 45 dB L_{dn} (5-day). This will enable occupants to close the windows during peak periods, or at any time at their discretion, therefore maintaining a suitable indoor noise environment. The offer has no timeframe attached to it, meaning it can be taken up at any time.

The annual review process will ensure that mitigation for existing dwellings occurs proximate to when the noise effects materialise. This incentivises Northport to constrain their noise footprint through other means (e.g. investment in quieter equipment or timing of loud activities during the day).

There are 16 dwellings in Reotahi and none in Marsden Bay that are predicted to potentially require noise mitigation by 2035. The predicted noise levels for the most exposed facade range from 55 – 58 dB L_{dn} (5-day).

3.4.5 Timing

The proposed noise conditions will apply to all port operations on the existing¹⁷ and expanded port but will not have effect until port operations commence on either Berth 4 or Berth 5. The existing noise limits in the NAV chapter of the District Plan will continue to apply to Berths 1-3 in the interim.

3.5 Reclamation

3.5.1 Areal extent

The areal extent of the reclamation is shown with associated coordinates on the plan in **Figure 8**.¹⁸

¹⁷ 'Port Operations Area A' as defined in the Whangarei District Plan.

¹⁸ See also WSP plans in **Appendix 3**.

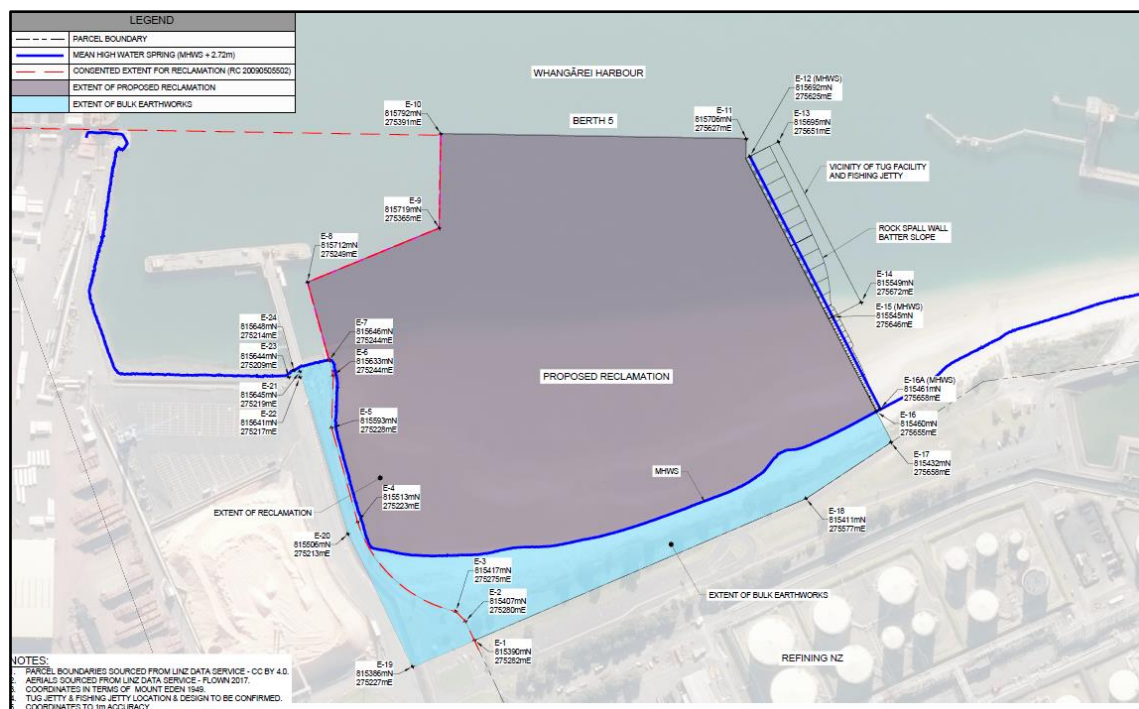


Figure 8: Proposed extent of reclamation

The proposed reclamation will have an area of approximately 11.7ha (see Figure 9 below).¹⁹

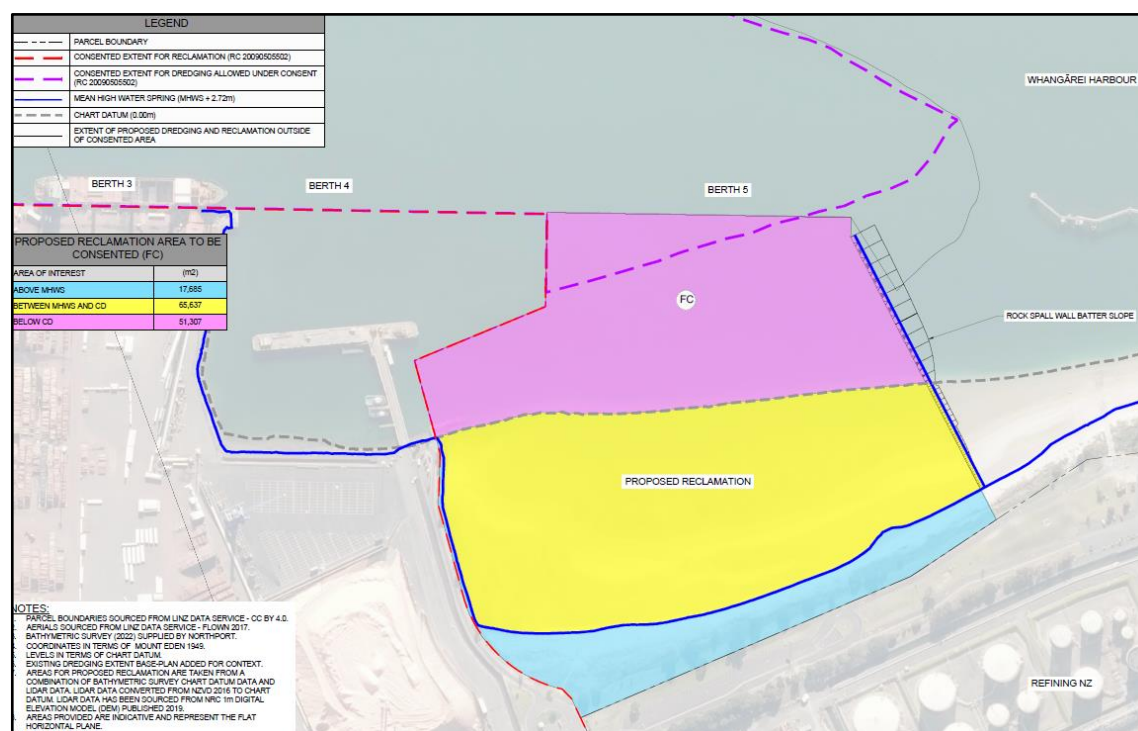


Figure 9: Proposed reclamation area (pink/yellow areas)

¹⁹ The overall expanded port area will be 13.7ha, 2ha of which is above MHWS.

3.5.2 Hard protection structures

A wharf will be constructed on the northern edge of the proposed reclamation (a linear extension of the existing Northport wharf). This edge will be retained using either sheet piling or a rip-rap rock revetment wall.

A rip-rap protected batter slope will be constructed along the eastern edge (similar to the eastern batter of the existing port). Some portions of the eastern edge could also be a sheet pile wall.

3.5.3 Deck height

The design height of the land will generally match the existing Northport deck level, being a minimum of 5.0m above chart datum.

3.5.4 Construction material

The land will be built using dredge spoil (sands and silts) and imported material (sand, rock, and gravel).

3.5.5 Construction methodology

It is anticipated that the reclamation will be built using techniques used by Northport for previous reclamations. Broadly, sand and silts won from dredging will be used to reclaim land, with some imported material used where needed.

It is most likely that a bund will be built around the perimeter of the reclamation, and the dredge spoil pumped or deposited into this enclosed area. It is anticipated that the bund will be predominantly rock and crushed aggregate, but some sections may need to be constructed of sheet piles. In some instances, a bund may not be used, with the sediment controlled by way of silt curtains (as was used for parts of the Berth 3 reclamation construction).

Once the rock bund area is complete (or alternative measures such as silt curtains are installed), dredge spoil (as a slurry) will be placed within the bund area. The slurry will be pumped from the dredger through a series of pipes and booster pumps, and ultimately discharged into the reclamation area where the solids will quickly settle out. A series of internal paddocks may be needed to settle out the finer-grained materials before discharging the water.

Marine plant will likely install a combi-pile or sheet pile wall across the northern face of the reclamation.

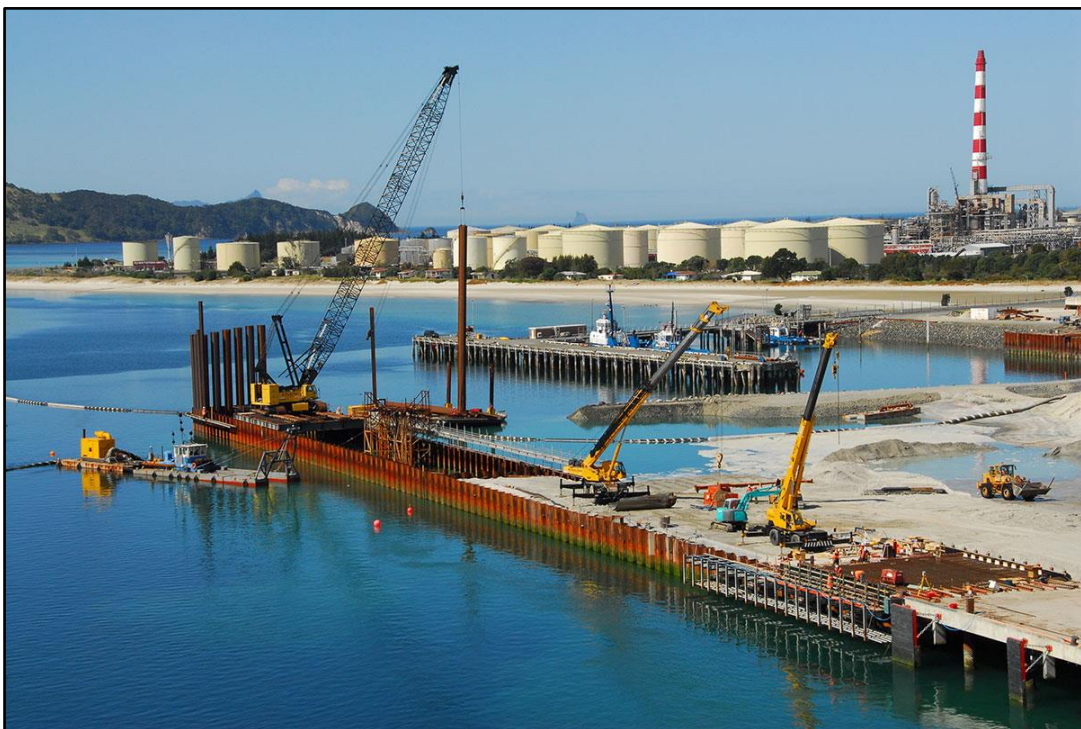
Piling associated with the wharf construction will be undertaken from marine plant with the piles predominantly being driven with a vibro hammer, although an impact hammer may be needed to complete the driving. Support vessels (barges etc) will be used to supply the piles.

Hardfill (crushed rock/gravel) will then be placed on the reclamation to create a suitable sub-base for future paving.

Figure 10 (below) shows land being built using an enclosed paddock method, with two main paddocks in use. The un-bunded method using enclosing silt fences is shown in **Figure 11**.



***Figure 10:** Sand being discharged using the perimeter bund method (with several internal paddocks) during original reclamation works at Northport*



***Figure 11:** Pumping sand to an open area (right side midground) during previous reclamation works at Northport*

3.6 Dredging

3.6.1 General

Capital dredging is proposed to increase the area and depth of the existing swing basin and to create a linear berth depth alongside the new wharf structures. The existing swing basin will be deepened to -14.5m CD at the western end, transitioning to -16.0m CD at the eastern end.

Further dredging is required at the eastern end of the reclamation to provide sufficient water depth for the tug berthing facility.

The anticipated volume of capital dredging is 1.72 million m³ (including dredging to shape the reclamation batter slopes and to key in the batter slopes to the seabed).

East-west batter slopes (in line with current) are to be 1:15, while north-south batter slopes (across currents) are to be 1:10.

The proposed capital dredging area is shown in **Figure 12** below and on the WSP design drawings in **Appendix 3**.

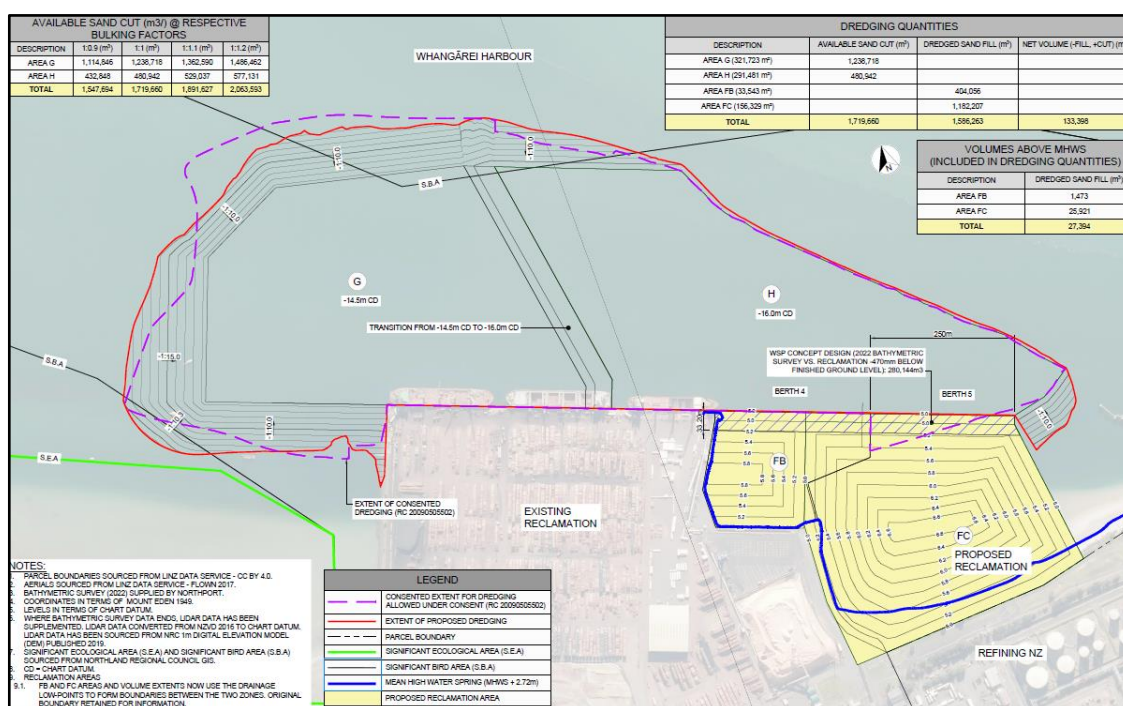


Figure 12: Proposed capital dredging area

3.6.2 Dredging methodology

Three types of dredging methods may be used. Specifically, there are two options to dredge the bulk volume in the swing basin, and another to dredge any silty material close to wharves and for construction-related dredging.

The various dredging methods are described below. These same methods have also been modelled by Met Ocean in order to determine potential dredge plumes.

Swing basin dredging

The swing basin dredging could be undertaken using one of the following two dredge types:

Trailer Suction Hopper Dredger (TSHD)

A self-propelled vessel which drags a suction head (or heads) on the sea floor as it travels forward. These suction heads fluidise the sediments and pump them into the vessel's hopper. The solids settle in the hopper and the cleaner water can be discharged (known as overflowing) to allow more room in the hopper for sediment.

Once the hopper is full, the dredger can either steam to an offshore disposal ground where it disposes of the load via bottom dump doors (not what is proposed here), or it can be piped to shore for use in land reclamation. It does this by connecting to a pipe, re-fluidising the sediment, and pumping it to where it is needed onshore.

Once the hopper is emptied, the process is repeated until the desired dredge extent and depth is achieved. A TSHD is shown in **Figure 13** below.



Figure 13: Trailer suction hopper dredger (TSHD) 'Albatros' in the Whangarei Harbour

Cutter Suction Dredger (CSD)

A CSD uses a rotating cutter head to dislodge sediment from the seafloor and fluidise it. Dredge pumps suck up the fluidised sediment and pump it to the shore via a pipe network. This pipe network may have one or more booster pumps to transport the slurry to its final location. The

current Northport swing basin was dredged by a CSD, with sediment pumped to shore and used in the reclamation.

CSD do not move while dredging. Rather, they swing side to side, dredging in an arc. Once the arc is complete, they pick up their anchoring system (a series of spuds or anchors) and move forward to begin dredging a new arc. Some CSD are self-propelled, but many rely on tugs or other workboats for propulsion and positioning. An example of a CSD, the Kotuku (which dredged the current swing basin) is shown in **Figure 14**.



Figure 14: Small Cutter suction dredger with attached pipework

Construction dredging

For construction dredging (i.e. shaping of batter slopes, deepening close to existing berths, and for smaller volumes) a smaller, more accurate dredging kit is needed. In these areas, a Backhoe Dredger (BHD) will most likely be used. A BHD may also be used if very silty material is encountered.

A BHD is typically a barge with a long reach mechanical excavator (see **Figure 15**). For this project, a barge with a crane and clamshell is also being considered (as they have similar work rates and plumes). A BHD can either be self-propelled or use attendant vessels for manoeuvring. Similar to a CSD, BHD often use one or more spuds to hold position and undertake limited movement to alter

dredge position. A BHD typically places the excavated sediment into hopper barges. For this project, the barges would transport the material to shore for on-land management.



Figure 15: Backhoe dredger loading a hopper barge

3.7 Management plans

A range of management plans are proposed to manage the construction effects of the proposed expansion. The primary management plan for the construction phase of the project is the Construction and Environmental Management Plan (CEMP). The CEMP will include a Marine Mammal Management Plan (MMMP), and additional chapters in respect to avifauna, biosecurity, turbidity during dredging, and general dredging effects management. Draft CEMP and MMMPs are attached in **Appendix 5**. In addition, as noted earlier, a draft PNMP is included with the MDL report in **Appendix 4**.

The final management plans will be prepared in accordance with conditions of consent.

3.8 Stormwater discharges

The canal and pond-based collection and treatment system described in Section 4.16.2 of this report is capable of managing stormwater from the expanded port. The additional dead storage area required for the additional port area can be achieved in the extended perimeter canal.

Proprietary devices may also be utilised depending on the final design of the expanded port.

A new resource consent is sought for the stormwater treatment system covering the existing and expanded port. The existing consent²⁰ will be surrendered when the expanded port becomes operational. The water quality standards required by the conditions of consent in the existing consent will be retained.

²⁰ Consent reference CON20090505532.

3.9 Public access and recreation

A public park/reserve area is proposed at the eastern end of the expanded port, generally as depicted on the plan in **Figure 16** below. The concept is shown in further detail in **Appendix 6**.



Figure 16: Proposed public park/reserve area and associated access concept

The proposed reclamation will be keyed into the adjoining WDC esplanade reserve at the desired deck height. Vehicle access to the park/reserve area will then be constructed between the expanded port area and the CINZL boundary.

Key components of the proposed park are as follows:

- A relocated carpark and toilets to allow easy access to the beach.
- A new pontoon for fishing, swimming, and socialising, and to operate as a potential terminal for the Te Araroa Trail water taxi.
- Beach and water access points suited to socialising and swimming, developed to attract such users to the western end of the beach away from one of the preferred fishing areas near the CINZL wharf, and to reduce disturbance of roosting birds along the beach.
- Walking access from the park to the proposed fishing pontoon along the eastern edge of the revetment.

Consultation with the WDC Parks Division is ongoing, and Northport remains open to alternative scenarios to improve public access and recreation facilities in the vicinity of the port and in the surrounding area.

3.10 Earthworks

Earthworks will be required to construct the part of the port deck above Mean High Water Springs (MHWS), and to construct the proposed walkway and park area detailed in Section 3.9 of this report. The proposed earthworks area is 20,767m² (approx.) and the volume is 31,630m³ (approx.).²¹ The extent of earthworks is shown on **Figure 17** below.

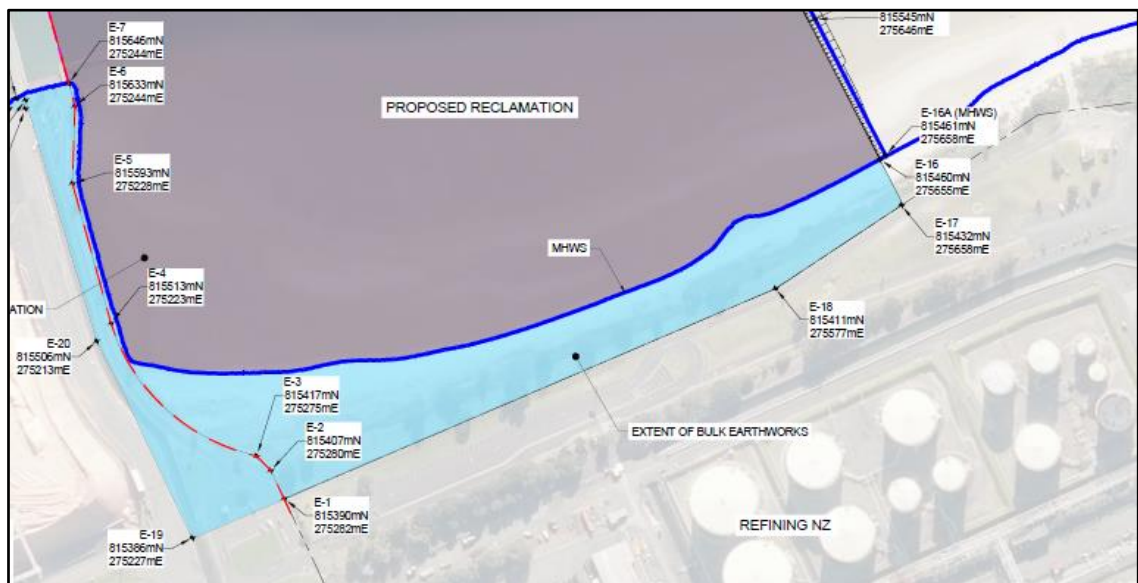


Figure 17: Proposed extent of earthworks (above MHWS)

A sediment control plan will be provided for certification as part of the CEMP. Dust suppression measures will also be employed in accordance with the recommendations in the PDP air quality report.

3.11 Creation of high-tide roosting habitat

3.11.1 Purpose

Additional roosting habitat for variable oystercatcher (VOC) and NZ Dotterel is proposed to be created in the inter-tidal area to the west of the existing port (see **Figure 18** below). This habitat will be created prior to the construction of the proposed reclamation so that it is available for use ahead of the loss of habitat associated with the reclamation.

²¹ This volume excludes imported hardfill for pavement. The total volume including pavement material is 27,040m³ approx.).



Figure 18: Proposed high tide roost location

Historically there was a sand/shell bank at the proposed roosting site, but this has been impacted over time due to changes in coastal processes.

3.11.2 Design constraints

Requisite requirements for the roost area are:

- Be independent from the existing shoreline during high tide to provide a safe area.
- Be largely, or completely, formed from sand.
- Provide a reasonable area above mean high water springs.
- Be situated away from ecologically significant areas.
- Avoiding potential future developments, such as the shipyard area.

3.11.3 Roost design

The preferred nature-based approach for forming the roost is to use fine to medium sand to augment the existing sandy flood spit feature extending along its length, recognising that this will adapt and adjust to the coastal processes over time. This approach uses sediments similar to those present on the intertidal area.

The cross section of the roost has been informed by the slopes and elevation of the existing shoreline. The existing beach face on the spit is around 8(H):1(V) with a back slope of around 4(H):1(V) and the crest of the beach is around 3.1m CD. The design has been based on these slopes extending to a crest level of 3.4m or around 0.6m above MHWS. This elevation would be sufficient to retain a dry area apart from during significant events and onshore winds, where overtopping could occur resulting in the landward migration of the roost and possibly lowering of the reef form.

To provide a smaller construction profile the roost will be constructed with steeper slopes (say 4(H):1(V)), with the expectation that the seaward slope will adjust overtime to a flatter slope.

3.11.4 Roost performance

The proposed bird roost is situated in a relatively sheltered environment, with low tidal currents (typically less than 0.2 m/s) and generally low wave heights (typically lower than 0.2 m) with higher waves only likely to occur during higher stages of the tide and during periods of strong north-westerly winds.

The roost will create a more sheltered environment between the roost and the existing barrier spit. Tonkin and Taylor (T+T) consider that this sheltering is likely to result in a reduction of the landward retreat of the existing barrier beach at this location and is also likely to enable the existing mangrove to extend further seaward in the lee of the roost.

T+T predict that the proposed roost will gradually lower due to wave overtopping moving sediment landward. The deflation and lowering are expected to result in a local raising of the seabed level between the roost and the landward spit feature and potentially merging with this spit.

The period that the bird roost will remain largely above MHWS is difficult to predict. However, the evidence from aerial imagery suggests that the remnant spit feature has remained at this location since prior to the original port construction (greater than 15 years). T+T anticipate that the proposed roost could remain effective for decades, although it is likely that some sediment loss will occur. If overwash occurs, moving sand to the landward side of the spit, this could retain a crest area above MHWS, but with a progressive landward location. However, it is also possible that if the roost deflates there could remain a high point, but below MHWS.

This means that top-ups of the roost may be required to maintain a sufficient high tide area. Therefore, there will need to be monitoring and a top-up plan established as part of the management of this roost. Conditions of consent will be proposed for this purpose. T+T recommend a top up volume of 10% of the capital be allowed for (i.e., 740m³) every five years, although the actual volume will be dependent on the performance of the roost.

3.11.5 Construction methodology

The roost will be constructed with sand transported to the area at high tides with shallow draft barges which will be unloaded and shaped with hydraulic excavators.

The roost is likely to require at least 40 barge loads and take 1-3 months to complete.

4. Existing Environment

4.1 Physical setting

Northport is a deep-water commercial port located at Marsden Point in Northland. The port is located at the entrance to the Whangarei Harbour, between the Marsden Point CINZL facility to the east, and One Tree Point to the west (see **Figure 19** below).

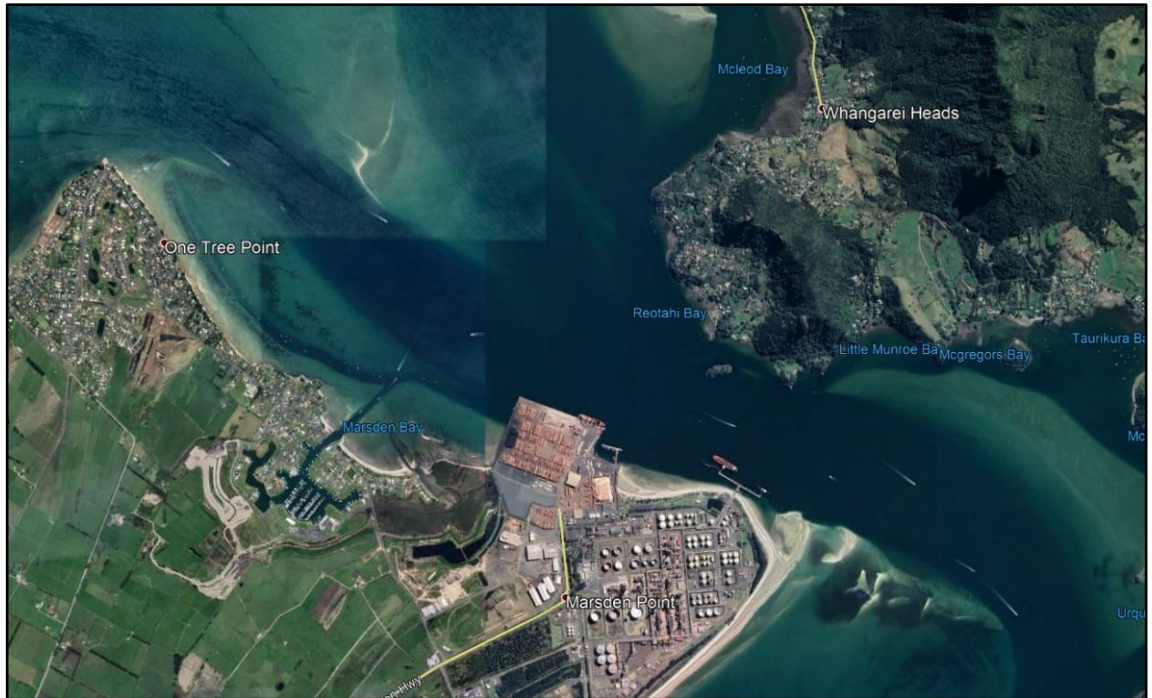


Figure 19: Location Map (Source: Google Earth)

Road access is via SH15 which connects directly to SH1 (see **Figure 20** below).



Figure 20: Road connections

Northport currently has three berths available for handling dry cargo vessels, with a total length of 570m. An additional 270m of linear berth (Berth 4) is consented but not yet constructed.

The overall Northport footprint is made up of multiple titles (see copies attached in **Appendix 7**). Much of the port is also located on reclaimed (crown owned) leased land.

The existing facility totals 49.1ha of land, with most of this area now being used for cargo operations (see **Figure 21** below). Of the existing 49.1ha footprint, 33.615ha is reclaimed land.



Figure 21: Northport aerial photograph (Source: Quickmap/Google Earth)

4.2 Cultural setting

4.2.1 General

The project area and its surrounds are rich in Māori history.

4.2.2 Patuharakeke

Patuharakeke is derived from Ngāti Manaia, Ngāi Tāhuhu, Ngāti Wharepaia, Ngāti Ruangaio, Te Parawhau and Ngāti Tu. Prior to Patuharakeke taking the name Patuharakeke the hapū was more generally known as Ngāti Tu with some elements identifying themselves as Te Ākitai and Te Parawhau. All of these hapū have origins in Ngāi Tāhuhu and/or Ngāti Manaia. Patuharakeke are a composite hapū of descent from most major contemporary iwi/hapū groups in the north. These include Ngātiwai, Ngāpuhi-nui-tonu, Ngāti Whātua and Te Uri o Hau.²²

²² Patuharakeke Hapu Management Plan (2014).

The Patuharakeke CVA at **Appendix 24** states: “Patuharakeke are tangata whenua of the area Northport operates in and hold mana whenua status over Poupouwhenua/Marsden Point.” It also records that the Patuharakeke Te Iwi Trust Board (PTITB) represents their interests in matters including *inter alia* environmental and resource management issues.

The Patuharakeke rohe is shown in **Figure 22** below.

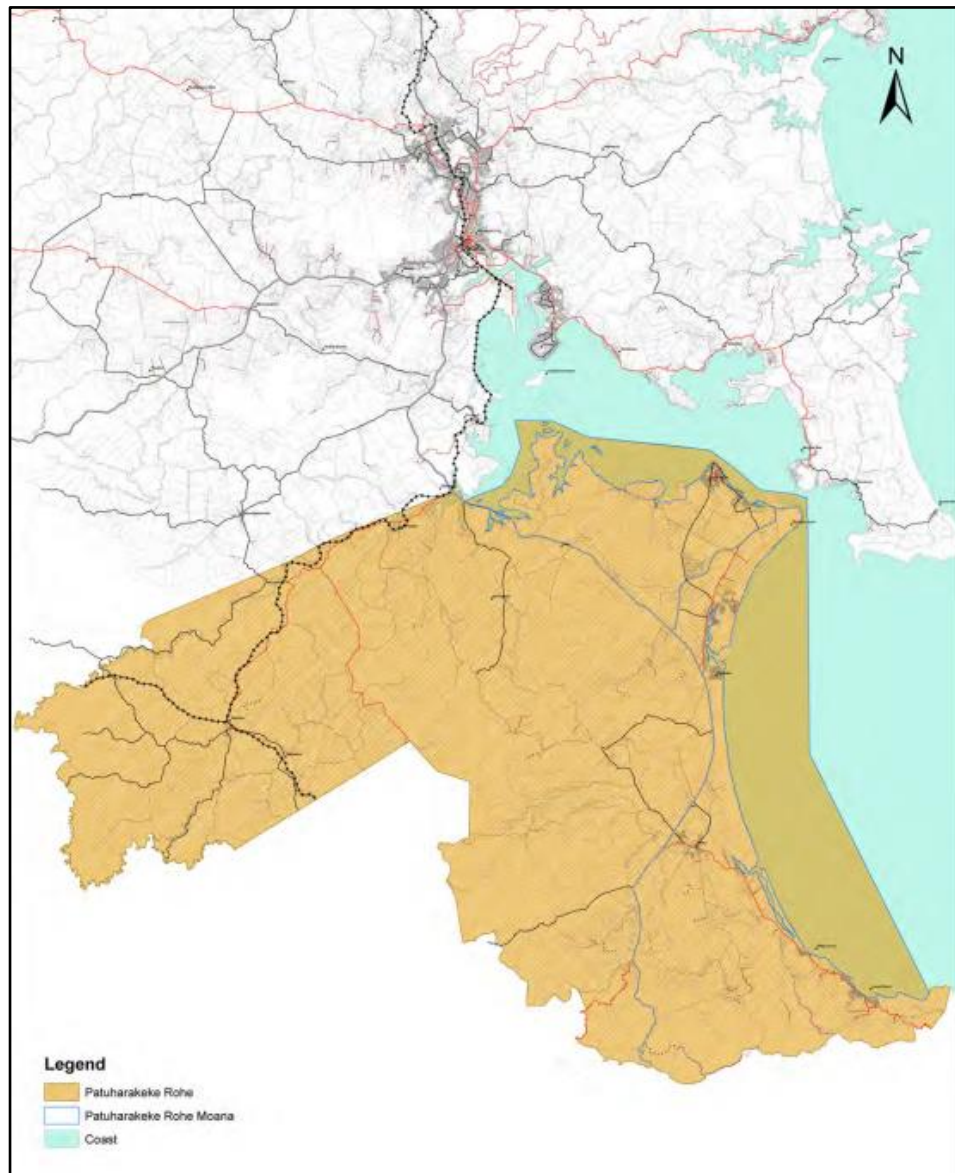


Figure 22: Patuharakeke Mainland Rohe (Source: Patuharakeke Hapū Management Plan)

4.2.3 Te Parawhau

Te Parawhau hapū and whānau are located at the southern boundary of Ngāpuhi. The Te Parawhau estate encompasses the area from Tangiteroria in the west, east to Whangārei and south to Brynderwyn. They are connected by geneology to most hapū of Whangārei. Both the Whangārei Harbour and the upper Northern Wairoa of the Kaipara Harbour are inclusive of Te Parawhau’s estates.

4.2.4 Ngātiwai

According to the Ngātiwai website,²³ Ngātiwai claims mana whenua and mana moana from Rākaumangamanga to Mahurangi, across to Aotea, and returning to Rākaumangamanga by way of the many islands and waters of Te Moana Nui a Toi. The Ngātiwai rohe is shown in **Figure 23** below.

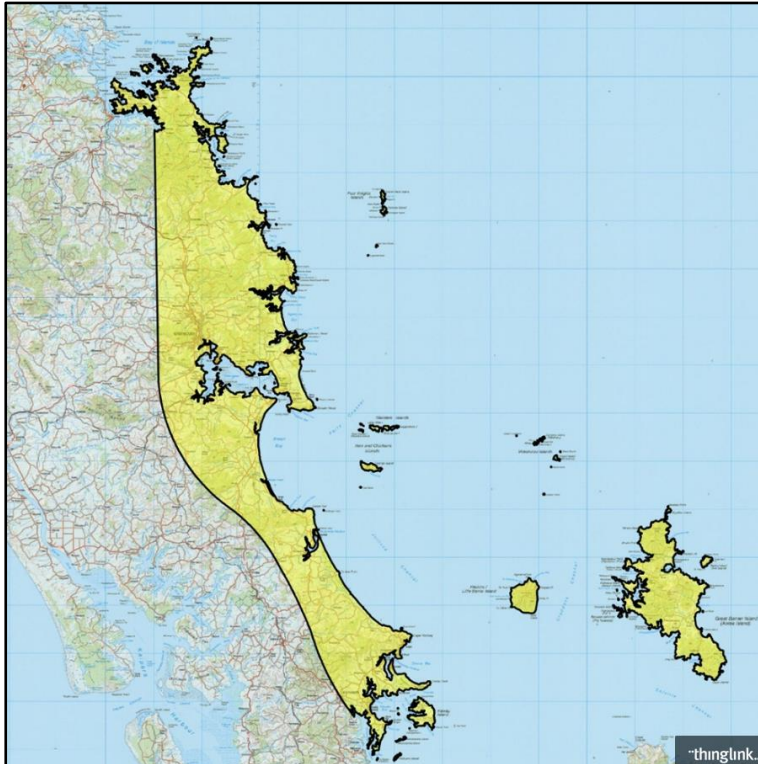


Figure 23: Ngātiwai rohe (Source: <https://ngatiwai.iwi.nz/te-iwi-o-ngatiwai/>)

4.2.5 Patuharakeke relationship with Northport

The relationship between PTITB and Northport 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.

4.2.6 Iwi/Hapu Management Plans and Documents

General

There are several Iwi/Hapu Environmental Management Plans held by the NRC. These are:

- Te Iwi o Ngātiwai Iwi Environmental Policy Document (2007)

²³ <https://ngatiwai.iwi.nz/te-iwi-o-ngatiwai/>

- Whatitiri Hapu Resource Management Plan (2016)
- Patuharakeke Hapu Management Plan

These documents are summarised below.

Te Iwi o Ngatiwai Iwi Environmental Policy Document (2007)

The stated purpose of this document is to:

- State the core values of Te Iwi o Ngatiwai, from an Iwi perspective, around generic environmental issues.
- Assist Ngatiwai hapu and whanau to produce documents that identify and state their own specific local environmental issues.

The document focuses on the responsibilities of District and Regional councils under the RMA and is designed for parties proposing development within the Ngatiwai rohe. It contains guidelines for an open, transparent, accountable, and collectively agreed upon process for Councils to take into account Iwi and Hapu documents lodged with them.

The document refers to the Ngatiwai Trust Board Resource Management Unit (NTBRMU) whose role is to develop the resource management capacity of Ngatiwai, ensuring the sustainable management of the natural, physical, and cultural resources of the iwi.

The NTBRMU aims to:

- Fulfil kaitiaki responsibility so that human interaction with environment is managed in a sustainable way that protects the mauri of natural, physical, and cultural resources.
- Maintain the cultural and spiritual integrity of Te Whakaputanga o nga Rangatira o Niu Tirenī (The Declaration of Independence) and Te Tiriti o Waitangi as founding political documents for governance of NZ.
- Weigh up principles and values of Ngatiwai for the Environment with those of the Crown in a meaningful and positive way to ensure the sustainability of its resources for future generations.

The document is set out according to the genealogical sequences of Ngatiwai. The sections have been positioned into the stages of creation. These subsections are then split into issues, objectives, policies, and methods. The various stages are as follows:

Te Unaunahi Tuatahi – Minerals and substances that make up the earth and sky.

Summarised into the following three sections with supporting objective, policies, and methods:

- Minerals
- Air quality
- Water

Te Unaunahi Tuarua – Flora and fauna which cloak the earth.

Summarised into the following two sections with supporting objective, policies, and methods:

- Indigenous flora
- Indigenous trees

Te Unaunahi Tuatoru – The animal world. Focuses on Indigenous fauna only.

Te Unaunahi Tuawha – The human related elements. Focusses on engagement.

Te aho Tapu

Summarised into eight sections:

- Maturanga Ngatiwai
- Wahi Tapu
- Rahui
- Taniwha
- Ngatiwai Landscape
- Customary Materials
- Exotic Plantation Forestry
- Genetically Modified Organisms

Whatitiri Hapu Resource Management Plan (2016)

This document is written on behalf of Te Uriroi, Te Parawhau and Te Mahurehure Ki Whatitiri.

The document recognises that hapu and whanau are facing increasing pressure to respond and have input into a variety of issues, such as treaty claims, court proceedings and resource management issues and has been prepared in recognition of the need for a centralised strategy to deal with these issues.

The stated vision of the document is:

- A healthy Maori community where hapu prospers and participates fully in the management of lands and waters for the betterment of the entire community, in the area known as Whatitiri, depicted in the Whatitiri Resource Management Unit map.

The stated Mission is to revitalise the health and wellbeing of the environment and their people.

The plan has been developed to:

- Ensure the engagement and participation in the planning and decision-making processes of council's, agencies, and developers with respect to their rohe.
- Assert their tino rangatiratanga over their ancestral taonga.
- Clearly identify the environmental management kaupapa of the Whatitiri RMU.

The stated values of the plan are:

- Kaitiakitanga – Our duty of care and responsibility toward our taonga tuku iho.
- Whānaungatanga – Building ongoing positive relationships with whānau, hapū, iwi, crown agencies and the wider community.
- Manākitanga – Our ability to sustain our whānau and our manuhiri.
- Matauranga – To protect, revive, enrich and utilise our knowledge in our capacity as kaitiaki.
- Tikanga – To retain the traditions of our tupuna in all our operations.

A key focus of the plan is on building and maintaining durable relationships. They recognise that the implementation of their policies will be dependent on the strength of relationships with whanau and all others who interact within the rohe. It is vital that they are acknowledged as kaitiaki and empowered to actively practice kaitiakitanga in regard to all resources in their rohe.

The remainder of the document is split into seven sections on natural resource issues, with each of these sections containing issues, objectives, policies, and methods. These are:

- Relationships
- Kaitiakitanga
- Water
- Land
- Biodiversity
- Heritage, landscapes and wahi tapu
- Genetic engineering

Patuharakeke Hapu Management Plan

This plan was developed to:

- Ensure the appropriate engagement and participation of Patuharakeke in the planning and decision-making process of councils, agencies, and developers with respect to their rohe.
- Assert tino rangatiratanga and kaitiakitanga over our natural environment and all ancestral taonga.
- Achieve the full intent of empowering legislative provisions.
- Clearly identify the environmental management kaupapa of Patuharakeke.

The stated vision of the plan is “*I nga ra e hi ika, he kupenga tatai awhai nuku*” – If you wish to catch fish, first you need to ensure your net is in good order. This provides all-encompassing contemporary vision of healthy environment as well as tribal activities, structures, management practices and operations that reflect the present and where they want to get to.

The stated mission of the plan is to revitalise the mauri of their taonga tuku iho.

The plan states that Patuharakeke's response to resource management issues is shaped by:

- A body of knowledge about their land, water and resources built over many generations;
- An holistic worldview that sees people in a familial and symbiotic relationship with the other manifestations of nature around them rather than in domination of it;
- The desire to protect key cultural values and practices such as mauri, tikanga, rahui and waahi tapu that are central to our identity, sense of place and cultural well-being; and
- An historical context where the dispossession of land that followed colonial settlement and Te Tiriti o Waitangi and the confiscation of Poupuwhenua and acquisition of Ruakaka, Mata and Waipu via imperfect purchases had a profound effect on the spiritual, cultural and traditional relationship between Patuharakeke and the environment. As the physical landscape changed, so did the ability of tangata whenua to access and manage the resources upon which they depended.

Key principles of the plan are:

- Whakapapa – The foundation of our framework for managing resources, this demonstrates the relationships between the various elements of the world around us, including human beings.
- Kaitiakitanga – Our duty of care and responsibility toward our taonga tuku iho.
- Whanaungatanga – Building ongoing positive relationships.
- Manaakitanga – Our ability to care for and sustain our whanau and our manuhiri.
- Matauranga – To protect, revive, enrich and utilise our knowledge in our capacity as kaitiaki.
- Mana Whenua – Our right to exercise authority over our rohe and the resources therein.
- Mauri – Protection of the 'life force' contained in all places, species, minerals, ecosystems in our rohe. It can also be understood as a measure of the health and vitality of those elements.
- Tikanga – To retain the traditions of our tupuna in all our operations.

The plan seeks to use the following methods to incorporate cultural values and objectives into RMA processes:

- Cultural Impact Assessments.
- Cultural Values Assessments.
- Cultural Health Monitoring.
- Sites of Significance Mapping.

The plan identifies that Patuharakeke have adopted various structures over the past two decades to better enable their participation in policy and planning including formation of the Patuharakeke Te Iwi Trust Board (PTITB).

Strengthening existing relationships and creating new meaningful ones are a key focus of the document and there are several issues, objectives, policies, and methods relating to this.

The plan identifies a range of resource issues and contains issues, objectives, policies, and methods in respect to each of these. The identified resource issues are as follows:

- Recognition of Kaitiakitanga
- Te Tiriti o Waitangi
- Kaitiaki Monitoring tools – Patuharakeke must be involved in the monitoring of all aspects of the health of their rohe.
- Ranginui including:
 - Discharges to air
 - Climate change
- Papatuanuku including:
 - General matters
 - Marae and Kainga
 - Maori Land Rating
 - Soil and Minerals
 - Vegetation clearance and commercial forestry
 - Subdivision and development
 - Utilities, amenities and infrastructure
 - Public access
 - Overseas investment and purchase of land
 - Waste management
 - Genetic engineering
- Wai Maori
- Tane Mahuta
- Waahi Tapu me Waahi Taonga
- Tangaroa including:
 - Coastal water quality
 - Foreshore and seabed
 - Access to the coastal environment

- Offshore oil exploration and mining
- Industrial activities at poupouwhenua
- Marine mammals
- Customary fisheries
- Aquaculture

These matters have been encapsulated in the Patuharakeke CVA and CEA included with this application.

4.2.7 Marine and Coastal Area (Takutai Moana) Act 2011

There are multiple (35) applicant groups that have applied for Customary Marine Title (CMT) under the Marine and Coastal Area (Takutai Moana) Act 2011 (MACA) (see **Appendix 8** for a full list of the claimants).

No CMT has currently been confirmed in the project area, and there are currently no planning documents prepared by a customary marine title group that would be relevant under clause 3(c) of Schedule 4 of the RMA.

4.2.8 Treaty of Waitangi claims

All three groups are known to have treaty claims in the project area.

4.3 Existing port activities

4.3.1 General

Northport handles a significant share of the region's export trade. Current port uses are shown spatially on the plan in **Figure 24** below and are described generally as follows:

- Log marshalling (approximately 46% of the port area).
- Container handling (approximately 15% of the port area).
- Multi cargo (approximately 12% of the port area).
- Woodchip (approximately 5% of the port area).
- LVL (approximately 3% of the port area).
- Coal (approximately 2% of the port area).
- Other wood products (approximately 1% of the port area).

- Agricultural imports (approximately 1% of the port area).
- Admin (approximately 10% of the port area).



Figure 24: Existing port uses (Source: ME)

Northport has traditionally focused on handling high volume, low value trade goods. This is mostly raw primary outputs for exports (logs and woodchip) or raw primary inputs that are imported to support production (agriculture and cement). However, the port also handles some high value goods including engineered timber, horticulture products and marine products. There have also been one-off imports of specialist machinery/vehicles and construction products (e.g. steel for the Auckland Convention Centre).

More recently Northport has handled several large container ships to assist in alleviating congestion at Ports of Auckland, including the 261m container ship *Constantinos P* and the 294m *Tianjin Bridge* (see **Figure 25** below).



Figure 25: Tianjin Bridge docked at Northport (January 2021)

4.3.2 Cargo types and storage

Cargo types handled by Northport will vary over time according to demand and supply in various markets around the world. It is expected that the type of cargo may broaden (i.e. cars, cruise ships) and that containers will become a larger part of the Northport freight mix.

A summary of existing cargoes handled by Northport is provided below.

Containers

Northport already handles container-based freight and will continue to do so. Construction of the already consented Berth 4 and the associated reclamation will increase the capacity for container handling at Northport, as will the eventual installation of ship to shore cranes.

Current containerised export cargoes include LVL (laminated veneer lumber), packaged timber, tri-board and veneer, kiwifruit, and bagged cement.

Containers have standardised dimensions meaning that they can be stacked (see **Figure 26** below).



Figure 26: Stacked shipping containers (six high)

Logs

Logs account for a significant percentage of the bulk cargo currently handled by Northport.²⁴ Logs are stored on the port in preparation for export, and ultimately loaded onto ships via ship-mounted cranes (see **Figure 27** below). Logs are currently exported to China, India and Korea.

Log exports are expected to reduce in the medium term due to the current stage of the Northland harvest cycle.



Figure 27: Log storage at Northport

²⁴ In 2018 and 2019 log exports accounted for 78% of the bulk cargo throughput at Northport ([Source](#): MMH announcement to NZX 29/08/19).

Woodchip

Woodchip is stored on the port in preparation for export to Japan (see **Figure 28** below). The chip is loaded onto ships via a conveyor system.



Figure 28: Woodchip and intake conveyor at Northport

Other bulk cargo

Dry bulk import cargoes currently handled by Northport include clinker from Japan, gypsum from Thevenard, coal, and animal feed supplements (including molasses, distillers dried grain, palm kernel expeller, and soy).

Future cargoes

As previously stated, future cargoes will depend on future markets. However, foreseeable port cargoes include imported vehicles, cruise ships (passengers), and bulk liquids. High value containerised horticulture exports (such as kiwifruit, avocados, berries and pipfruit) are also expected to increase. Northport's changing freight tasks and opportunities to diversify are outlined in the Issues and Options report at **Appendix 2**.

4.3.3 Shipping operations

Northport is among the most modern ports in New Zealand. It is the country's only port constructed entirely under the RMA framework. Although originally primarily built for the export of forest products from Northland, Northport is a flexible multipurpose facility catering for a range of cargoes and their associated vessel types.

There are three companies running regular port shipping operations in the Whangarei Harbour. These are Northport and CINZL (both based at Marsden Point), and Golden Bay Cement (based at Portland).

Northport is currently a three-berth facility capable of handling ships with up to a 13m draft. The three oil jetties serving CINZL (to the east of Northport) are capable of handling tankers with a deadweight of up to 150,000 tonnes and with a maximum draft of 15.2m. Portland Cement Terminal has one jetty which serves the Golden Bay Cement Company cement works. One specialised bulk cement vessel uses this facility on a regular basis.

An analysis of shipping movements in the harbour between 2014 and 2020 shows that (on average) there are approximately 24 weekly movements involving vessels over 500 gross tonnes (12 in and 12 out).²⁵ Approximately 12 of these are related to Northport, approximately 8 are related to CINZL,²⁶ approximately 3 are related to Golden Bay Cement, and less than one movement can be attributed to the upper harbour (Port Nikau).

All vessels that visit Northport exceed 500 gross tonnes and so must be piloted.²⁷ Piloting operations are carried out by NTL. Ships are turned in the swing basin adjacent to Northport before berthing (see **Figure 29** below).

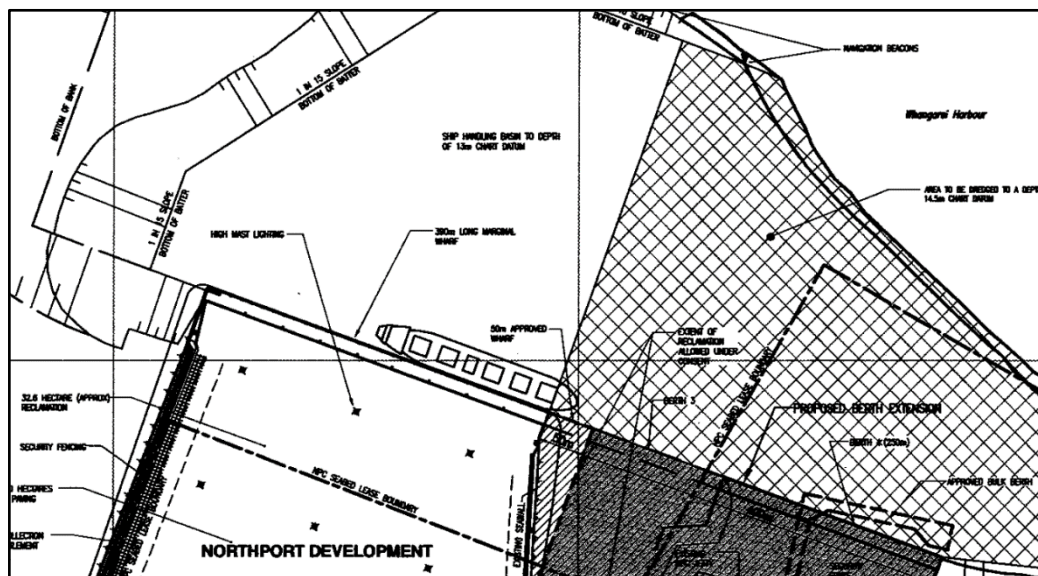


Figure 29: Ship turning (swing) basin (Source: NRC consent AUT.005055.23.01)

The NRC oversees the Whangarei Harbour Safety Management System (WHSMS), which implements the national legislative and policy framework at the regional level. The NRC can and does delegate its functions under the WHSMS. Specifically, Northport has delegated responsibility for:

- Aids to navigation;

²⁵ This excludes smaller craft such as maintenance and fishing vessels.

²⁶ Movements associated with the import terminal are similar to the movements associated with the refinery.

²⁷ *Maritime Rules: Part 90: Pilotage*, Maritime New Zealand (13 December 2019).

- Hydrographic surveys and maintenance dredging; and
- Local navigation information in Whangarei Harbour.

Also, NTL has responsibility for the provision of pilotage and towage in Whangarei Harbour.

4.4 Surrounding land environment

4.4.1 Marsden Maritime Holdings Industrial Land

There is 185ha of industrial land owned by Marsden Maritime Holdings Ltd (MMH)²⁸ adjoining the southern boundary of Northport (see **Figure 30** below).



Figure 30: Marsden Maritime Holdings Ltd overall landholding (excluding Marsden Cove)

Much of this land is yet to be developed and is currently being grazed. However, the land immediately adjacent to the port has been developed and leased by MMH to a range of different businesses (see **Figure 31**).

²⁸ MMH owns 50% of Northport.



Figure 31: Marsden Maritime Holdings Ltd existing industrial development adjacent to Northport

The activities carried out on the MMH lease land include:

- Grain storage.
- Construction company headquarters.
- Log scaling.
- Log processing (debarking).
- Concrete batching plant.
- Plastics manufacturing.
- Various commercial activities.

4.4.2 Channel Infrastructure NZ

Immediately opposite the MMH land on the eastern side of SH15 is the Channel Infrastructure New Zealand (CINZL) fuel import terminal (see **Figure 32** below).



Figure 32: CINZL terminal (note Matukaroro Island in the foreground and Northport to the west)

CINZL imports refined fuels and distributes them throughout Northland and Auckland, largely via a purpose-built 170-kilometre pipeline to a storage terminal in Wiri (South Auckland), and then distribution by road or by further pipeline to Auckland International Airport.

4.4.3 Other industrial uses

There are a range of other industrial uses on land near the port. These uses include:

- BOC and Air Liquide CO₂ plants (CINZL owned land).
- Sand mining (Hansen Earthworks and Drainage).
- Timber storage and manufacturing (including the Carter Holt Harvey LVL mill).

There is also a consented (but not yet constructed) 31ha solar farm on CINZL land to the south of the CINZL facility between Mair Road and Rama Road.

4.4.4 Rural Uses

Almost all the MMH land on the southern side of Marsden Bay Drive is currently being grazed. The exception to this is the boat hardstand facility adjacent to the Marsden Cove Marina, and an adjacent small-scale commercial and industrial development.

4.4.5 Residential communities

There are several residential communities in the vicinity of Northport. These communities are shown on the plan in **Figure 33** below.

On the southern side of the harbour is the residential area of One Tree Point (including Albany Road and the Marsden Cove waterways development). On the northern side of the harbour are the residential areas of McLeod Bay, Reotahi, Taurikura, and Urquarts.

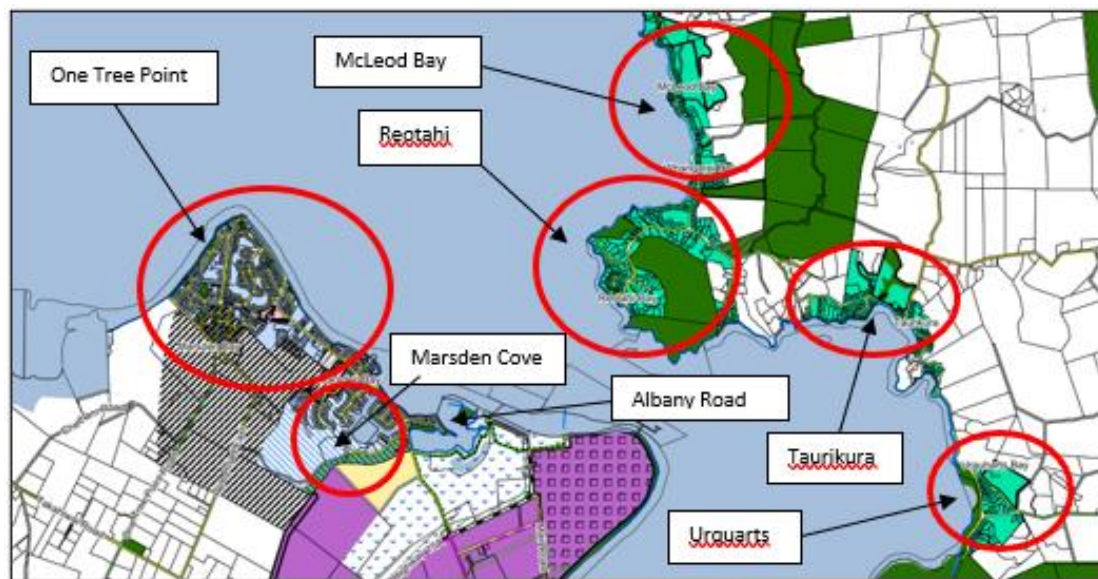


Figure 33: Residential communities in the surrounding environment (Source: Operative Whangarei District Plan)

4.5 Coastal processes

4.5.1 General

The existing environment for coastal processes has been identified by Tonkin and Taylor (T+T) with the technical assistance of Met Ocean (MO). The conclusions from the T+T report are summarised below. Further detail is provided in the T+T report in **Appendix 10**.

4.5.2 Channels and sand banks

The Whangarei Harbour is accessed through a natural tidal channel which varies in depth from – CD 14.7m to 32m at its deepest point. Home Point and Busby Head define the outer limits of the main channel. The existing harbour bathymetry (water depth) is shown in **Figure 34**.

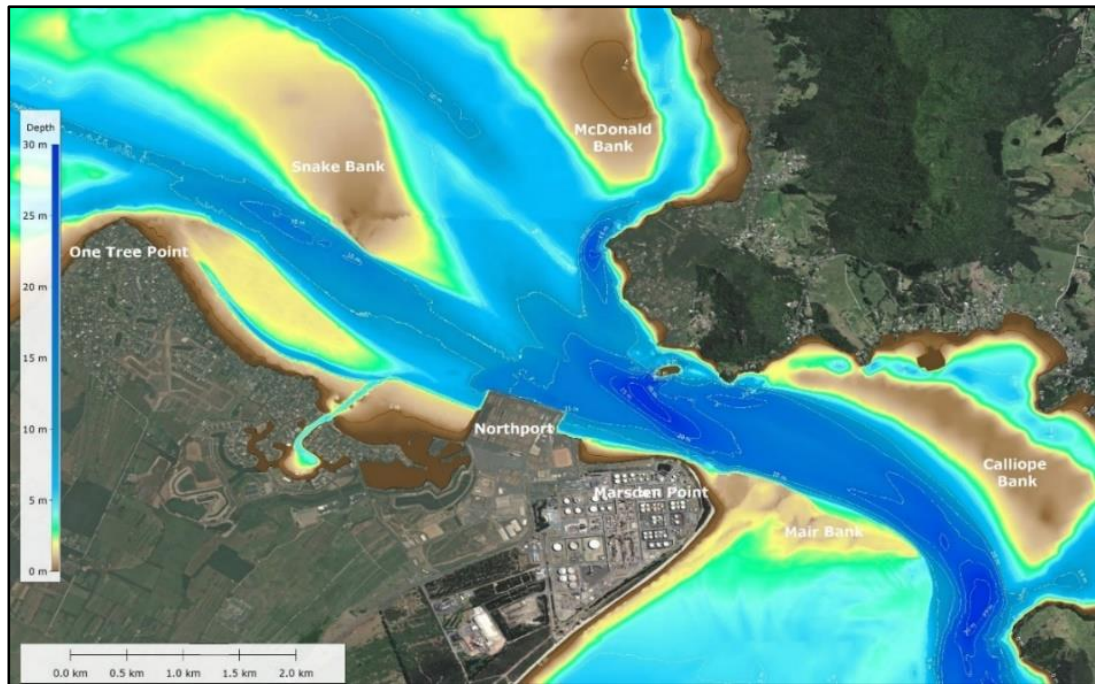


Figure 34: Existing Harbour bathymetry (MSL) (Source: Met Ocean)²⁹

The harbour entrance channel is flanked by Mair Bank to the south and Calliope Bank to the north. Snake Bank is located to the north-west of Northport. Sand from this bank is continually being mobilised, along and off the end of the bank, and deposited into the swing basin. This has resulted in the (recent) need for maintenance dredging in the Northport swing basin.

4.5.3 Marsden Cove Marina entrance channel

The artificially constructed Marsden Cove Marina entrance channel is located 750 to the west of Northport (see **Figure 35** below). Marsden Cove incorporates a 230-berth marina and surrounding residential development. Additional canal and associated residential development are currently under construction.

²⁹ Predicted morphological response to proposed capital dredging and land reclamation, April 2018 (Met Ocean – Appendix 9).

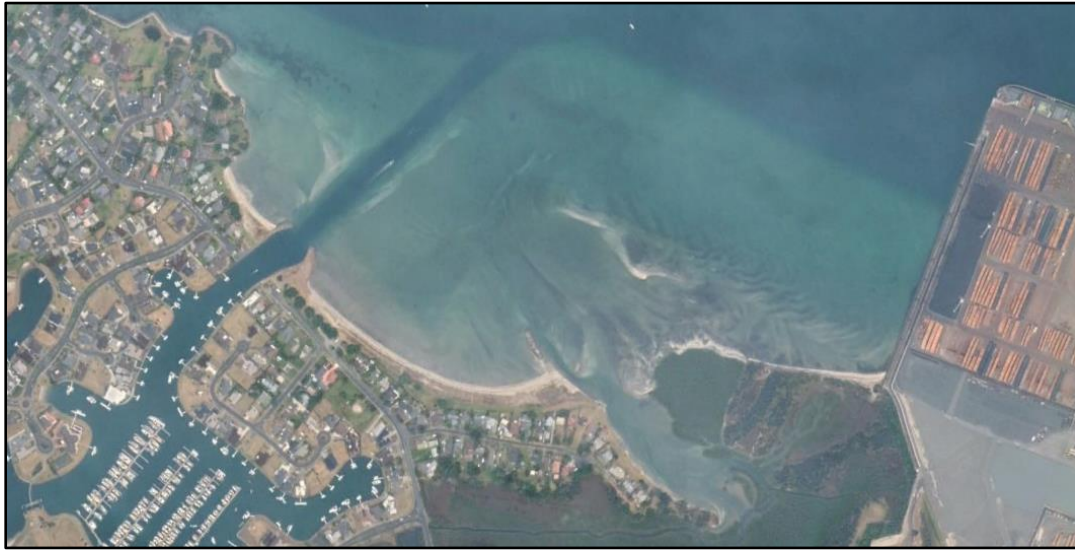


Figure 35: Marsden Cove entrance channel (Source: Google Earth)

4.5.4 Hydrodynamic and morphological setting

Whangarei Harbour is a meso-tidal³⁰ 98km² drowned river valley.

The harbour is relatively shallow due to extensive intertidal flats.³¹

The harbour is accessed through a relatively narrow tidal inlet which is around 790 m wide and 32 m deep at its deepest point. The inlet is bounded by tertiary volcanic rocks on the northern side and a Holocene prograded sandy barrier spit on the southern side (Marsden Point).

The inlet channel separates a large ebb tide delta that extends seaward to around the 20 m depth contour. Mair Bank is situated on the southern side of the channel, with Calliope Bank on the northern side. Snake Bank and McDonald Bank are the two main flood-tidal deltas located within the harbour upper harbour area (see **Figure 36**).

³⁰ 2-4m tidal range.

³¹ 58% of the high tide area is made up of inter-tidal flats.

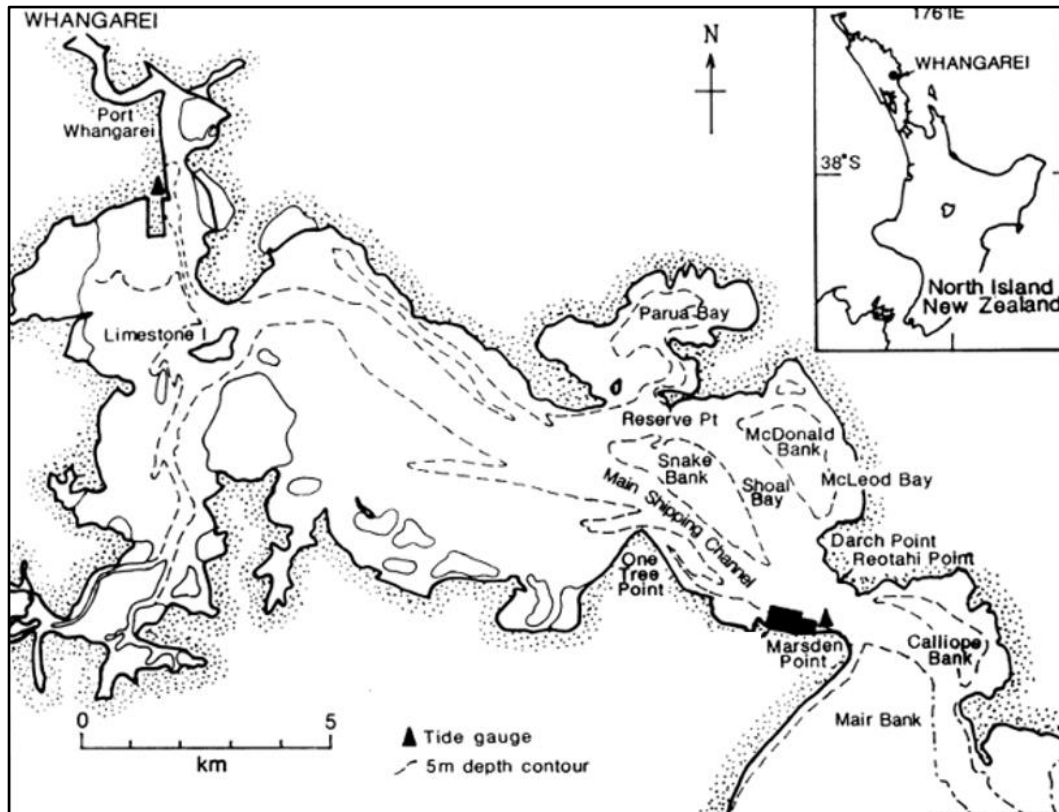


Figure 36: Location of shoals and banks

4.5.5 Sediment data

Seabed

The sediments in the vicinity of Northport are predominantly fine to medium sands with a reasonable proportion of shell, and a small quantity of silts and clays (see **Figure 37**).

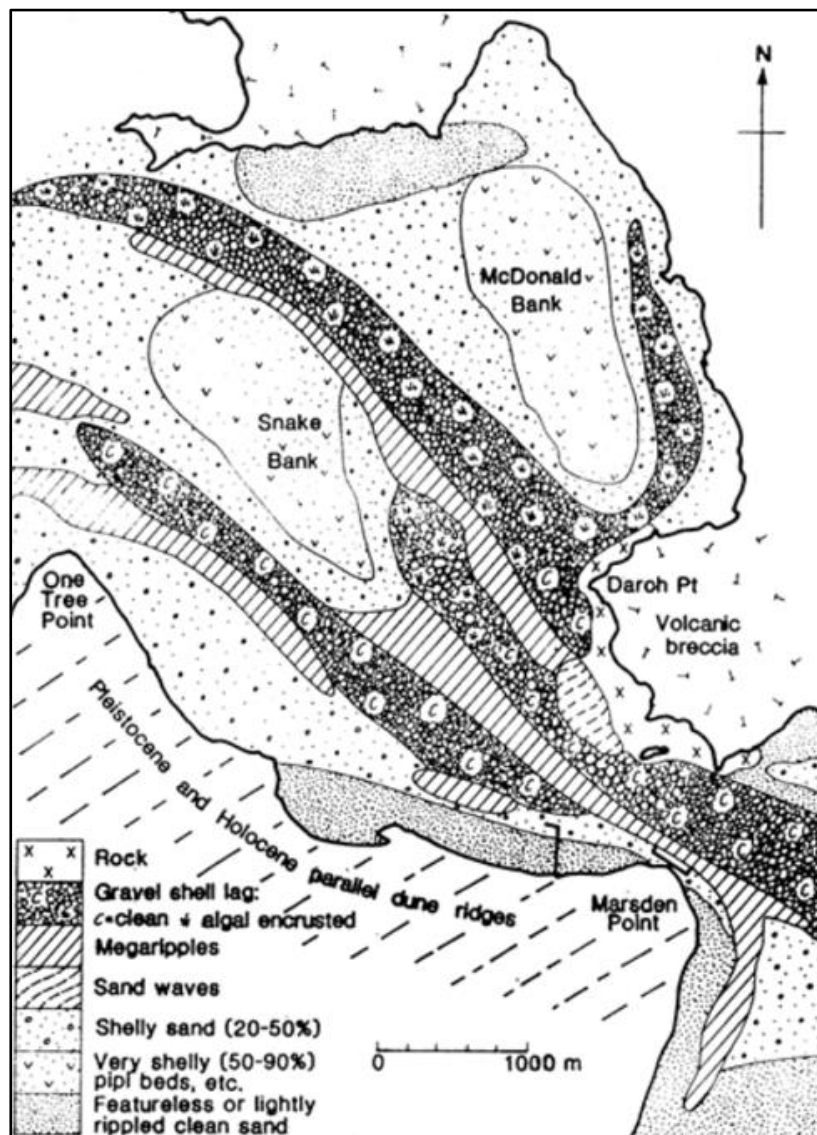


Figure 37: Sediment facies for Whangarei Harbour

Suspended sediment

Based on sampling in 2008 and 2009, average suspended sediment values of around 6 mg/L occur on the intertidal areas of the harbour seabed, and within the channel and ebb tide shoal areas.

4.5.6 Bathymetry (depth)

Northport has undertaken an extensive bathymetric monitoring program of the access channel, swing basin, and berths over the last two decades. The purpose of the monitoring is to assess the naturally occurring morphological response (including sedimentation) and to confirm that the required navigable depth is available. Hydrographic surveys using single and multi-beam echo-sounders have been conducted annually, with data available for the period 2006-2022. The bathymetry map for 2022 is shown in **Figure 38** below.

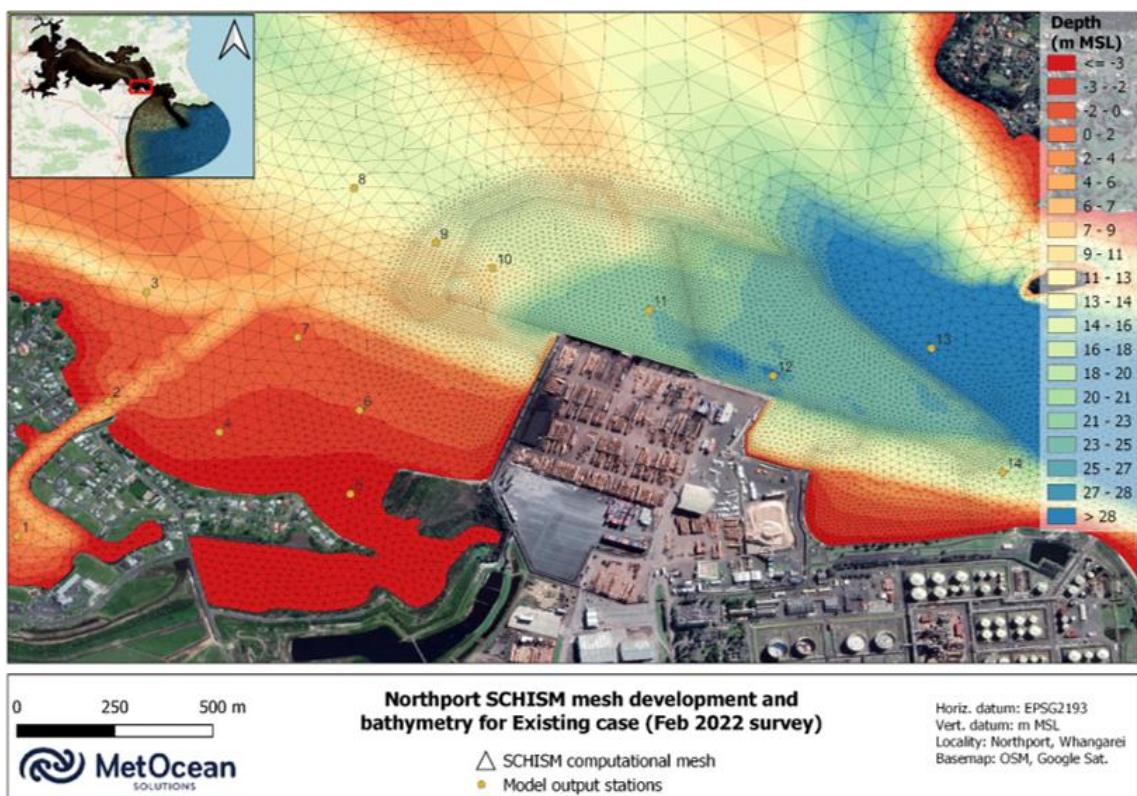


Figure 38: Existing bathymetry

As shown on the map in **Figure 38**, the harbour depth in the vicinity of Northport varies between 14.7m and 32m as per the 2022 data.

4.5.7 Current velocities

Current velocities in the vicinity of Northport vary between ebb (outgoing) and flood (incoming) tidal stages. During outgoing tidal stages, current velocities tend to be stronger adjacent to the port berths and within the swing basin as the harbour drains through the main channel linking the harbour entrance to the inner Whangarei harbour. Conversely, during incoming tidal stages current velocities are stronger on the north side of the harbour and aligned with the main entrance channel (see **Figure 39** below).

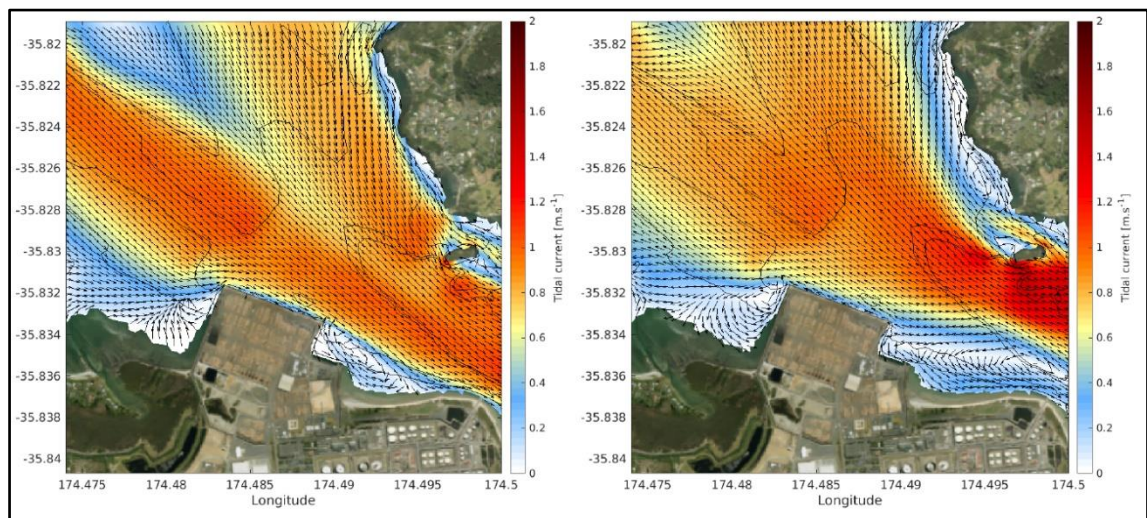


Figure 39: Modelled peak ebb (left) and flood (right) flows in the vicinity of Northport

Tidal current velocities gradually decrease up-harbour, from a peak around 1 m/s (≈ 2 knots) at Marsden Point to 0.8 m/s (≈ 1.5 knots) at Limestone Island. Tidal streams are strongest in the area adjacent to Home Point southeast of Marsden Point, where rates up to 1.5 m/s (≈ 3 knots) may be experienced. The constricted tidal inlet results in currents reaching peak depth-averaged velocities of 1.1-1.3 m/s (≈ 2.1 to 2.3 knots) during spring tides at Marsden Point.

Met Ocean modelling predicts only very slight differences between current velocities for the existing harbour configuration and the harbour configuration assuming the exercise of the CINZL channel deepening consent.

4.5.8 Sediment transport

There is evidence of sand wave migration from Snake Bank into the port area, and some local scour and deposition around the faces and corners of the port reclamation (see **Figure 40** below).

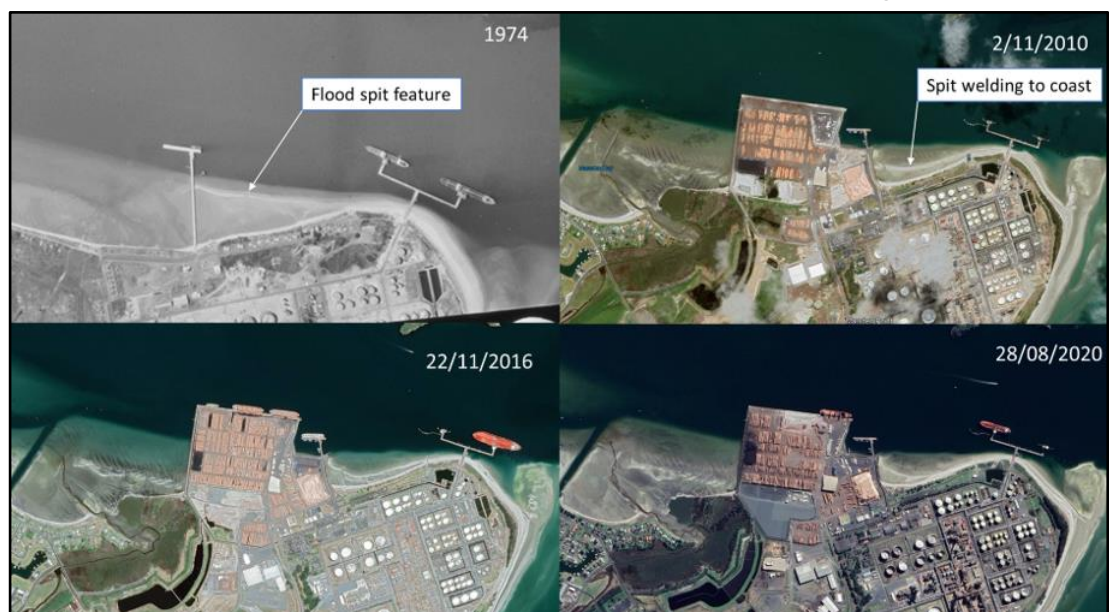


Figure 40: Satellite and aerial photograph imagery showing morphological change adjacent to Northport

4.6 Marine ecology

4.6.1 General

The present environment for marine ecology (excluding marine mammals and avifauna) has been investigated by Coast and Catchment (C+C) with technical assistance from 4Sight. The conclusions from the C+C report are summarised below. Further detail is provided in the C+C report in **Appendix 11**.

4.6.2 Ecological setting

The consolidation, review, and analysis of existing information, together with the data gathered through quantitative surveys and rapid intertidal and subtidal video surveys, illustrates that the harbour ecological system is made up of at least four distinct zones being:

- The outer harbour and entrance including flood and ebb tide deltas, a channel complex, and relatively narrow intertidal sandflats;
- Parua Bay, on the northern shore of the harbour, which is a largely enclosed, sheltered, depositional inlet;
- The mid-harbour between the shell bank that historically traversed the main channel and Limestone Island, with its broad intertidal and subtidal flats, and channel system;
- The sheltered upper harbour, that splits into Hātea and Mangapai Rivers which narrow upstream and become increasingly influenced by freshwater inputs and adjoining landuses.

Northport sits within the Outer Harbour Ecological Zone (OHEZ) (see plan in **Figure 41** below)

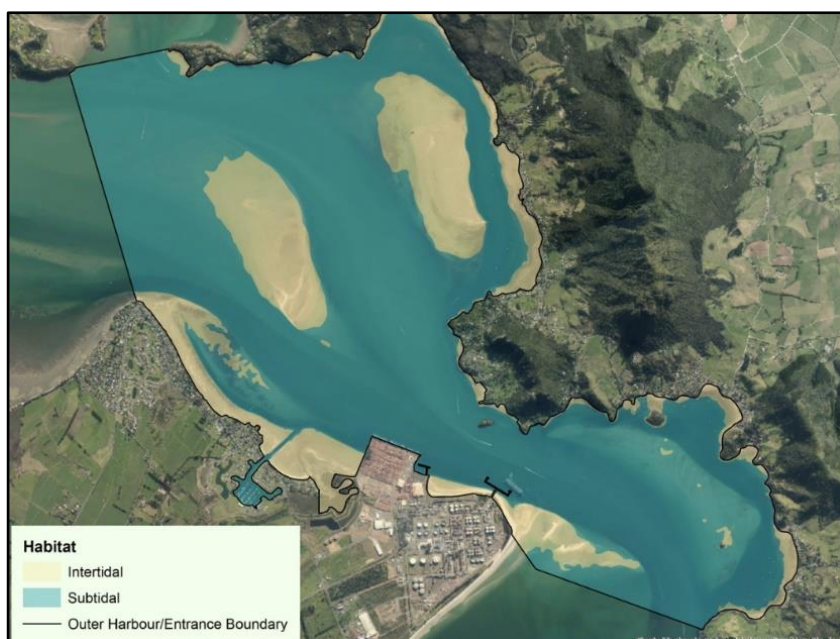


Figure 41: Outer Harbour Ecological Zone (OHEZ)

The OHEZ is a discrete and ecologically significant system. It includes flood and ebb tide deltas, a channel complex, and relatively narrow intertidal sandflats. It is a complex zone subject to strong currents with around 610 ha above chart datum (CD) and 1970 ha below CD. It contains diverse physical habitats, extensive areas of biogenic habitat (including extensive shell gravel beds, seaweed meadows, seagrass beds, sponges, horse mussels, scallops, and significant beds of other shellfish). This is reflected in the high diversity of ecological taxa in that zone. The coastal margin and central area of this zone almost completely consists of mapped Significant Ecological Areas (SEAs) and a marine reserve, with areas that have not been mapped as SEAs mainly consisting of subtidal channels.

4.6.3 Assessment methodology

As described in detail in the C+C report (**Appendix 11**) ecological values were assessed through the following methods:

- A literature review.
- The analysis of relevant, available data.
- A qualitative intertidal survey of Marsden Bay.
- A rapid quantitative intertidal survey of Marsden Bay.
- A video survey of subtidal habitats around Northport.

A summary of the fieldwork undertaken by 4Sight is provided in **Appendix 29**.

4.6.4 Mapped ecological areas

There are several ecological overlay zones in the vicinity of the existing port being a Significant Ecological Area (SEA), Significant Bird Area (SBA) and Significant Marine Mammal and Seabird Area (SMMSB) (see **Figure 42** below).

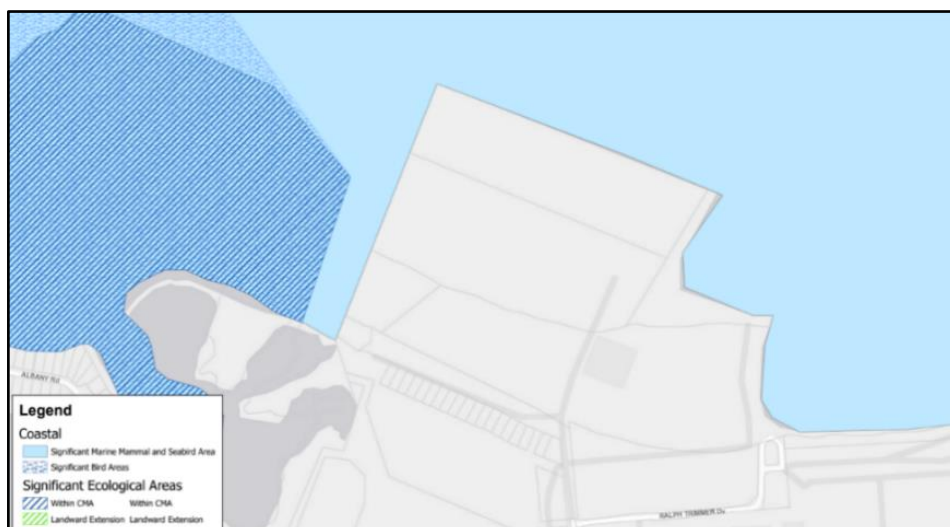


Figure 42: Proposed Regional Plan (Appeals Version) planning map excerpt (ecological area overlays)

4.6.5 Marine reserve

On the opposite side of the harbour to Northport (approximately 670m to the northeast) is the Motukaroro Marine Reserve (see **Figure 43**). The reserve is a mix of sandy beach, rocky reef and small high-current outcrops including Matukaroro/Passage Island.

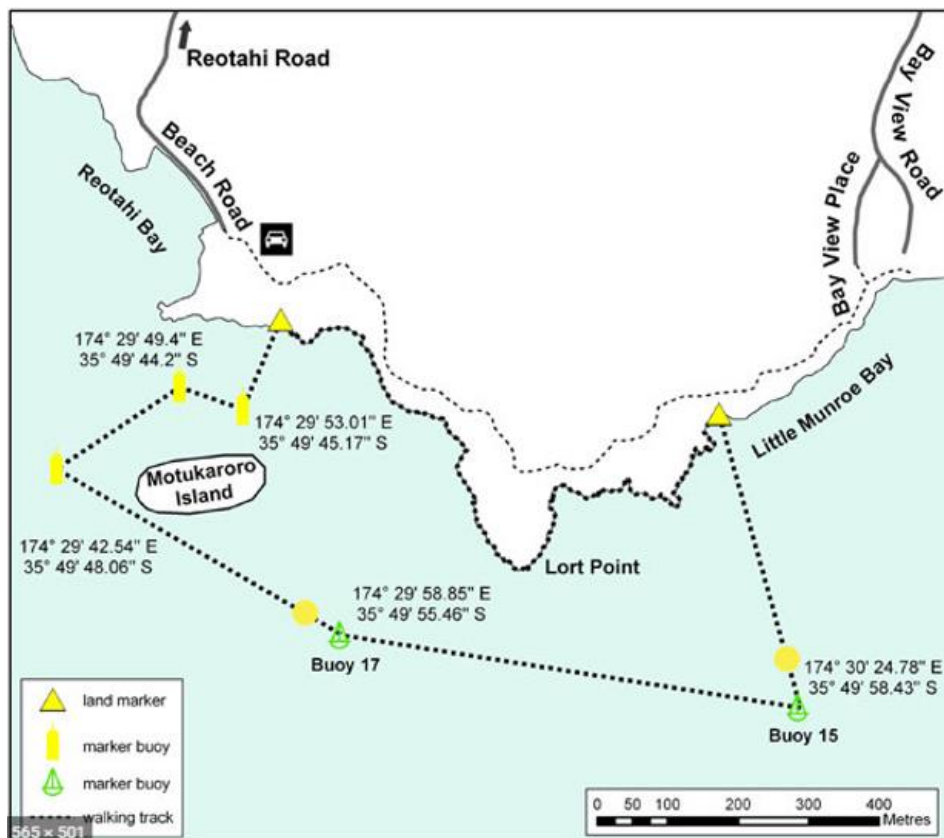


Figure 43: Matukaroro Marine Reserve (*Source: Department of Conservation*)

4.6.6 Coastal vegetation

General

The most conspicuous marine plants in the Whangarei Harbour are the dense stands of mangroves that line a large proportion of the southern and upper harbour shores. However, no mangroves are present to the east of Northport (see **Figure 44**).

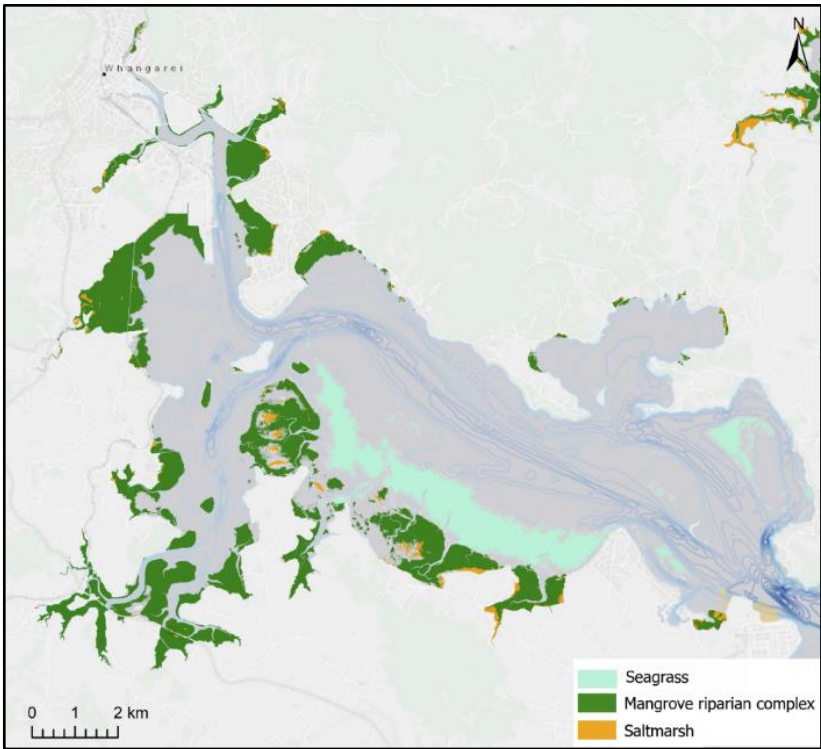


Figure 44: Seagrass, saltmarsh, and mangrove extents in the Whangarei Harbour (Source: NRC, 2015)

Seagrass (*Zostera muelleri*) is abundant on the intertidal flats between One Tree Point and Northport), including patches within, and near, the proposed development area (see Figure 45 below).

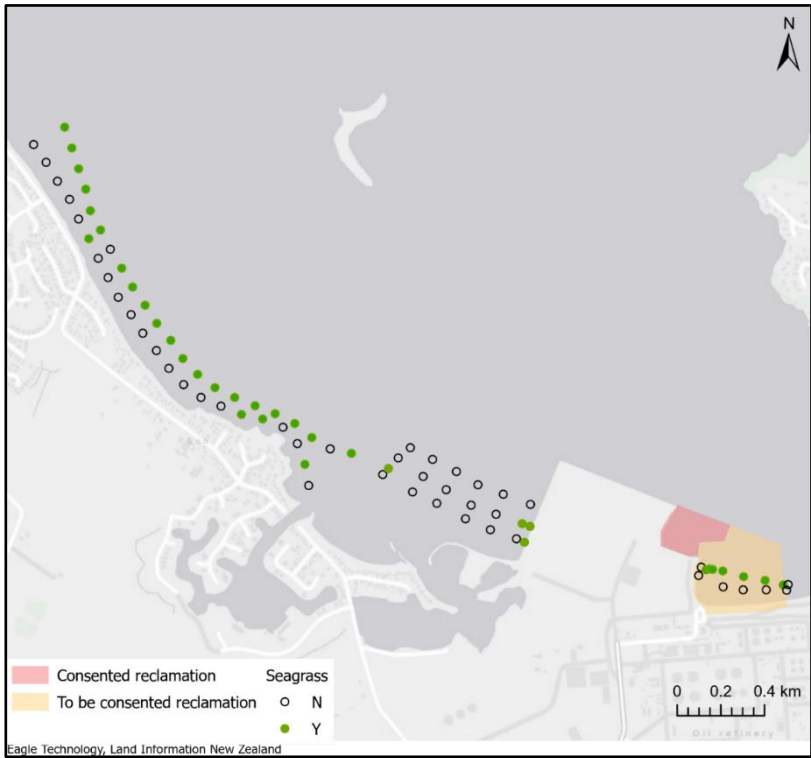


Figure 45: Seagrass within the proposed expansion footprint

Threatened or at-risk species

Seagrass is listed as an “At Risk” species under the New Zealand Threat Classification System (NZTCS) due to the seagrass population being very large, but subject to low to high ongoing or predicted decline. It is a non-endemic species that is secure overseas, and experiences extreme population fluctuations.

4.6.7 Macroalgae

General

Natural rocky habitats and associated macroalgae communities are a relatively minor feature of the Whangarei Harbour. Intertidal and subtidal reef surveys at the outer harbour and surrounding Bream Bay area indicate they contain typical macroalgae assemblages, with seaweed species.

While natural rocky reefs are not present in the Northport area, the Port revetments provide hard artificial reef structures similar to natural reefs. Surveys of these revetments indicate that they have been colonised by common macroalgae.

There are also macroalgal communities in the sediment habitats (known as macroalgae meadows). Macroalgae meadows were one of the key ecological features observed in video footage during the recent video survey around Northport.

Threatened or at-risk species

Four of the taxa in the outer Whangarei Harbour have been listed as at risk under the NZTCS. These are:

- *Microdictyon mutabile*, an endemic green seaweed that inhabits the mid to low intertidal on sheltered, gently sloping rocks in Northern New Zealand, where it forms extensive undulating pads. Locations where it is known to be present in Auckland, include Rangitoto Island, Howick, Birkenhead, Archilles Point, Point Resolution (Parnell), Torpedo Bay (Devonport), The Tor (Waiake Beach), Stanmore Bay, Army Bay (Whangaparāoa), Flat Roch (Tawharanui), Motutapu Island, Motuihe Island, The Noises, Hobbs Bay (Tiritiri Matangi Island), Great Barrier Island, and Kaikoura Island.
- *Feldmannia mitchelliae*, a filamentous brown seaweed that is little known and poorly studied in New Zealand but is widespread internationally
- *Hincksia granulosa*, a filamentous brown seaweed that is little known and poorly studied in New Zealand but is widespread internationally, particularly in temperate seas.
- *Aeodes nitidissima*, a red seaweed that grows on rocks in the low-intertidal subtidal, on open coasts and harbours. It is reported as being widespread, with a New Zealand distribution of Three Kings Islands, North Island, South Island, Stewart Island, Chatham Island, Auckland Island and Campbell Island.

None of these species are known to be located in the expansion footprint.

4.6.8 Benthic macrofauna

Sediment dwelling communities

Sampling carried out in 2020 (see **Figure 46** below for locations) characterised the intertidal sand flats surrounding the port as having high benthic diversity, with numbers of individuals varying between low to moderately high.

Polychaete worms were the most abundant and diverse taxa group, followed by crustaceans and molluscs. Investigations indicated that taxa were patchily distributed around the harbour with high abundances at some sites and low or zero counts at others.

The intertidal benthic community in Marsden Bay, including the Marsden Cove–One Tree Point SEA to the west of Northport, is similar to that found at sites in other northern, southern, and upper harbour SEAs. Finer scale intertidal sampling has confirmed that the area around the port is characterised by high benthic diversity with variation along and down the shore, and differences between the western and eastern sides of Northport.



Figure 46: Location of the qualitative and quantitative intertidal survey locations

Subtidal sampling has also shown that the seabed around the port contains a very diverse assemblage of benthic macroinvertebrates. Similar numbers of taxa were obtained in two recent

subtidal surveys of the outer harbour/harbour entrance.³² It is considered highly unlikely that any of the taxa in the proposed expansion footprint is unique to the proposed reclamation area.

Overall, the macrofaunal diversity in intertidal and subtidal benthic habitats around the port is high, with taxa diversity and abundance lower on the eastern side of the port.

Subtidal epibenthic communities

The mid-to outer harbour contains a variety of physical seabed and biogenic habitats. Habitat forming macro-faunal species include horse muscles, green lipped mussels, dog cockles, sponges, ascidians, and dead shell.

A subtidal video survey carried out in November 2021 indicated that the ecological values of subtidal seabed habitats and communities around Northport were generally high, and largely consisted of patchy and/or contiguous sand and biogenic features including:

- Extensive areas of shell;
- Macroalgae meadows;
- Areas that are almost completely covered with a variety of sessile organisms including macroalgae, sponges, bryozoans, hydroids, and other invertebrates;
- Numerous small holes and sediments, which are likely to be worm tubes, shellfish siphons, and/or crustacean burrows.

Large biota observed included starfish, horse muscles, scallops, cushion stars, and anemones, turret shells, Mediterranean fan worm, hydroids, and bryozoans.

A transect through the proposed reclamation area displayed clear changes towards the shore with the habitat in the outer transect consisting of sand with little epibiota, the central transect consisting of sand with patches of red algae densely packed with turret shells, scattered starfish, algae, sponges, and an octopus den, and the inner transect consisting of bare sand with numerous cushion stars.

The seafloor of the previous dredged area was almost completely covered with a variety of sessile organisms including sponges, bryozoans, hydroids and macroalgae. Other parts of the previously dredged area contained a mix of sand, scattered and dense shell, and biogenic species such as red algae and sponges.

Shellfish

Cockles

Cockles are known to be widespread in the Whangarei Harbour. The highest densities have been recorded at Marsden Bay and McLeod Bay.

³² Kerr & Grace (2016), West and Don (2016).

The benthic survey conducted in November 2021 found moderate to very high abundances of cockles on the mid-shore across the entire length of Marsden Bay (including some in the area to the east of Northport), with the highest densities found near the entrance to Marsden Cove Marina. Almost all of the cockles found were below harvestable size of 30 mm (see **Figure 47**).

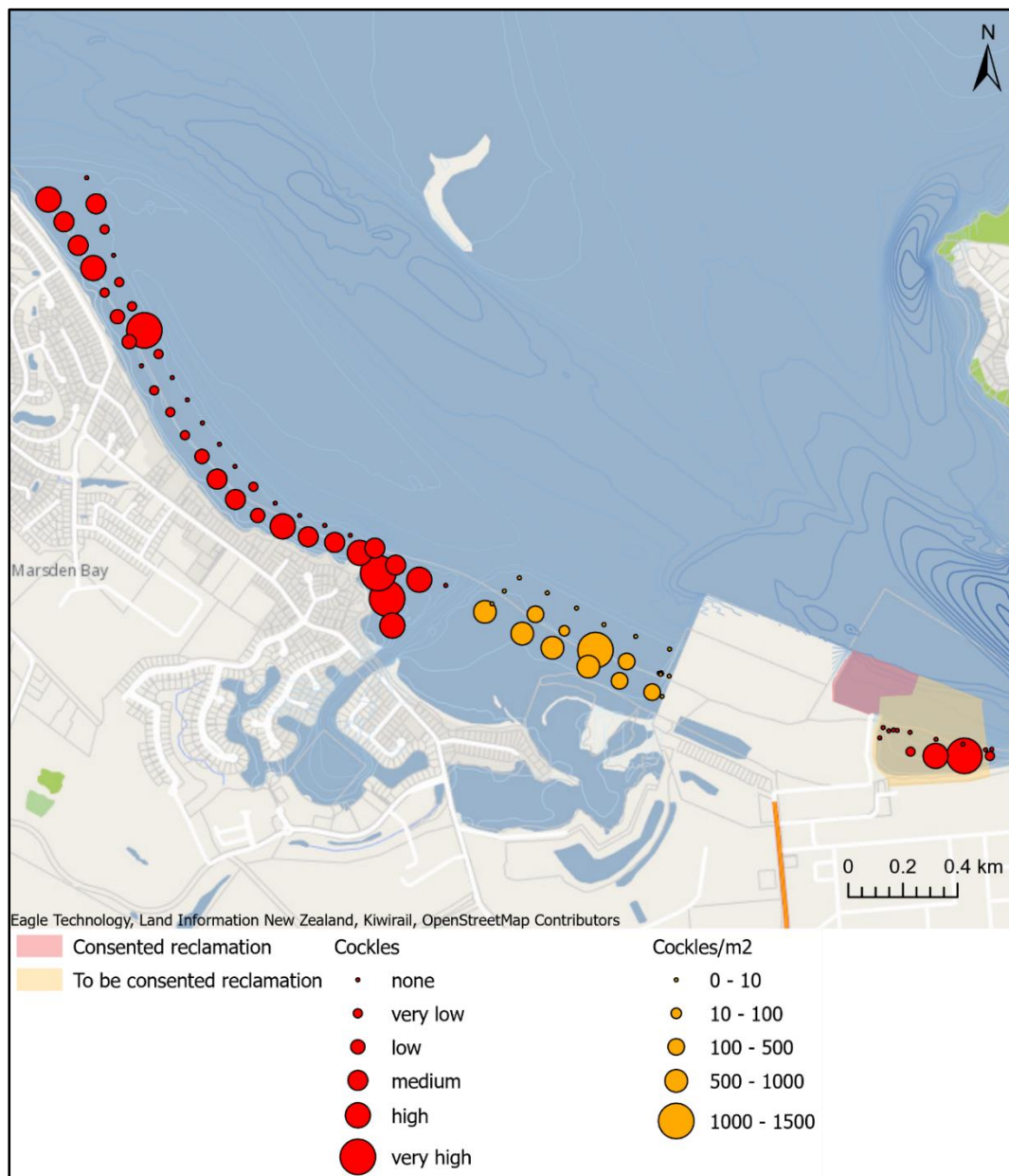


Figure 47: Abundance of cockles in Marsden Bay (November 2021)

Pipis

Based on surveys of Marsden and Mair Banks between 2013 – 2019, pipis have a very patchy distribution with low numbers of large harvestable (<50 mm) pipi.

Juvenile pipis were found at several sites in the mid-to outer harbour, with highest densities found Marsden Bay and the western side of Northport (although few were of harvestable size (>50 mm).

No pipi were found to the east of Northport (see **Figure 48**).



Figure 48: Abundance of pipi in Marsden Bay (November 2021)

Scallops

There are large scallop beds found in various parts of the harbour, including on the sand flats at Takahiwai, in Marsden Bay, in Shoal Bay (between McDonald and Snake Banks), from McLeod Bay along the inside channel as far as Parua Bay, in the channel between Limestone and Rat Islands, and in and around the harbour entrance. Recreational scallop dredging occurs frequently in these areas. However, due to declining numbers, there is currently a temporary closure in place imposed by the Minister of Oceans and Fisheries.

Green-lipped mussels

Green-lipped mussels are reported to have been common in the channel adjacent to Mair Bank. However, they disappeared in the late 1960s due to commercial dredging. Another bed reappeared in 2015, however that too has almost completely disappeared due to intensive harvesting. The area is now subject to a rahui over the collection of shellfish.

Threatened or at-risk species

One top shell gastropod (*Cantharidus* sp.) and one bivalve (*Mysella* sp.) were recorded in the intertidal area within the reclamation footprint during a survey in 2020. While some species of *Cantharidus* and *Mysella* are listed as at-risk on the NZTCS, in both instances it is considered extremely unlikely that the species recorded in the expansion footprint are one of the at-risk species referred to in the NZTCS. The recorded species are very common around Northport (see recorded *Mysella* in **Figure 49** below).



Figure 49: *Mysella* sp. counts in the vicinity of Northport (June 22)

4.6.9 Reef communities

There is a limited amount of reef habitat in the Whangarei Harbour, with most occurring on the northern coastline towards the harbour entrance. Overall, species assemblages on natural Whangarei reef habitats are typical of those found in north-eastern New Zealand.

The Northport revetments are, in effect, narrow artificial reefs with similar habitat and community values to the naturally occurring reefs in the harbour. Macroalgae observed in the revetments included: *E. radiata*; *S. sinclairii*; *Carpophyllum flexuosum*; *Dictyota kunthii*; *Hildenbrandia* sp.; *Colpomenia* sp.; *Ralfsia* sp.; various species of red turfing algae; and crustose coralline algae.

A variety of common sponges, molluscs and echinoderms were observed growing on the revetments, along with compound and solitary ascidians, polychaetes including Mediterranean fan worm *Sabella spallanzanii* and the parchment worm *Chaetopterus* sp.

Crustaceans included low numbers of crayfish *Jasus edwardsii* and a reasonably diverse fish assemblage was also recorded with four species of triplefin and a range of other common reef species that included silver drummer *Kyphosus sydneyanus*; red moki cheilodactylus *spectabilis*; silver sweep *scorpius lineolata*; big eye *pempheris adspersa* and marble fish *Aplodactylus arctidens*. Other more cosmopolitan species included kingfish *Seriola lalandi*; trevally *Pseudocaranx dentex*; and parore *Girella tricuspidate*.

None of the reef species known to be present in and around the Northport revetments are listed as threatened or at risk.

4.6.10 Fish

A large variety of fish utilise the Whangarei Harbour. The most common species observed during the video survey by C&C were snapper, spotty, trevally, goatfish, leatherjacket, and parore, although the harbour is also known for a range of other species including jack mackerel, rig, eagle rays, grey mullet, sand flounder, trevally, yellow-belly flounder, kahawai, and kingfish. The video survey showed the abundance of snapper was significantly higher in biogenic habitats (horse muscles, seagrass, and sponges) compared to bare sediment or reef.

Fish communities around the Northport rock revetments appear to be similar to those that inhabit reefs in and around the harbour. These include leatherjackets, red moki, spotty, sweep, triplefins, kingfish, jack mackerel, two spot demoiselle, and goatfish.

None of the fish species recorded are listed as threatened or at risk.

4.7 Avifauna

4.7.1 General

The present environment for avifauna has been reviewed by Boffa Miskell (BML) with technical assistance from C+C and 4Sight. The conclusions from the BML report are summarised below. Further detail is provided in the BML report in **Appendix 13**.

4.7.2 General description of habitat

The Whangarei Harbour coast and river estuaries along Bream Bay have saltmarsh and mangrove communities that provide important breeding and feeding habitat for banded rail, fernbird, herons, and shag species. There are also several wading bird roost sites within the harbour, including Port Whangarei, Portland, Skull Creek, Takahiwai, Marsden Bay, Northern Harbour and Airport, and Ruakaka.

There are several islands within the Whangarei Harbour which provide habitat to several marine avifauna species. These include Matakohē/Limestone Island, located in the inner harbour, which contains a small population of breeding grey-faced petrel (*Pterodroma macroptera gouldi*; classified as *Not Threatened*). Also, little penguin, classified as *At Risk – Declining*, have been recorded breeding on several islands close to Northport, including High and Calliope Islands. White-fronted tern and red-billed gull have both been recorded breeding on Frenchman Island.

In regard to pelagic seabirds such as other petrels and shearwaters, the majority of species recorded have been using the open water habitat of Bream Bay rather than the Whangarei Harbour waters.

To the immediate east of Northport is a 750m beach bound to the east by the CINZL jetty. The landward extent of the coastal dune that runs behind this beach is approximately 20-30m wide, with the vegetation cover including spinifex, lupin and pohutukawa. The CINZL jetty has been noted as a key roosting area for white-fronted tern.

To the east of the CINZL jetty is Mair and Marsden banks. These have been identified as regionally significant shellfish beds. Birds are known to forage in these areas, with black-backed gull, red-billed gull and variable oystercatcher being the most abundant species recorded in the intertidal zone (although they were not identified as significant high tide roost areas).

4.7.3 Recorded species

A total of 73 bird species, comprising 21 introduced and 53 native species, have been recorded in the wider Whangarei Harbour area. Of the 53 native species, 37 are primarily associated with freshwater, coastal or oceanic habitats.

Of those, 19 species were recorded during the 4Sight surveys, including 4 species classified as *Threatened* and 11 classified as *At Risk*. These species are identified in **Table 5**, while the survey locations are shown in **Figure 50**.

Table 5: Native species recorded during 4Sight wading birds survey (2017/18, 2019/20 and 2021)

SPECIES		SPECIES CODE	THREAT CLASSIFICATION ³³
Reef heron	<i>Egretta sacra sacra</i>	RF	Threatened - Nationally Endangered
Caspian tern	<i>Hydroprogne caspia</i>	CTe	Threatened - Nationally Vulnerable
Northern NZ dotterel	<i>Charadrius obscurus aquilonius</i>	NZD	Threatened - Nationally Increasing
Wrybill	<i>Anarhynchus frontalis</i>	Wry	Threatened - Nationally Increasing
Banded dotterel	<i>Charadrius bicinctus bicinctus</i>	BDo	At Risk - Declining
Bar-tailed godwit	<i>Limosa lapponica baueri</i>	BtG	At Risk - Declining
Lesser knot	<i>Calidris canutus rogersi</i>	Lkn	At Risk - Declining
Red-billed gull	<i>Larus novaehollandiae scopulinus</i>	RbG	At Risk - Declining
South Island pied oystercatcher	<i>Haematopus finschi</i>	SIPO	At Risk - Declining
White-fronted tern	<i>Sterna s. striata</i>	WfT	At Risk - Declining
Pied shag	<i>Phalacrocorax varius varius</i>	Psh	At Risk - Recovering
Variable oystercatcher	<i>Haematopus unicolor</i>	VOC	At Risk - Recovering
Black shag	<i>Phalacrocorax carbo novaehollandiae</i>	BSh	At Risk - Relict
Little shag	<i>Phalacrocorax melanoleucos brevirostris</i>	LSh	At Risk - Relict
Royal spoonbill	<i>Platalea regia</i>	RSp	At Risk - Naturally Uncommon
Pied stilt	<i>Himantopus h. leucocephalus</i>	PSt	Not Threatened
Southern black-backed gull	<i>Larus d. dominicanus</i>	SBBG	Not Threatened
White-faced heron	<i>Egretta novaehollandiae</i>	WfH	Not Threatened
Eastern curlew	<i>Numenius madagascariensis</i>		Vagrant

**Figure 50** Bird survey locations³³ Robertson et al. (2017).

In summary:

- Northern New Zealand Dotterel (classified as *Threatened – Nationally Increasing*) have been recorded along much of the coastal margin from One Tree Point to the CINZL facility, as well as on the Northport site.
- International migrant waders, being bar-tailed godwit (*At Risk - Declining*) and lesser knot (*At Risk - Declining*) have been recorded primarily around the Blacksmith's Creek area, although a few godwit have also been recorded further west up to One Tree Point and to the east of Northport.
- Variable oystercatcher (*At Risk - Recovering*), South Island Pied oystercatcher (*At Risk - Declining*) and pied stilt (*Not Threatened*) have primarily been recorded to the east of Northport and adjacent to the Marsden Cove Marina channel.
- Gulls and terns have been recorded dispersed along the coast, with large concentrations of red-billed gull (*At Risk - Declining*) to the east of Northport.
- Reef Heron (*Threatened – Nationally Endangered*), White Faced Heron (*Not Threatened*) and spoonbill (*At Risk – Nationally Uncommon*) have been recorded in relatively low numbers and only along the coast west of Northport.
- Pied Shag (*At Risk – Recovering*), Black Shag (*At Risk – Relict*), and Little Shag (*At Risk – Relict*), have been recorded in low numbers and primarily associated with the port, though a few birds were recorded in the Blacksmith's Creek/Wildlife Refuge area.

4.7.4 Feeding resources

Intertidal communities within the Whangarei Harbour generally fall into one of three broad types being:

- Sheltered tidal creeks (upper harbour).
- Semi-exposed sandflats (mid-harbour).
- Exposed sandflats (lower harbour).

These community types are largely driven by substrate type. A change in community composition exists from muddy upper harbour to sandier lower harbour sites. Intertidal flats comprise 58% of the marine area habitat in the lower harbour, supporting extensive cockle and pipi beds.

The intertidal habitat within the proposed reclamation footprint is clean, unpolluted sands with varying amounts of shell. This habitat hosts a benthic macroinvertebrate community which is also found on the intertidal shores to the west, and which is considered to be of moderate biodiversity but low abundance. The intertidal zone is not notable relative to that wider community and has comparatively less biodiversity and significantly less abundance of biota.

4.7.5 High tide activity (roosting)

High-tide counts were undertaken in 2017/18, 2019/20, and again in 2021.

Northport site

Despite Northport being an active port site, ten species were recorded roosting to the east of the port in the 2019/20 and 2021 surveys. Red-billed gull were the most abundant and dense species recorded, followed by NZ Dotterel and VOC.

East of Northport

High numbers of shorebirds were recorded roosting to the immediate east of Northport during the 2017/18, 2019/20 and 2021 high tide wading bird surveys, though the diversity of species roosting on the eastern sites was lower than that recorded at the western sites.

The species for which the highest mean abundance and densities were recorded were South Island pied oystercatcher (SIPO), VOC, and Red-billed gull.

West of Northport

Bar-tailed godwit and lesser knot were the most abundant species recorded to the immediate west of Northport.

SIPO were the most abundant species recorded adjacent to the Marsden Cove Marina Channel (further to the west).

4.7.6 Mid and low tide activity (foraging)

East of Northport

The most abundant species recorded foraging to the east of Northport were SIPO, red-billed gull, and VOC. The benthic infauna survey identified known prey items of both oystercatcher species present in this area, although the abundance of prey items for both oystercatcher species was relatively low compared to the western side of the port.

West of Northport

Data collected over the 2017/18, 2019/20 and 2021 low and mid-tide counts showed Lesser knot as the most abundant species recorded. Bar-tailed godwit were also prevalent, as were Northern NZ Dotterel, but in relatively low numbers. The benthic infauna survey identified known prey items of both oystercatcher species present in this area.

4.7.7 Nesting

Northport site

During the 2018/19 survey, variable oystercatcher were recorded breeding on top of the tug bay revetment on the eastern side of Northport. Later in the season (24/1/19), two pairs of VOC (each with one chick) and one pair of New Zealand dotterel (with three chicks) were recorded on the Northport site.

During the 2019/20 survey, the port site had the highest number of nesting birds recorded. This included a pair of Northern NZ dotterel successfully raising chicks on top of the coal pile, a pair of VOC with chicks on the tug revetment, and a pied stilt on a nest with four eggs next to the molasses pond.

The December 2019 kororā survey along the eastern and western riprap of the Northport site detected no sign of nesting birds. While outside of the breeding season, the June 2021 survey of the same area using a DOC-certified conservation dog gave three weak indications along the western riprap. Exploration of the crevices that the dog indicated on found no sign of birds or feathers. Nevertheless, given the riprap does provide potential kororā habitat, and a weak indication was given at three locations, a precautionary approach is to assume that these locations are used by nesting kororā.

East of Northport

No wading or shorebird species were recorded nesting during either the 2018/19 or 2019/20 season.

West of Northport

Variable oystercatcher was confirmed breeding within the Blacksmiths Creek mangrove survey area during both the 2018/19 and 2019/20 seasons, as well as on the Northport west revetment in 2019/20.

4.7.8 Feeding and roosting in the wider harbour

In 2017 a Biosearches Group Limited coastal survey identified the relative importance of eight locations around the lower harbour for feeding and roosting for gulls and wading birds. The key findings at each of those sites were as follows:

- **Bream Bay beach:**

- Low species diversity (n=6) – Red-billed gull (53.3%), black-backed gull (20.7%), variable oyster catcher (13.3%), white-fronted tern, Caspian tern and Australasian gannet.
- Primarily used by gulls as a resting / roosting habitat.

- **Mair Bank:**

- Moderate species diversity (n=10) – Black-backed gull (max = 196), red-billed gull (max = 70), variable oystercatcher (max = 66), Caspian tern, little shag, northern NZ dotterel, pied shag, pied stilt, SIPO and white-faced heron.
- Predominant habitat use was resting, primarily black-backed gull and but occasional Caspian tern, red-billed gull and VOC.
- Of the few feeding records, 5.7% were on the beach, 19.9% on the inner bank and 74.4% on the outer bank.

- **Refining NZ jetty to Northport:**

- Moderate species diversity (n=10) – SIPO (max = 437), red-billed gull (max = 154), VOC (max = 60), black-backed gull, Caspian tern, northern NZ dotterel, pied shag, pied stilt, spur-wing plover, white-fronted tern.
- Dominant habitat use was resting rather than feeding.

- **One Tree Point:**

- High species diversity (n = 15) – Black-backed gull (max = 114), white-fronted tern (max = 71), bar-tailed godwit (max = 60), red-billed gull (max = 58), VOC (max = 54), lesser knot (max = 37), Caspian tern, curlew, little shag, mallard, northern NZ dotterel, paradise shelduck, pied stilt, SIPO and white-faced heron.
- Approximately equal use for feeding and resting, but no high tide wading roost habitat.

- **Snake Bank:**

- Moderate species diversity (n = 8) – SIPO (max = 63), black-backed gull, bar-tailed godwit, little shag, red-billed gull, VOC, white-faced heron, and white-fronted tern.
- Feeding the predominant activity, and primarily by SIPO.
- Differs from Mair Bank in that black-backed and red-billed gulls were not as prominent, and SIPO rather than VOC was the most common oystercatcher species.
- This site is a shore commute from birds roosting at Marsden Bay.

- **Reotahi Bay:**

- Low species diversity (n = 6) – red-billed gull (77.6%), white-fronted tern (10%), black-backed gull, Caspian tern, white-faced heron and VOC.
- Almost exclusively (98.2%) for resting (in the intertidal area) or roosting on poles, boulders and trees.

▪ **Taurikura Bay:**

- Moderate species diversity (n = 11) – red-billed gull (~75%), Australasian gannet, black-backed gull, Caspian tern, kingfisher, little shag, pied shag, red-billed gull, reef heron, spur-wing plover, VOC and white-faced heron.
- Primarily resting habitat.

▪ **Urquharts Bay:**

- Moderate – high species diversity (n = 12) - Australasian gannet, black-backed gull, Caspian tern, little shag, pied shag, red-billed gull, reef heron, SIPO, spur-winged plover, VOC, white-faced heron and white-fronted tern.
- Main activity recorded was resting and roosting, primarily by gulls.

The comparative population composition and habitat use for these sites is shown in **Table 6** below.

Table 6 Comparative population composition and habitat use

	Bream Bay Beach	Mair Bank	CINZL jetty to Northport	One Tree Point	Snake Bank	Reotahi Bay	Taurikura Bay	Urquarts Bay
% feeding	11.8	17.5	1.5	47.6	63.5	1.8	20.9	23.3
% resting / roosting	88.2	83.5	98.5	52.4	36.5	98.2	79.1	76.7
% wading birds	13.3	16.1	65.1	34.4	84.2	4.2	12.1	23.9
% gulls	74	82.9	31.0	42.3	12.9	84.4	81.1	68.2

4.7.9 Ecological value

The 15 species recorded as utilising the area east of Northport (areas East 1 and East 2 on **Figure 50**) comprises four species that are considered to have ‘Very High’ value, four species of ‘High Value’, three species of ‘Moderate Value’ and four species of ‘Low Value’ according to the Environment Institute of Australia and New Zealand (EIANZ) (See **Table 7** on the following page).

Table 7: Coastal and estuarine avifauna species values

SPECIES	THREAT CLASSIFICATION	ECOLOGICAL VALUE ³⁴	WEST 3	
			High	Low- mid
Australasian bittern	<i>Threatened – Nationally Critical</i>	Very High		
Reef heron	<i>Threatened - Nationally Endangered</i>	Very High		ü
Banded dotterel	<i>Threatened - Nationally Vulnerable</i>	Very High		
Caspian tern	<i>Threatened - Nationally Vulnerable</i>	Very High	ü	ü
Lesser knot	<i>Threatened - Nationally Vulnerable</i>	Very High	ü	ü
Wrybill	<i>Threatened - Nationally Vulnerable</i>	Very High		
Banded rail	<i>At Risk - Declining</i>	High		
Eastern bar-tailed godwit	<i>At Risk - Declining</i>	High	ü	ü
Red-billed gull	<i>At Risk - Declining</i>	High	ü	ü
South Island pied oystercatcher	<i>At Risk - Declining</i>	High	ü	ü
White-fronted tern	<i>At Risk - Declining</i>	High		
Pied shag	<i>At Risk - Recovering</i>	Moderate		
Northern NZ dotterel	<i>At Risk - Recovering</i>	Moderate	ü	ü
Variable oystercatcher	<i>At Risk - Recovering</i>	Moderate	ü	ü
Black shag	<i>At Risk - Naturally Uncommon</i>	Moderate		
Royal spoonbill	<i>At Risk - Naturally Uncommon</i>	Moderate		
Little shag	<i>Not Threatened</i>	Low	ü	
Pied stilt	<i>Not Threatened</i>	Low	ü	ü
Southern black-backed gull	<i>Not Threatened</i>	Low	ü	ü
White-faced heron	<i>Not Threatened</i>	Low	ü	ü

4.8 Marine Mammals

4.8.1 General

The present environment for marine mammals has been reviewed by the Cawthron Institute (CI). The conclusions from the CI report are summarised below. Further detail is provided in the CI report in **Appendix 14**.

4.8.2 General Description

Many of New Zealand's marine mammal species live or pass through the upper and central eastern coastal waters of the North Island. At least 27 *cetacean* (whales, dolphins, and porpoises) and two *pinniped* (seals and sea lions) species have been recorded along the north-eastern coastline of the North Island.

³⁴ As per the EIANZ criteria.

Several marine mammal species visit the Whangarei Harbour waters and the wider region on a regular basis. The Whangarei Harbour entrance represents a small fraction of similar habitats available to support the various species that utilise the Harbour and wider Bream Bay ecosystem.

The distribution patterns of the more common marine mammal species to frequent Whangarei and nearby waters are shown on **Table 8**, along with the conservation threat status.

Table 8. Distribution patterns of the more common marine mammal species to frequent Whangarei and nearby waters.

Common name	Species name	NZ Threat Classification System	IUCN Listing	Residency category in Northland	Patterns of Seasonality (relative to proposal area)
Bottlenose dolphin	<i>Tursiops truncatus</i>	Nationally Endangered	Least Concern	Common Seasonal to Year-Round	Resident sub-population to north in Bay of Islands that ranges between Doubtless Bay, Great Barrier Island and Tauranga. Occasional visits to Whangarei / Bream Bay, perhaps more over summer months. Generalist feeders. Currently in decline.
Common dolphin	<i>Delphinus delphis</i> (including <i>D. capensis</i>)	Not Threatened	Least Concern	Common Seasonal to Year-Round	Common throughout north-eastern waters year-round. Feed on schooling or more pelagic fish species. Generally observed in waters deeper off Whangarei / Bream Bay with occasional inshore sighting.
NZ fur seal	<i>Arctocephalus forsteri</i>	Not Threatened	Least Concern	Common Seasonal to Year-Round	Present year-round with multiple haul-out sites in the Hauraki Gulf and regular sightings off the Hen & Chickens Islands and Bay of Islands. More susceptible to human effects in breeding colonies. Feed mainly over shelf waters.
Leopard seal	<i>Hydurga leptonyx</i>	Naturally uncommon	Least Concern	Seasonal to Semi-Common	Solitary animals occasionally observed within Whangarei Harbour (e.g. Marsden Cove Marina) as well as various haul-out sites and marinas between Auckland and Northland.
Orca (killer whale)	<i>Orcinus orca</i>	Nationally Critical	Data Deficient	Seasonal to Semi-Common	Frequent north-eastern waters year-round, more common in late winter / early spring. Forage in harbours, estuaries and coastal areas on rays, fish and other marine mammal species. Overseas populations noted for heavy pollutant loads due to high trophic level.
Bryde's whale	<i>Balaenoptera edeni</i>	Nationally Critical	Least Concern	Seasonal to Semi-Common	Commonly observed whale species in north-eastern waters year-round. Feed on small schooling fish and sometimes krill. Regularly move through Bream Bay, travelling between Bay of Islands and Hauraki Gulf.
Southern right whale	<i>Eubalaena australis</i>	At Risk - Recovering	Least Concern	Seasonal Migrant	Frequent more inshore, shallow regions of Northland during seasonal migration periods, particularly with new-born calves. Once present, they can remain in the Northland region for several days to weeks. Most often seen between August and November.
Humpback whale (Oceania)	<i>Megaptera novaeangliae</i>	Migrant	Endangered	Seasonal Migrant	Pass by Whangarei / Bream Bay on both north and south migrations but more prevalent and closer to shore on southern return migration when with calves (mainly Oct to late Dec).
Pilot whale	<i>Globicephala melas</i>	Not Threatened	Least Concern	Offshore Semi-Common	While a more offshore species, inshore sightings occur mainly over summer months. Forages off shelf waters. Known for frequent and mass strandings in Bream Bay and surrounding waters.
Sperm whale	<i>Physeter macrocephalus</i>	Data deficient	Vulnerable	Offshore Visitor	Increased sightings along the north-eastern coasts, mainly over summer and autumn months.

4.8.3 Potentially affected species

Species occurring commonly in the area of interest³⁵ and more likely to be affected by the project are bottlenose dolphin (*Tursiops truncatus*), common dolphin (*Delphinus delphis*), orca (*Orcinus orca*), and Bryde's whale (*Balaenoptera edeni*). These, and other more common species are further described below.

Bottlenose dolphins

An inshore population of bottlenose dolphins is known to range between Doubtless Bay to the north and Tauranga to the south. Sightings near Whangarei have mainly occurred over the spring and early summer months. The species is listed as *nationally endangered* by the New Zealand Threat Classification System, making them potentially more vulnerable to disturbance or changes within their distribution range.

³⁵ Area of interest: the coastal waters between the Bay of Islands and the Hauraki Gulf.

Common dolphins

Several localised populations of common dolphins are found year-round. The species has mainly been observed in deeper waters (30m +). The species is listed as *not threatened*, although there is little known about the actual population size and movements in the area of interest.

Orca

Orca are frequently sighted along the coastline between the Bay of Islands and Hauraki Gulf. They have been observed year-round but are thought to be more common in the area of interest during late winter and early spring.

The orca that occur within Northland waters appear to be generalist feeders, opportunistically foraging on a variety of prey species.

Based on the sighting data and the timing of individual re-sightings from various Visser publications, orca do not spend a large amount of time in any one location. By way of example, they would not enter the Whangarei Harbour and remain solely within it for a whole week, much less a day or two. Instead, they most likely wander in and out again over the course of several hours and may perhaps re-visit on subsequent days or not again for several months.

The tendency by orca to forage in and around enclosed harbours makes this species potentially susceptible to harbour developments. Orca are currently listed as *nationally critical* by the New Zealand Threat Classification System based on their natural low abundance.

Bryde's whales

Bryde's whales are one of the most commonly observed whales in New Zealand waters. They are frequently reported in the area of interest, particularly over the late spring and summer months. They pass through Whangarei offshore waters as they travel between the Bay of Islands and Hauraki Gulf. The species is thought to seasonally migrate along the north-eastern coast of the North Island to and from the subtropics.

A small residential population of whales is found year-round within the Hauraki Gulf region. Their natural tendency to remain just below the surface of the water most of the time (91%) and their spatial overlap with the main shipping channels of Auckland makes them highly vulnerable to ship strikes. This species is listed as *nationally critical* in New Zealand waters due to low abundance and the high proportion of mortalities due to ship strikes.

New Zealand fur seals

New Zealand fur seals are year-round residents within Bay of Plenty and Coromandel Peninsula waters with established breeding colonies and several known haul-out sites. Regular sightings of adults and pups are now common in the Hauraki Gulf region with frequent sightings around the Hen and Chickens Islands. There has also been occasional visiting seal within the Whangarei region as this species appears to be expanding northward.

Fur seals are considered non-migratory but are known to easily and repeatedly cover large distances to find food. Some adults will travel out to open waters over winter while younger animals focus over shallower continental shelf waters.

Leopard seals

Although thought to mainly occur around Antarctic pack ice, Leopard seals are known to disperse northwards over the colder autumn and winter months when individuals are occasionally observed in New Zealand waters. Leopard seals prey on a variety of species (e.g. krill, penguins, birds, fish, seals), eating their prey where it is taken.

There are several reports of solitary animals observed within the Whangarei Harbour, and at various haul-out sites and marinas between Auckland and Northland.³⁶ An individual leopard seal (*Owha*) is known to reside semi-seasonally around Marsden Cove marina.

Southern right whales

Several baleen whale species migrate through Northland waters from early winter (May) to the late spring months (November). Most whale species begin their northern migrations in late autumn or winter; humpbacks travel from May to August and southern right whales from July to September.

Southern right whales can be slow migrators, especially cow/calf pairs, with a tendency to remain in shallow protected bays and coastal waters when calving. They can be observed with newborn calves from August onwards, particularly around the Northland region. Approximately 40–50% of all cow/calf pairs are observed between Northland and Hawke's Bay waters and may remain within nearshore waters for up to four weeks.

Southern right whales are considered *at risk - recovering* by the NZ threat classification systems as their preference for shallow, protected bays and coastal waters (particularly for calving) overlaps with numerous anthropogenic activities in New Zealand's waters.

Humpback whales

Humpback whales along the eastern coastline of the North Island are generally reported during their returning south-bound migration. They begin by returning with their newborn calves in later September, passing through Northland waters until late November/December. While humpbacks tend to travel more directly between headlands, they do occasionally wander briefly into nearby harbour and bays.

The Oceania sub-population of humpbacks (including New Zealand) is considered *endangered* by the IUCN³⁷ due to their slower recovery rate.

³⁶ The number of reported sightings is likely biased high (i.e. a very small number of individuals are reported multiple times) given the novelty of seeing this species.

³⁷ International Union for the Conservation of Nature.

Other offshore species

Other offshore species observed in area of interest waters include pilot whales, sperm whales, false killer whales, beaked whales, pygmy sperm whales, and blue whales. It is thought that there is a general inshore movement within Northland waters for some of these species over the summer months.

4.8.4 Summary

According to the CI report, there is no evidence indicating that any of the identified species have home ranges restricted solely to the Whangarei Harbour and nearby Bream Bay waters.

While several whale species have known migration routes past this region, harbour waters are not considered part of any important migration corridors as most animals generally pass further offshore (more than 5 km), with only a few individuals wandering near or into the harbour entrance each year.

Based on current knowledge, the proposal area is not ecologically more significant in terms of feeding, resting, or breeding habitats for any marine mammal species relative to other regions along the north-eastern coastline. However, because the area of interest waters periodically supports threatened or endangered species (such as bottlenose dolphins, orca, Bryde's whales, and southern right whales), Policy 11(a) of the NZCPS is relevant in respect to these species.

4.9 Landscape setting

4.9.1 General

The existing landscape setting has been reviewed by Brown New Zealand Limited (BNZL). The conclusions from the BNZL report are summarised below. Further detail is provided in the BNZL report in **Appendix 15**.

4.9.2 Mapped Landscape and Natural Character Areas

There are several 'Outstanding Natural Landscape', 'Outstanding/High Natural Character', and 'Outstanding Natural Features' in the wider Whangarei Harbour environment. These areas are mapped in both the PRP where they are in the CMA, and in the Operative WDP where they are located outside the CMA (on land) (see **Figures 51 and 52**).

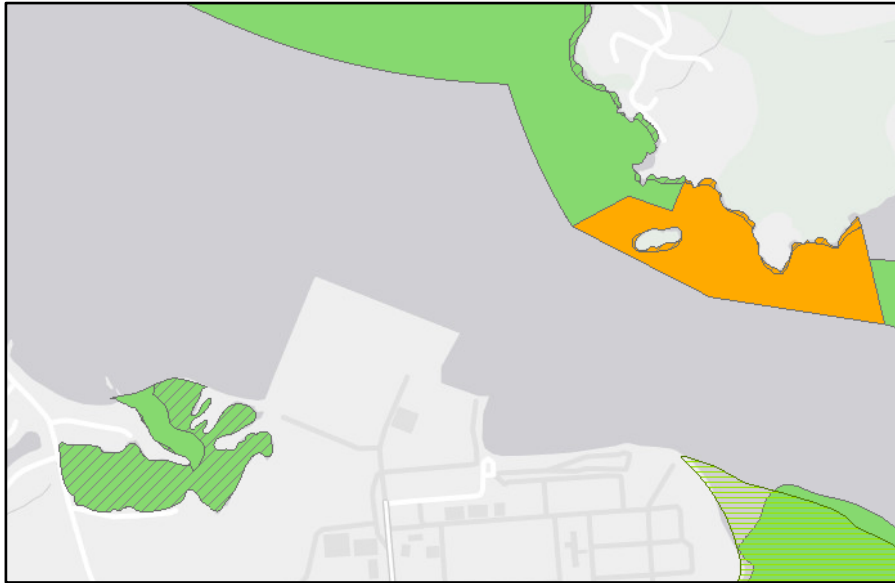


Figure 51: Outstanding (orange) and High (green) Natural Character Areas in the Proposed Regional Plan

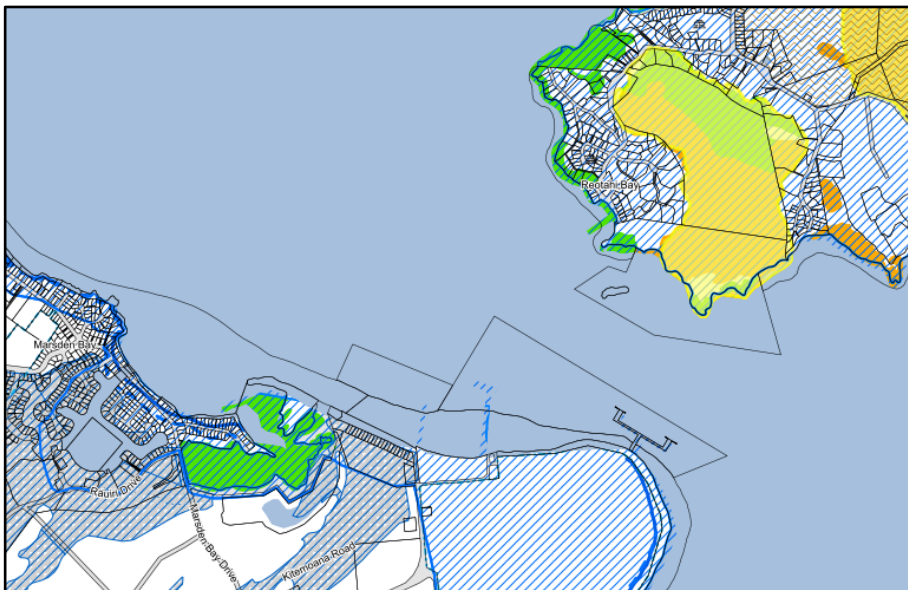


Figure 52: Outstanding Natural Features (green), Outstanding Natural Landscape Areas (yellow) in the Operative Whangarei District Plan.

The existing landscape and natural character values of the environment surrounding Northport are described in detail in the BNZL report (**Appendix 15**). The surrounding landscape can be summarised as one of multiple contrasting natural and anthropocentric elements and features.

Natural elements and features include the harbour, volcanic peaks and native forests of Whangarei Heads, Blacksmith's Creek to the west, the open dune terraces and coastal plains of Ruakaka to the south, and the open expanse of the Pacific Ocean to the east.

Anthropocentric elements and features include the chain of coastal settlements on the north side of the harbour,³⁸ the CINZL facility, and Northport. These contrasting natural and man-made elements are evident in both proximate and distant views.

The CINZL facility, with its complex array of land-based structures and two large jetties projecting out into the main harbour channel, together with the deep-water berths of Northport dominate the landscape on the south side of the harbour.

4.10 Archaeology

4.10.1 General

Existing archaeology in the vicinity of the proposed expansion has been reviewed by Clough and Associates (C+A). The conclusions from the C+A report are summarised below. Further detail is provided in the C+A report in **Appendix 16**.

4.10.2 Archaeological sites

Twelve archaeological sites are recorded within 1km of the port facility. These sites are all midden deposits (see **Table 9** and **Figure 53**).

Table 9: Archaeological sites previously recorded within a 1,000m radius of the port facility

NZAA Number	Easting	Northing	Site Type
Q07/72	1734116	6032829	Midden
Q07/105	1733615	6033227	Midden
Q07/106	1733415	6033127	Midden
Q07/107	1733515	6033127	Midden
Q07/108	1733616	6033028	Midden
Q07/325	1733316	6032927	Midden
Q07/1152	1733516	6032827	Midden
Q07/1153	1733716	6032928	Midden
Q07/1154	1733816	6033028	Midden

³⁸ Parua Bay, McLeod Bay, Taurikura and Urquharts.

Q07/1157	1733432	6032882	Midden
Q07/1162	1733506	6032827	Midden
Q07/1163	1733496	6032827	Midden

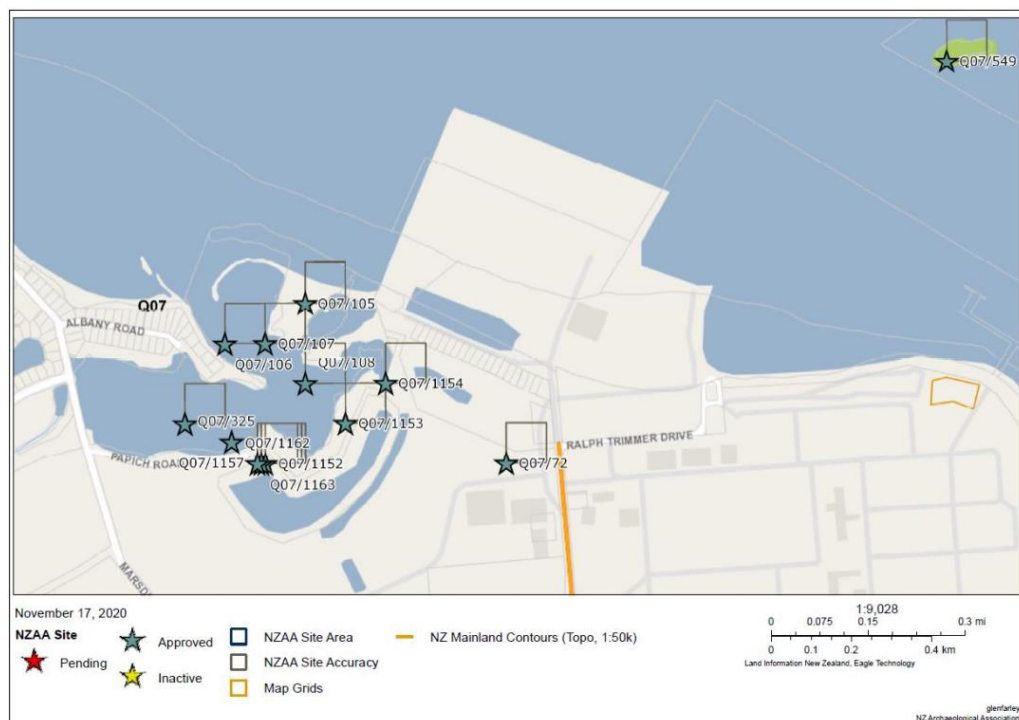


Figure 53: Previously recorded archaeological sites in the vicinity of Northport.

No archaeological sites are recorded within the footprint of the proposed port expansion.

4.11 Navigation safety

4.11.1 Navigation aids

The shipping channel between the Fairway Buoy and Snake Bank Beacon is marked by buoys and leading beacons (see **Figure 54**).

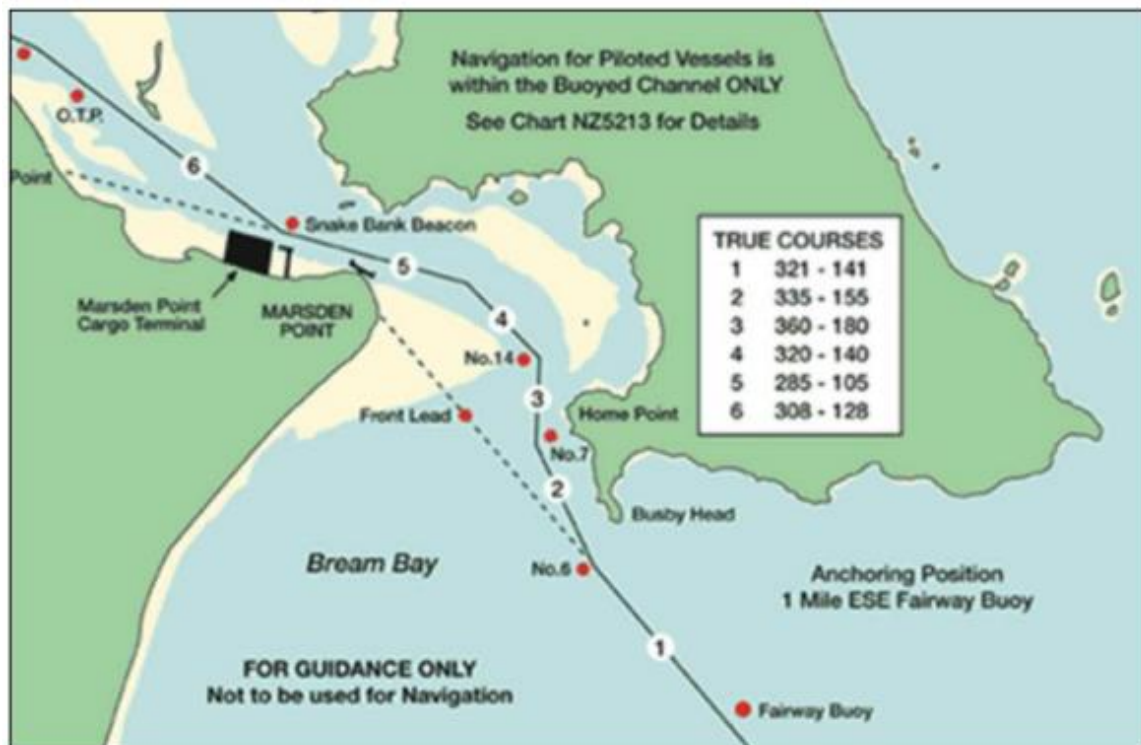


Figure 54: Navigation aids

4.11.2 Harbour radio

Maritime New Zealand (MNZ) is responsible for ensuring the provision of appropriate distress and safety radio communications systems.

Whangarei Harbour Radio is used to coordinate the commercial and recreational vessel movements in the harbour. Under a memorandum of understanding between the NRC and Northport on the provision of local navigation information, Northport operates the 24/7 radio capability and repeater station, assists with coordination of vessel movements, broadcasts local navigation and safety warnings, provides information regarding pilotage requirements, and provides monthly data to the Harbourmaster on vessel movements. Marine VHF Ch 16 (Distress and Calling) is monitored by Northport for initial contact, navigation warnings and distress, and Marine VHF Ch 11 is used for commercial shipping movements within Whangarei Harbour.

Northport also provides the Local Port Service (LPS) which is an information service designed to improve port safety and co-ordination of port services within the port community by dissemination of port information to vessels, pilots, and berth/terminal operators. All port Services Officers have been trained to IALA standards. The system records and holds on file all LPS images for a limited time.

While Northport has certain delegated responsibilities for harbour communications, the NRC and the Harbourmaster retain oversight functions/responsibilities. The Harbourmaster is required to work in conjunction with the port operator(s) to establish a radio service and traffic monitoring system.

4.11.3 Dynamic Under Keel Clearance System (DUKC)

Northport contracts with OMC for the provision of the DUKC system. The system takes into account different components of ship motion and if the under-keel clearance and the manoeuvrability margin is below the required safety limit then the software will advise the operator not to transit.

The system operates in the Whangarei Harbour as follows:

- North Tugz operates the DUKC system for vessels using Marsden Point facilities following procedures implemented by the Whangarei Harbour Safety Committee;
- DUKC assists vessels using the CINZ jetties and users pay a charge to Northport for that service; and
- Northport provides all hardware, buoys, computer equipment and OMC software.

The WHSMS outlines specific requirements based on ship data and meteorological conditions for the use of the DUKC system. The Harbourmaster may give directions relating to the transit of vessels, and therefore has some interface with the DUKC.

Under the Service Level Agreement for the DUKC, OMC provides notifications to Northport, reports generated for Northport, analysis at Northport's request, site visits to review the operation in consultation with Northport, and upgrades to the service as approved by Northport. Northport is responsible for hydrographic surveys and maintenance dredging, and to communicate survey information to ensure that it is used to update the DUKC system.

OMC state that its DUKC system is world-leading software navigation technology that has an unblemished safety record due to its ability to scientifically model how much under keel clearance ships have, and that it is the only system that has proven capability to predict the vertical component of navigation during the actual transit.

4.11.4 Channel configuration

The Marsden Point and Northport fairway has a minimum depth of - 14.7 m CD, a minimum width of 200 metres in the vicinity of Home Point and is subject to spring tidal streams of up to 3 knots.

The channel has a critical turn of 40° in the vicinity of buoys 12 and 14. For these reasons, the channel is challenging for pilotage, particularly in spring ebb tides and strong winds between Home Point and buoy 16.

The channel is marked by navigation buoys from the fairway buoy to the Northport Berths. A PEL Leading Light is used to define the centreline of the approach channel from fairway buoy to buoys 3 and 6. In addition there are three sets of leads located in the vicinity of Marsden Cove/ One Tree Point to assist in determining cross distance off the Northport berths when approaching.

4.11.5 Marine spill response plan

The Northland Marine Oil Spill Contingency Plan has been prepared as part of the NRC's statutory responsibility under the Maritime Transport Act 1994 to conduct a Tier 2 response for marine oil spills that occur within the Northland CMA (see **Appendix 17**). It forms the Northland region element of the New Zealand Marine Oil Spill Kit Response Strategy and has been prepared in accordance with the Maritime Transport Act 1994 and Marine Protection Rule 130C.

There is a related agreement detailing a joint response between the NRC, CINZL, Northport, NTL, and Marsden Cove Marina for any spills in the lower Whangarei Harbour (Marsden Point Integrated Response Agreement). The agreement details the establishment of an Emergency Operations Centre (EOC) at CINZL, the purpose of which is to ensure that prompt actions are taken to mitigate the effects of any spill in this area.

Task plans have been developed for possible scenarios which sit inside the CINZL Oil Transfer Site Marine Oil Spill Contingency Plan. Once the incident is handed to the Regional On-Scene Commander (ROSC), the ROSC plan will become the plan that is phased in and adhered to.

4.12 Biosecurity

4.12.1 Regulatory context

New Zealand operates a national 'biosecurity system' to protect its environmental, economic, social, and cultural (including spiritual) values from the impacts of non-indigenous species.

Northland has an operational Regional Pest and Marine Pathway Management Plan (2017-2027) required under s100B of the Biosecurity Act 1993. This plan is focused on controlling the following pest species in the marine environment:

- Asian paddle crab
- Australian droplet tunicate
- Japanese Mantis Shrimp
- Mediterranean fan worm
- Pyura sea squirt
- Styela sea squirt
- Undaria seaweed

The plan includes the following measures:

- Communication and advice programmes to assist vessel owners and stakeholders with ensuring compliance with rules.
- A Hull Surveillance Programme assessing a minimum of 2,000 vessels over 3 years. Any vessel carrying a named marine pest in an area without that pest being widely established, will be

placed under a Notice of Direction and directed to make a plan to have the vessel cleaned. In addition, owners of vessels that exceed the MPMP fouling threshold will be advised and issued a warning letter encouraging them to have the vessel cleaned and explaining that enforcement action will follow if they fail their next inspection and move between designated places.

- Notices of direction on vessels found with listed marine pests will be tracked in IRIS (councils online incident logging database).
- Owners of structures that constitute high risk in terms of marine pest spread will be subject to consideration and assessment in accordance with species rules.

In addition to the matters covered under the Marine Pathway Plan, there are further regulations administered by the Ministry for Primary Industries (MPI) relating to international ships.

4.12.2 Ballast water management

Ballast water from international ships is subject to the 'Import Health Standard' (2016) (IHS) administered by the Ministry for Primary Industries and prepared in accordance with s24A of the Biosecurity Act 1993

The IHS states that no ballast water may be discharged into New Zealand waters unless it meets one of the following options, and it has received permission from an inspector:

a) Option 1

The ballast water has been exchanged with mid-ocean seawater on route to New Zealand in areas free from coastal influences preferably at least 200 nautical miles (nm) from the nearest land; and in water of over 200m in depth. Accepted techniques are either emptying and refilling ballast tanks or holds with an efficiency of 95% volumetric exchange, or pumping through the tanks a water volume equal to at least three times the tank capacity; or

b) Option 2

The ballast water is fresh water (not more than 2.5 parts per thousand of sodium chloride); or

(c) Option 3

The ballast water has been treated using a shipboard treatment system listed in the MPI List of Approved Ballast Water Treatment Systems.

Furthermore, the IHS states that sediment which has settled and been removed from ballast tanks, ballasted cargo holds, sea-chests, anchor lockers or other equipment must not be discharged into New Zealand waters. If sediment cleared from these areas is intended for landing in New Zealand, the sediment must not be landed until an inspector has given clearance. It must be taken, as directed by an inspector, to a landfill that has no drainage to the sea either directly or indirectly via other water bodies.

4.12.3 Relevant Proposed Regional Plan provisions

The PRP contains rules relating to marine pests. These rules relate to:

- In water cleaning of vessel hull and niche areas or structures and barges (C.1.7.1, C.1.7.2, and C.1.7.4).
- Vessel hull maintenance on the foreshore (C.1.7.3)
- Marine pests and by biofouling (C.1.7.5)

Rule C.1.7.5 is the most relevant to port operations. Specifically, this rule triggers the need for a non-complying resource consent for navigation, mooring, or anchoring of vessels with marine pests that are not authorised under the Biosecurity Act 1993.

4.13 Noise

4.13.1 General

The present noise environment has been reviewed by MDL. The conclusions from the MDL report are summarised below. Further detail is provided in the MDL report in **Appendix 4**.

4.13.2 Existing noise environment

Northport operates on land zoned 'Port Zone' pursuant to the WDP. The port is bordered by the fuel jetty and import terminal (formerly the oil refinery) to the east, other 'Port zoned' properties (owned by MMH) to the south, and residential dwellings in Marsden Bay to the west and Reotahi to the north across Whangārei Harbour.

There are four distinct receiving environments being:

- (1) Reotahi is a coastal settlement on the northern side of the Whangārei Harbour, 1 – 1.5 km from Northport. Existing dwellings are zoned 'Rural Village Residential' in the WDP.
- (2) Marsden Bay is a coastal settlement on the southern side of Whangārei Harbour, approximately 500m west of the Northport log yard. Existing dwellings are zoned 'General Residential'.
- (3) Industrial areas to the south of Northport are not noise sensitive (e.g. Marsden Point import terminal and the Carter Holt LVL Plant).
- (4) Coastal, Rural, and other Open Space Zones are used for recreational purposes during the day.

4.13.3 Existing noise monitoring

MDL conducted noise monitoring at Reotahi and Marsden Bay between May and July 2018 while three log ships were berthed at Northport. Further monitoring was undertaken in Reotahi in May 2021 while container operations were in progress.

The 2018 noise measurements showed the highest noise levels being those received at Reotahi, but these complied with the operative WDP day-time noise limits and were just compliant with the 45 dB L_{Aeq} (15min) operative WDP night-time noise limit.

The 2021 noise measurements were overall lower than the 2018 measurements, indicating that container operations create less noise than intensive log handling activities.

Overall, the monitoring indicates that existing Northport operations comply with the permitted limits in the NAV chapter of the WDP.

4.13.4 Existing consent conditions

Northport holds existing WDC land use consents for port activities on the reclamation associated with Berths 1 and 2, and Berths 3 and 4 respectively. Berths 1-3 and their associated reclamations have been constructed, but Berth 4 is still to be built. Regardless, Berth 4 and its associated noise is part of the existing environment.

The consent conditions relating to port noise in the WDC land use consents are as follows:

Berths 1-2

12. The noise level (L_{10}) as measured within any residential zoned boundary or the notional boundary of any existing rural dwellings shall not exceed the following limits:

All Days:

0700am – 1000pm 55dBA L_{10}

10pm-0700am 45dBA L_{10}

10pm – 0700am 65dBA L_{max}

The noise levels shall be measured and assessed in accordance with the requirements of NZS 6801: 1991 Measurement of Sound and NZS 6802: 1991 Assessment of Environmental Sound.

Berths 3-4

7. The Consent Holder shall ensure that all activities on the site (except construction activities where the noise limits differ from those below) to which this consent applies, are designed and conducted so that the following noise limits are not exceeded at any point, within any residential zone or within the notional boundary of any existing rural dwelling:

07.00am – 10.00pm 55dBA L_{10}

10.00pm – 07.00am 45dBA L_{10}

10.00pm – 07.00am 65dBA L_{max}

All noise emissions from the port shall be measured cumulatively.

The noise levels shall be measured in accordance with NZS6801:1999 Acoustics - Measurement of Environmental Sound and assessed in accordance with NZS6802:1991 Assessment of Environmental Sound.

The conditions in the two consents are for all intents and purposes the same. While there are now less restrictive provisions in the NAV chapter of the District Plan, these consent limits represent the existing noise environment for assessment purposes. Northport currently operates within the limits specified in these consents.

4.14 Traffic environment

4.14.1 General

The present traffic environment has been reviewed by WSP. The conclusions from the WSP report are summarised below. Further detail is provided in the WSP design report in **Appendix 18**.

4.14.2 Port traffic

Northport inbound and outbound freight is currently transported by truck via State Highway 15. There is currently no rail link to the port.

SH15 extends 8.5km from the port to the SH15/SH1 roundabout.³⁹ It is a two-lane road which was declared a state highway in 2004, the purpose being to provide a highway connection to Northport.

In 2018,⁴⁰ port traffic accounted for approximately 64% of total traffic on SH15. Logging related traffic is a large contributor to overall port traffic and is subject to seasonal and cyclical peaks and troughs. According to the Northport wood availability forecast (2018 and 2022) there is likely to be a reduction in the availability of logs in the medium term, followed by a longer-term increase in supply.

Approximately 300 people work at the port and Northport uses a ride share scheme for staff, with use of their company vehicles.

4.14.3 Intersections

There are seven public road intersections on the 8.5km route from the roundabout to Northport, these being:

- SH1/SH15 roundabout.
- SH15/Salle Road intersection.

³⁹ The total length of SH15 is 126km. It runs from Okaikau to Northport, including concurrent sections with both SH14 and SH1.

⁴⁰ The 2018 pre-Covid numbers are considered to accurately reflect the current situation, noting the reduction of logging related traffic.

- SH15/One Tree Point/McCathie Road intersection.
- SH 15/Marsden Point Road Intersection.
- SH15/Marsden Bay Drive/Rama Road Intersection.
- SH15/Mair Road Intersection.
- SH15/Ralph Trimmer Drive

None of these intersections are currently at capacity.

4.14.4 Crash history

There were 12 reported crashes on the 8.5km stretch of SH15 from SH1 to Northport during the five-year period from 2016 to 2020. Of the 12 crashes, one resulted in a fatality, and two resulted in minor injury. Crash data has not been updated post 2020 to avoid COVID affected traffic data.

4.14.5 Pedestrian and cycle routes

There are no specific cycle facilities on SH15 or the feeder roads. Given the rural environment surrounding SH15, the 100km/h speed limit, and the high volume of heavy vehicles, it is not considered suitable for either pedestrians or cyclists.

4.15 Recreation and public access

4.15.1 General

The present environment for recreational activities in the vicinity of Northport has been reviewed by Rob Greenaway and Associates (RGA). The conclusions from the RGA report are summarised below. Further detail is provided in the RGA report in **Appendix 19**.

4.15.2 Range of recreation activities

There is a range of recreation activities, public areas and facilities in the environment surrounding Northport.

These can be categorised as:

- Terrestrial recreation and access
- Beach activities, walking, cycling, and running
- Fishing
- Shellfish gathering, and diving
- Boating

4.15.3 Terrestrial recreation and access

Access to both sides of the Port area is available by legal road (Papich Road on the western side, and Ralph Trimmer Drive on the eastern side).

There is a public carpark and toilets at the end of Ralph Trimmer Drive.

From the end of Ralph Trimmer Drive an esplanade reserve (administered by the Whangarei District Council) extends along the beach to the east of Northport and around Marsden Point as far as Mair Road. It then connects with a crown owned reserve which extends further along the coast to the south (see **Figure 55** below).

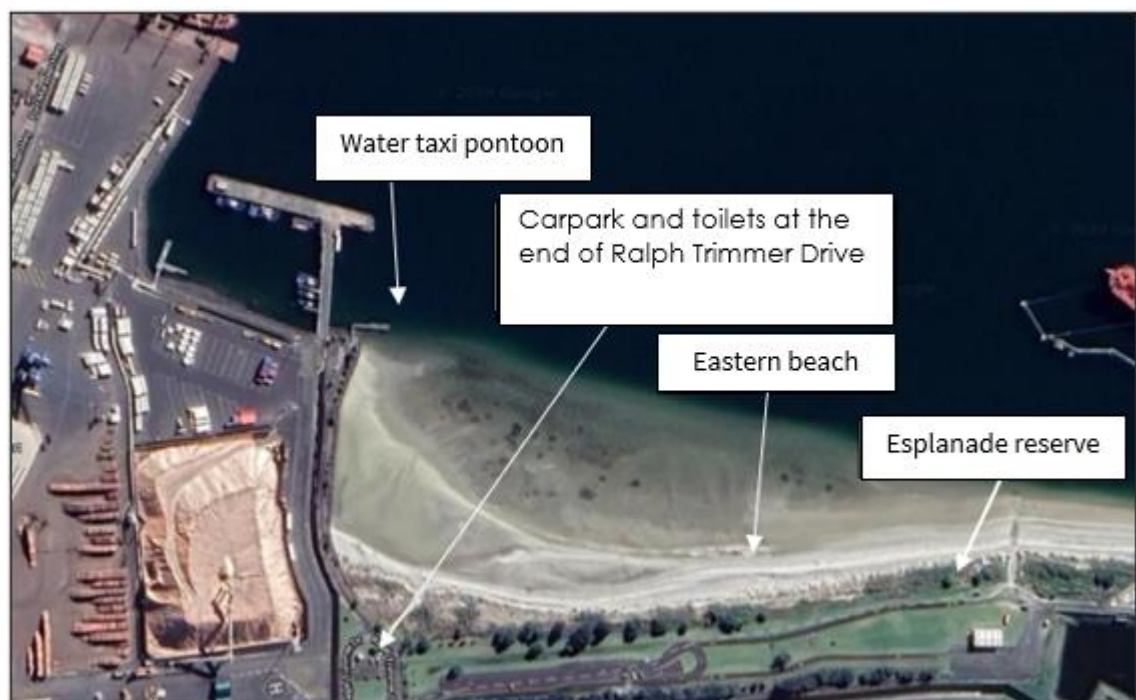


Figure 55: Public areas and facilities to the east of Northport

4.15.4 Beach activities, walking, cycling, and running

The beach to the east of Northport is used for a range of beach activities. Strava data shows that it is used for running, although this is not as popular as the beach to the south (accessed from Mair Road). It also shows that the walkway to the fishing jetty on the western side of the port is popular.

The water taxi pontoon on the eastern side of the port is the southern connection to the Te Araroa Trail. There are water taxi services available between Reotahi and this pontoon.

4.15.5 Fishing

There is a fishing jetty and associated access along the western side of the existing port accessed by foot via Papich Road (see **Figures 56 and 57**). There is also a ferry pontoon on the eastern side

of the port accessed from the end of Ralph Trimmer Drive (see **Figure 55**). Both these facilities and the associated access are a requirement of the consents for the existing port, although the eastern pontoon was required for ferry berthing rather than for fishing. Both facilities are popular shore-based fishing sites within the Marsden Bay/One Tree Point area.



Figure 56 Western fishing jetty

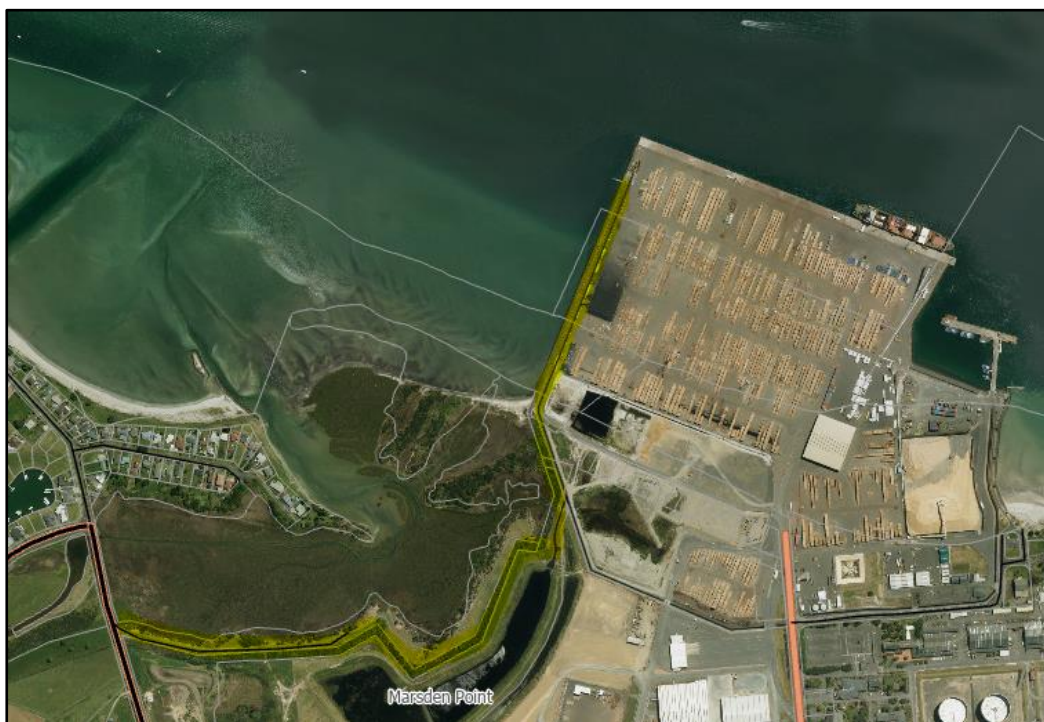


Figure 57 Walkway extending from Papich Road to western fishing jetty (highlighted yellow)

In addition to fishing from the western jetty and eastern pontoon, spinning for kahawai and kingfish is also popular from the beach to the east of Northport.

The Whangārei Harbour area is a relatively heavily fished setting, with similar vessel densities to the Bay of Islands and the inner Hauraki Gulf – although the latter has several areas with two to three times the density of vessels. The recreational fishing vessel density of the harbour and surrounding area is shown in **Figure 58** below.

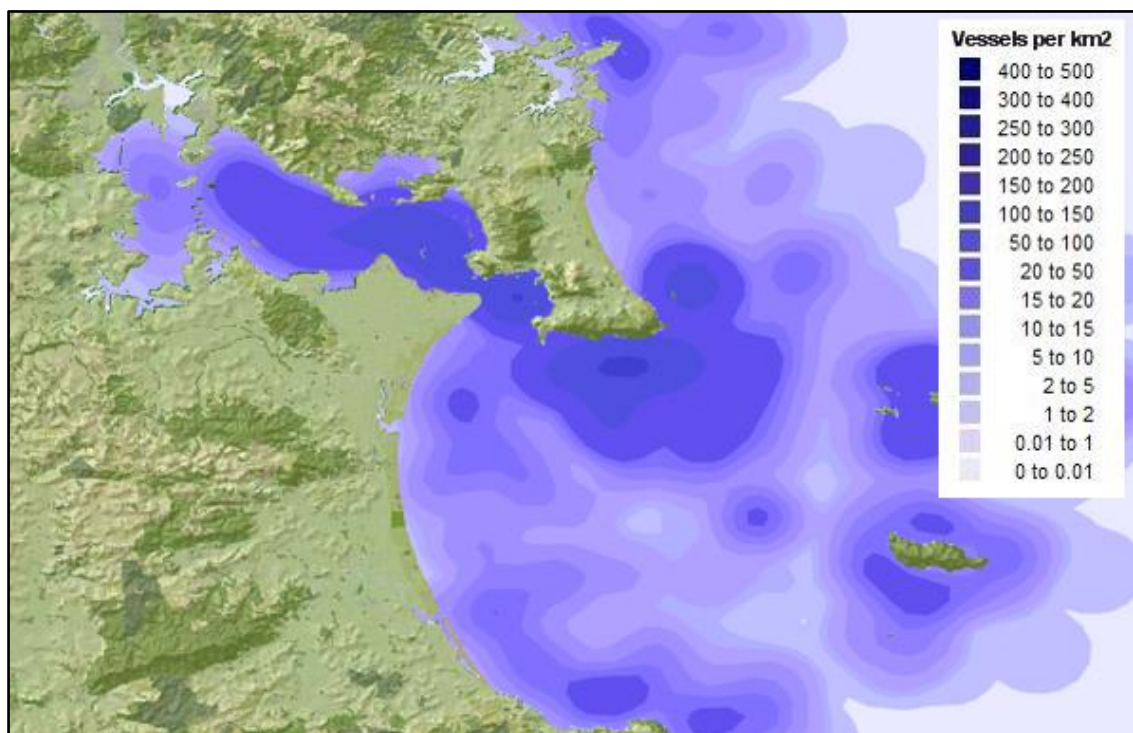


Figure 58: Recreational fishing vessel density (Source: MPI NABIS data)

4.15.6 Shellfish gathering, and diving

There are no known pipi beds within the proposed expansion area. While there are cockles, these are mostly below 'harvestable' size.

In the surrounding environment, pipi and scallops are gathered from around Snake Bank to the west of the Port, pipi at Marsden Point and at Mair Bank, and scallops to the north of Urquharts Bay. There are other scallop diving sites within Whangārei Harbour, but Snake Bank and Urquharts Bay are the most popular.

There are several popular dive sites in the Whangarei Heads area, although none within the proposed port expansion area.

4.15.7 Boating

Most boating activity in the vicinity of Northport is confined to the main channel. However, there is some public use of the ferry pontoon on the eastern side of the port.

There are several anchorages, boat ramps, and boat clubs in the harbour (see **Figure 59** below). None of these are located within the proposed expansion area.

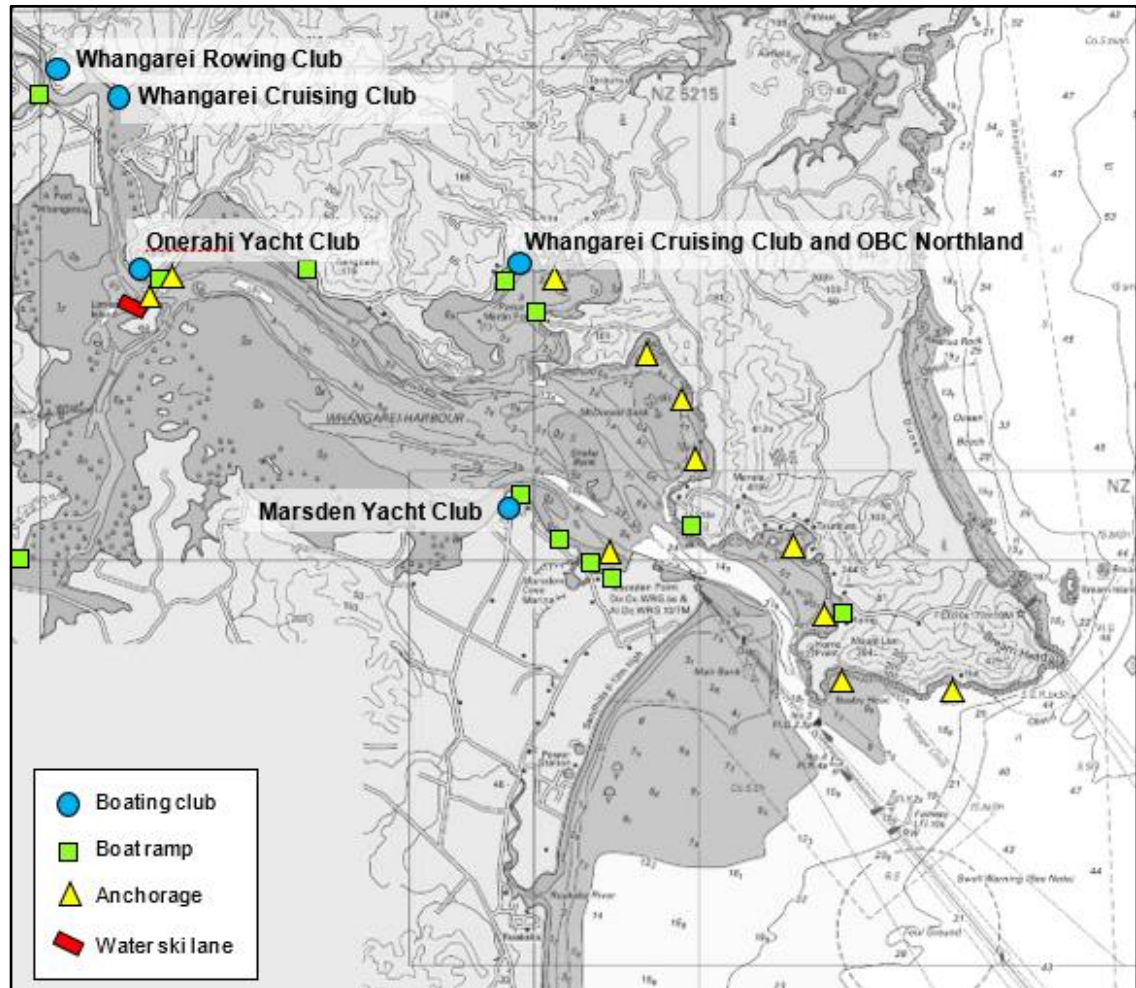


Figure 59: Anchorages, boat clubs and boat launching in the Whangarei Harbour

4.15.8 Public reserves

The land immediately behind the beach to the east of Northport is a WDC owned esplanade reserve. Access to this reserve is obtained via Ralph Trimmer Drive (a public road vested in the WDC). There is a small Council owned parking area and public toilet located at the entrance to the beach (within the road reserve) (see **Figure 60**).



Figure 60: Council carpark at the end of Ralph Trimmer Drive

To the immediate west of the existing port reclamation is a small stream (known as Blacksmith's Creek) which discharges to the Whangarei Harbour (see **Figure 61** below).



Figure 61: Blacksmiths Creek (western end of Northport)

This area (vested in the Crown) is a small, mangrove dominated delta at the stream mouth that provides a roosting area for a range of species including Godwit, Knot, SIPO, VOC, Red-billed gull, and Banded Dotterel.

4.16 Stormwater discharges and harbour water quality

4.16.1 General

The present environment for stormwater treatment and disposal from the existing Northport facility has been reviewed by Hawthorn Geddes (HGL). The conclusions from the HGL report are summarised below. Further detail is provided in the HGL report in **Appendix 20**.

4.16.2 Stormwater collection and treatment system

Stormwater from the existing Northport operations area is managed via a canal and pond-based system established under an existing NRC discharge consent.⁴¹ The system was constructed to provide treatment for stormwater runoff from the port prior to discharge to the Whangarei harbour. The pond was extended in 2016 to accommodate an extension of the hardstand area behind the port, and in 2018 baffles and two forebay bunds were installed within the pond to limit “shortcutting”.

Stormwater from the site is conveyed via open collection channels to a partitioned settlement pond. Treatment of suspended solids occurs through trapping behind a weir at the terminal end of the collection channel system, and through settlement in two serially connected pond cells. Water is pumped from the final pond cell and discharged, along with stormwater from Marsden Maritime Holdings Ltd to the harbour via an outfall diffuser beneath the port berths.

4.16.3 Existing conditions of consent and compliance

Stormwater discharges from the Northport are managed in accordance with an existing consent (CON20090505532), which includes a range of monitoring requirements, compliance standards, and indicators for assessing treatment performance (“Action Levels”). Among other things, water quality standards for the harbour currently include limits on changes to temperature, pH, dissolved oxygen, water clarity and hue, and concentrations of copper, lead and zinc, which are applied from the edge of a 300–500 m mixing zone.

Current consent conditions require a greater range of parameters (compared with the range of parameters to which water quality standards apply, as outlined above) to be monitored. Event related sampling of pond water quality (prior to discharge to the coastal environment) needs to be carried out on three occasions each year, with three samples to be collected over each of those days. Every sample must be analysed for total suspended solids, volatile suspended solids, turbidity (NTU) and pH. In addition, the first sample of the first discharge event must be analysed for aluminium, copper, lead, zinc, polycyclic aromatic hydrocarbons, and resin acids.

⁴¹ CON20090505532.

Conservative Action Levels are prescribed for particular contaminants to enable the early detection and investigation of issues before an environmentally harmful situation arises. Consent requirements for discharge water quality monitoring are complimented by conditions that require:

- Whole effluent toxicity testing (WETT) of stormwater on at least one occasion, with the need for further testing to be considered if new contaminants are introduced;
- Pond influent monitoring once each year to enable treatment efficiency to be checked.

Results from the monitoring indicate that Northport has displayed a high level of compliance with its conditions of consent, and that the quality of discharged stormwater is reasonably good. Little, if any, need for dilution in the mixing zone was required to achieve compliance, or reduce concentrations to levels below ANZG (2018) 95% protection guideline values. Specifically:

- All of the prescribed metals were well below consented concentration limits for the receiving environment (based on ANZG (2018) 95% guideline values), after providing for 200 times dilution within the mixing zone.
- In most cases, metal concentrations were below the receiving environment limit before they left the pond. The exception was copper, but that only had pond concentrations of around two times the receiving environment limit.
- Based on expected dilution rates, copper concentrations will be well below consent standards and guideline values after reasonable mixing.
- Polycyclic aromatic hydrocarbons concentrations in eleven samples collected between November 2013 and December 2014 had concentrations below levels of detection.

Continuous pond monitoring between 2019 and 2020, and spot sampling between September 2018 and September 2019, has shown that pond water is reasonably aerated (average dissolved oxygen concentration at the discharge was 7.24 mg/L), turbidity and total suspended solids (TSS) concentrations were low with an average of 9.53 NTU and a TSS maximum of 15 mg/l), and that the average pH of 7.47 was within consent limits.

4.16.4 Harbour water quality

The 2015 NRC state of the environment report, together with performance information for the Northport stormwater system (including compliance/monitoring data) indicates that water quality is high in the lower harbour and around the port.

4.17 Air quality

4.17.1 General

The present environment for air quality in the vicinity of Northport has been reviewed by Pattle Delamore Partners Limited (PDP). The conclusions from the PDP report are summarised below. Further detail is provided in the PDP report in **Appendix 21**.

4.17.2 Regulatory setting

Northport is located in the Marsden Point Airshed under the Marsden Point Air Quality Strategy (MPAQS) (see **Figure 62**).

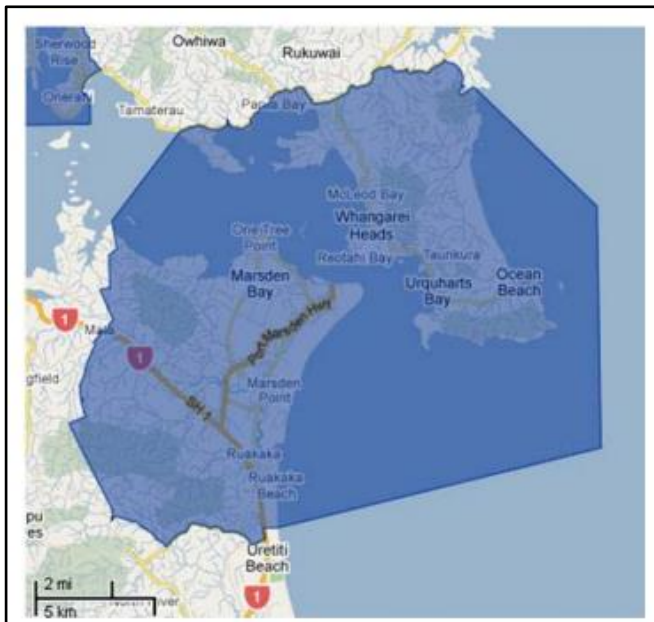


Figure 62: Marsden Point Airshed (Marsden Point Air Quality Strategy)

Contaminants identified as being critical in the MPAQS are particulate matter smaller than ten micron (PM_{10}), sulphur dioxide (SO_2) and nitrogen dioxide (NO_2), with further potential for discharges of other contaminants. In particular, emissions from the (former) New Zealand Refining Company Ltd (NZRC) together with emissions from Carter Holt Harvey LVL Plant were estimated to produce 98% of the PM_{10} levels, 99% of the NO_x levels and 100% of the SO_2 levels (NRC, 2007a).⁴²

The Operative Regional Air Quality Plan (ORAQP) contains special information requirements for discharge consent applications in the Marsden Point Airshed, with an emphasis on applications involving discharges of SO_2 , inhalable particulate (smaller than 10 microns in size) and NO_2 .

The PRP contains a policy requiring that the MPAQS be taken into account when considering resource consent applications.

⁴² Northland Regional Council (2007a) 'Marsden Point Air Quality Strategy' Whangarei, New Zealand.

4.17.3 Location

Northport is bordered by industrial activities on MMH owned land to the south, and the CINZL facility to the south-east.

The nearest residential dwellings relative to the proposed port expansion are located approximately 1,000 meters to the north at Reotahi and 1,200 metres to the west in the Albany Road area.

4.17.4 Meteorology

The wind rose shows that the predominant winds are from the west and typically have lower wind speeds. Wind speeds greater than 5 m/s, when there is greater potential for dust to be carried towards the residential properties to the southwest of the port, occur between 1.8 and 3.4% of the time (See **Figure 63** below).

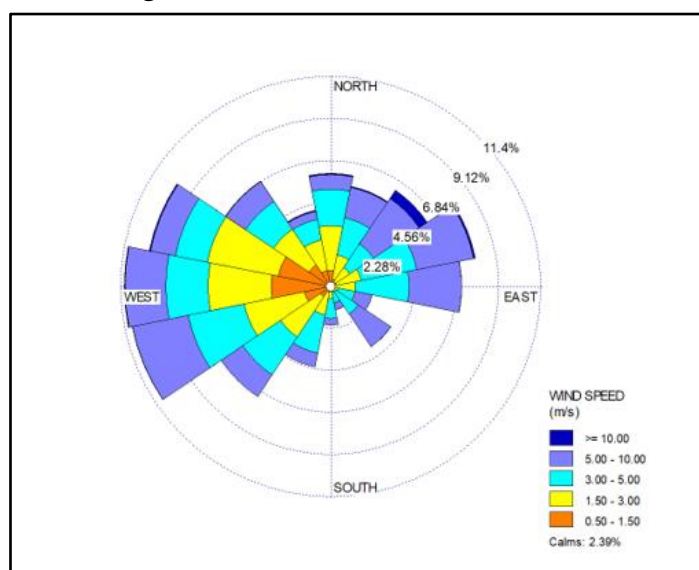


Figure 63: Wind Speed and Wind Direction Distribution on the Site for 2011-2012 (1-hour average)

4.17.5 Background air quality

The closest publicly available air quality monitoring site is located at Bream Bay College, approximately 5 km south of Northport and measures PM₁₀. The data from the last 5 years of monitoring indicates that PM₁₀ concentrations are typically below 30 µg/m³ and are generally considered to be low.

While there is no PM_{2.5} (particulate matter less than 2.5 microns) monitoring undertaken in the Marsden Point area, it is possible to calculate likely PM_{2.5} concentration, which in this case is expected to be below 11 µg/m³.

The predicted 1-hour average concentration NO₂ is 37 µg/m³ and the 24-hour average concentration 23 µg/m³. These represent low concentrations of air contaminants.

The scaling down of refinery operations means that SO₂ concentrations will be well below the National Environmental Standards.

Overall, the air quality around Northport is relatively good.

4.17.6 Sensitive receptors

The closest sensitive receptor to the port expansion (a dwelling) is located approximately 1,000 metres from the proposed port expansion (at Reotahi). Because nuisance dust effects are not generally experienced more than 500m from the source, there are no sensitive receivers for fugitive dust in the vicinity of Northport, apart from potential users of the beach between Northport and CINZL during construction.

4.18 Economic contribution

4.18.1 General

An economics analysis has been undertaken by Market Economics (ME). The conclusions from the ME report are summarised below. Further detail is provided in the ME report in **Appendix 22**.

4.18.2 Current contribution to the Northland economy

Northport currently facilitates \$438 million in value added and the equivalent of 6,300 jobs in the Northland economy. It is of considerable regional significance.

4.18.3 Evolution of trade facilitated by Northport

Northport has historically focused on handling high volume, low value trade, which is mostly raw primary outputs for export (logs and woodchip) or raw primary inputs that are imported to support production (agriculture or cement). In more recent times, the Port has increasingly been handling more high value goods such as engineered timber, horticulture products, and marine products (see **Figure 64** below). There has also been one-off imports of specialist machinery/vehicles and construction products (e.g. steel for Auckland's convention centre).

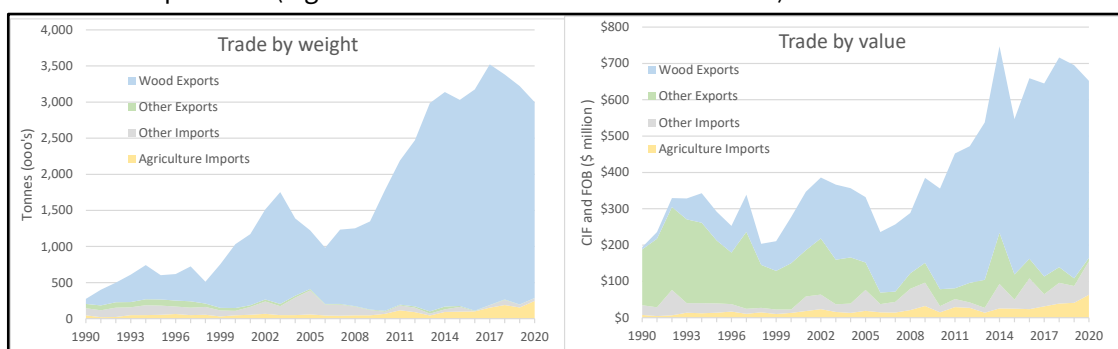


Figure 64: Ports of Whangarei Harbour Trade 1989 – 2020 YE June (excl. Marsden CINZL facility)

Since the early nineties wood exports have dominated the trade handled by Northport (and Port Whangarei before 2007).⁴³ The official trade data shows that wood was the largest commodity handled in 2020, both in terms of weight (90%)⁴⁴ and value (75%)⁴⁵. The recent rapid growth in wood trade has been driven by the maturing of forests in Northland and associated harvest, which has become known as ‘the wall of wood’ that peaked in 2017 and is now declining as available forests are harvested. There have also been recent reductions in processed wood exports.⁴⁶

Import of agricultural inputs (feed and fertilizer) has also been a significant trade task for the port in Whangarei. The level of agricultural inputs handled by the port has grown significantly over the last three decades. However, this trade is still small compared to wood exports. The official trade data shows that imports of agricultural inputs accounted for 8% of weight and 10% of the value of trade handled at Northport in 2020.

The other exports and imports represent a small proportion of the trade handled by Northport (approx. 1% of weight). However, this trade has much higher value than wood or agricultural inputs, with all other exports representing 2% of the value of goods and other imports 14%.

Since Northport operations commenced in 2002 the trade tasks handled in the Whangarei harbour (excluding the CINZL facility) have grown by 3.9% per annum and the value of trade has grown by 3.0% per annum. Northport trade tasks peaked at 3.7 million tonnes in the 2017 year and were at 3.0 million tonnes in 2020. While total volumes have dropped over the last four years, the value of trade handled has remained relatively strong at around \$650 million in 2020 (YE June).

It is also important to note that the Covid19 pandemic impacted global trade and local economic activity in 2020, which explains some of the change in trade handled by Northport. For example, the month of April 2020 was down by almost 60% compared to the previous April. However, trade handled by Northport has rebounded with most months since then having higher trade than the previous year.

4.18.4 Recent developments

Three recent developments at Northport which have enabled new higher value products at the Port are the purchase of mobile harbour cranes, cruise ships (booked), and the development of additional paved area.

Mobile harbour cranes

The port has invested in two mobile container cranes which allows it to handle container trade (the first commissioned in 2015 and a second in 2020). While Northport did handle containers prior to purchase of the cranes using ‘geared ships’, coastal shipping of containers through Northport increased from August 2017 and the first international container vessels arrived in May 2018. This

⁴³ Statistics New Zealand (2020) Overseas Trade Imports and Exports (incl. re-export) Merchandise Trade Monthly 1989-2020 NZ Port by HS2.

⁴⁴ Gross Weight (KG).

⁴⁵ Value measured in CIF (\$NZ) and FOB (\$NZ) dollars of the day.

⁴⁶ Carter Holt Harvey LVL Plant has stopped exports in 2020 and will reduce activity at the Marsden Point plant by 68%.

service allows Northport to undertake additional roles in trade handling, both locally and serving the rest of the country.

Cruise ships

Northport has the ability to host cruise ship calls. Pre-Covid19, Northport had taken multiple bookings for cruise vessel visits in the 2021/22 season, which was expected to coincide with the completion of new tourism facilities in Whangarei. All were cancelled due to Covid19 and associated border closures.

There are currently 12 bookings for the 2024/2025 season.

Cruise ships ranging between 230m and 300m in length have obvious implications for Northport in terms of capacity to handle merchant ships when cruise vessels are in port.

Pre-pandemic, the cruise industry was growing very fast, internationally (7% per annum⁴⁷), nationally (14% per annum⁴⁸) and regionally (17% per annum⁴⁹). While it will take some time to get back to such strong growth rates, there is an opportunity for Northport to tap into this market. The implications of Covid19 are that cruise activity is expected to quickly rebound and it is important for Northport to plan for the eventual needs of the industry.

Development of additional paved area

Northport has recently sealed all the remaining vacant port area. This investment allows the area to be utilised for handling light freight and opens up additional opportunities for different types of trade – including handling light vehicles.

Northport, unlike most ports in New Zealand, has ample scope to modify its operations to meet the changing demands of the economy in the Region and Upper North Island. The port has been proactive in its planning to provide a range of services that encourages businesses to use the facility to trade.

4.19 Existing resource consents held by Northport

Northport currently holds the following relevant NRC and WDC resource consents (Note: Consents relevant to Berths 1 and 2 are unshaded, and those relevant to Berths 3 and 4 are shaded grey).

⁴⁷ Internationally, cruise tourism has been growing consistently since the early 90s, at approximately 7% per annum from 4 million passengers in 1989 to 27 million passengers in 2018. Cruise Lines International Association (2017) 2018 Cruise Industry Outlook.

⁴⁸ Nationally, cruise tourism has also been growing rapidly since the late 90s. The number of passengers undertaking a cruise in New Zealand, has grown by around 14% per annum, which is much faster than the global rate of growth. Market Economics (2002-2017) Cruise Tourism Studies for Cruise New Zealand and McDermott Fairgray (1997-2001) Cruise Tourism Studies for Tourism Board.

⁴⁹ Statistics New Zealand (2018) Cruise Passenger Counts.

Northland Regional Council

Table 10: Existing NRC consents

Consent ref.	Consent Type	Date issued	Activity
Dredging			
AUT.005055.1.1.01 (CON19960505511)	Coastal permit (maintenance dredging)	02/12/1999	Maintenance dredging of turning basin.
AUT.005055.02.02 (CON19960505502)	Coastal permit (maintenance dredging) (renewal)	26/02/2010	Maintenance dredging of turning basin.
AUT.005055.22.01 (CON20030505522)	Coastal permit (capital dredging)	17/11/2004	Capital dredging associated with the development of berths 3 and 4.
AUT.011809.01.01 (CON20041180901)	Coastal permit (maintenance dredging)	30/03/2004	Maintenance dredging at the Refining NZ jetties.
AUT.005055.29.01 (CON20030505529)	Coastal permit (maintenance dredging)	19/10/2004	Maintenance dredging of the turning basin associated with berths 3 and 4.
Stormwater and air discharges			
AUT.005055.05.02 (CON19960505505)	Discharge permit (stormwater) (renewal)	26/02/2010	Discharge of stormwater and decant water from dredge tailings to the CMA.
AUT.005055.32.01 (CON20090505532)	Discharge permit (stormwater)	19/03/2010	To discharge treated stormwater associated with the operation of a port to the CMA.
CON20030505530	Certificate of compliance (discharge of water)		Discharge of water during construction

	during construction)		
CON20030505531	Certificate of compliance (discharge of dust during operation of new wharf)		Discharge of dust during operation of new wharf
AUT.005055.28.01 (CON20030505528)	Discharge permit (stormwater)	19/10/2004	To discharge stormwater and decant water from the berth 3 and 4 reclamation and associated structures.
Reclamation			
AUT.005055.23.01 (CON20030505523)	Coastal permit (reclamation)	17/11/2004	To reclaim approximately 5.2 ha of seabed associated with the development of berths 3 and 4.
Structures			
AUT.005055.04.01 (CON19960505504)	Coastal permit (structure)	02/12/1999	Wharf and piles used for port operations.
AUT.008925.01.01 (CON20000892501)	Coastal permit (structure)	04/04/2000	Navigation beacon with access platform.
AUT.005055.17.01 (CON20030505517)	Coastal permit (structure)	18/03/2003	Fishing jetty at west wall.
AUT.005055.08.01 (CON19960505508)	Coastal permit (structure)	02/12/1999	Barge berths, water taxi landing, quarantine station
CON19960505507	Coastal Permit (works in CMA)		Construct and use extension to existing jetty
AUT.013187.01.01 (CON20051318701)	Coastal permit (structure)	24/05/2005	Tide monitoring gauge at Frenchman Island.
AUT.005055.36.01	Coastal permit (structure)	16/08/2018	Pontoon facility.

AUT.005055.24.01 (CON20030505524)	Coastal permit (structure)	17/11/2004	To erect and place new wharves and related structures for new berths 3 and 4 in the CMA.
AUT.011811.01.01 (CON20041181101)	Coastal permit	13/03/2004	Remedial scour protection works at Refining NZ jetties.
CON20030505525	Coastal Permit (works in the CMA)	19/10/2004	To alter any part of the existing jetty not covered under CON19960505506 (original consent for jetty alteration).
AUT.005055.27.01 (CON20030505527)	Coastal permit (structure)	19/10/2004	Direction, placement and use of structures for barge berths, tug berths and a water taxi.
Occupation of CMA			
AUT.005055.01.01 (CON19960505501)	Coastal permit (occupy CMA)	02/12/1999	To occupy the seabed and water space for new walls and related structures for berths 1 and 2.
AUT.005055.26.01 (CON20030505526)	Coastal permit (occupy CMA)	19/10/2004	To occupy the seabed and water space for new walls and related structures for berths 3 and 4.
Micellaneous			
AUT.005055.34.01 (CON20090505534)	Land use consent (renewal)	26/02/2010	To deposit dredging material (during construction)

Whangarei District Council

Table 11: Existing WDC consents

Consent ref.	Consent Type	Date issued	Activity
TP96/316	Land use consent		<ul style="list-style-type: none"> Use of land for port and port -related activities including wharfs, terminals, associated loading and unloading structures, cargo sheds, port storage and transport operating areas, port related buildings (including storage sheds, stevedoring facilities, berth operations shed, gatehouse) and all ancillary activities. The construction, use and maintenance of covered and uncovered storage areas. Construction and use of the Mission to Seamen Facility incorporating recreational and administration activities with a residential component for the Mission to Seamen in manager. Construction, operation and maintenance of stormwater collection and bark separation system including stormwater signalling and storage ponds. Earthworks and the use of land for the deposition of dredged material during construction of the port and maintenance dredging of the turning basin. The construction and use of a water taxi facility including access Road and public car park, barge terminals, and public toilets on the Eastern edge of the reclamation. Construction and use of segregated transport corridor.
LU0841040	Land use consent (hazardous substances)	19/02/2009	The transport, storage and/or use of hazardous substances associated with port activities including the loading/unloading of materials.
LU1500068	Land use consent (harbour cranes)	05/06/2015	The establishment and operation of two harbour cranes on the existing port deck and wharfs.
	Land use consent	19/10/2004	Use of land for port and port related activities
	Land use consent	19/10/2004	Construction and use of buildings, stormwater, and ancillary works.

4.20 Existing unimplemented resource consents

4.20.1 Berth 4 reclamation and wharf (Northport)

The Berth 3 and 4 consents have not yet been fully implemented. Specifically, the fourth berth and its associated reclamation and wharf structure have not yet been constructed. Northport is in the early stages of constructing this berth in response to market demand.

4.20.2 Channel optimisation (Channel Infrastructure NZ)

On 14th December 2018, the Environment Court approved the various resource consents required for the Refining NZ Crude Shipping Project (AUT.037197 – see copy attached in **Appendix 23**). These currently unimplemented consents provide for the deepening and realignment of the shipping channel in the approach to the Whangarei Harbour. The works extend approximately 5 nautical miles from the Fairway Buoy to the CINZL jetty (see **Figure 65** below). The possibility that these consents may be implemented requires them to be considered in the various environmental effects assessments, particularly those relating to coastal processes (i.e. hydrodynamics and morphology) and marine ecology.

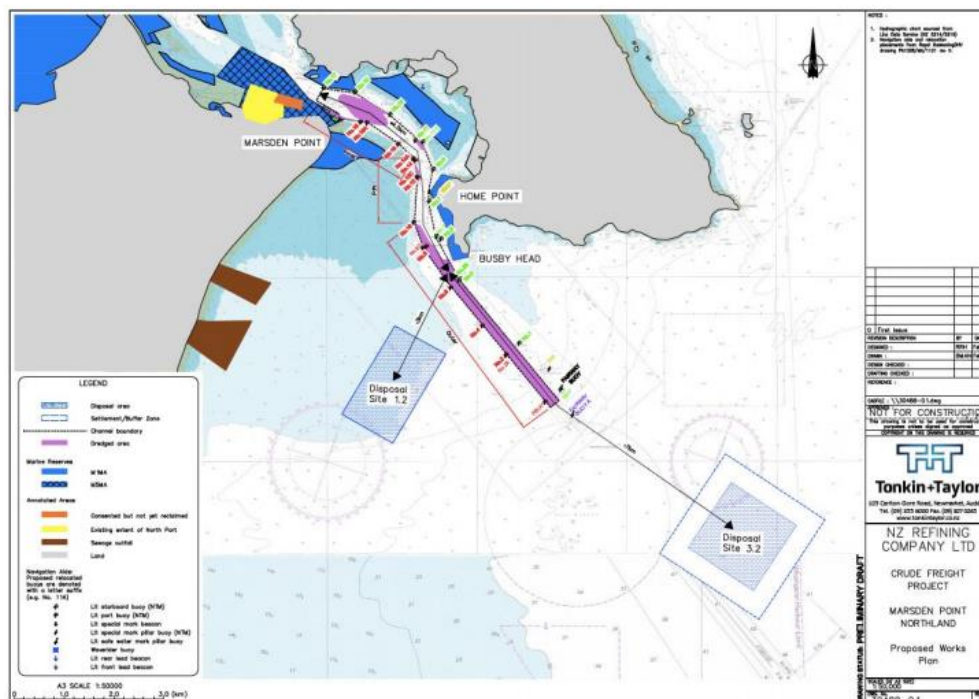


Figure 65: Proposed channel optimisation works (Source: Refining NZ)⁵⁰

⁵⁰ Proposed deepening in realigning of the Whangarei Harbour entrance and approaches 'Assessment of Environmental Effects Report and Resource Consent Applications', Ryder Consulting Ltd.

5. Assessment of Effects

5.1 Introduction

This section is an assessment of the actual and potential effects on the environment of the proposal. The assessment is supported by a full range of technical reports prepared by suitably qualified and experienced experts included as appendices to the AEE.

5.2 Cultural effects

5.2.1 General

This section presents the current understanding of cultural values and issues of significance to mana whenua in respect of the Project. It draws from engagement with mana whenua, specifically Patuharakeke, Te Parawhau, and Te iwi o Ngātiwai.⁵¹

Relevant source documents that have assisted the assessment below are:

- Patuharakeke Hapu Environmental Management Plan (2016).
- Patuharakeke Cultural Values Assessment Report (January 2019)
- Patuharakeke 'Interim Cultural Effects Assessment' (2021).
- Te Parawhau Hapu Iwi 'Mana Whenua Cultural Report' (2021) (incomplete draft).
- Te Iwi o Ngatiwai Iwi Environmental Policy Document 2007, and
- Te Uriroroi Hapu Environmental Management Plan Whatitiri Hapu Environmental Plan 2016.

5.2.2 Existing environment

It is recognised that Māori have a different perspective of what constitutes the “existing environment” to that established through caselaw under the RMA.⁵² More specifically, rather than assessing the effects on the environment as it exists today, the environment for Māori extends back to the environment that existed prior to Pākehā settlement and port and other developments at Poupouwhenua. This fundamentally different approach results in fundamentally different conclusions on the scale of effects.

5.2.3 Sustainable management

Patuharakeke have, in the CEA (2021), considered and expressed the potential effects of the project in terms of the following pillars of sustainable management under the RMA:

- Environment
- Culture

⁵¹ See Section 7 of this AEE for a summary of the engagement with mana whenua.

⁵² *Queenstown Lakes District Council v Hawthorn Ltd* [2006] NZRMA 424.

- Economic
- Social

The following assessment adopts the same approach and summarises the impacts and/or issues under each of these pillars.

5.2.4 Environmental effects

The Patuharakeke CEA (see **Appendix 24**) addresses the potential environmental effects of the proposal under the following topics:

- Marine ecology
- Avifauna
- Marine mammals
- Air discharges
- Climate change
- Coastal processes

The CEA raises concerns over the actual and potential effects of the proposed reclamation, dredging, and future port operations on marine ecology, taonga species and their habitats in the context of the Māori view of the existing environment (past, present, and future). It is noted that the concerns were raised prior to many of the proposed avoidance, mitigation, and enhancement measures being finalised, particularly in relation to avifauna and marine mammals.

Regarding marine mammals, there is a general concern about the cumulative impacts on marine mammal taonga. As suggested in the report, the role of kaitiaki in protecting this taonga requires further refinement.

The impacts of climate change are raised in the CEA, including risks to ecosystems, and threats to Māori culture and well-being. The concerns do not appear to be specific to Northport activities, except in relation to emissions from combustion engines.

The CEA also refers to the 'Patuharakeke Draft Hapu Strategic Plan' and questions whether the proposed port expansion aligns with the goals and measures of that document.

5.2.5 Cultural effects

The Patuharakeke CEA addresses cultural effects under the following sub-topics:

- Cultural landscapes and seascapes
- Loss of Takutai Moana
- Mauri

- Mana
- Kaitiakitanga

The CEA raises concerns over the impacts of the expansion in terms of cultural landscapes, seascapes, and customary access and rights to the Takutai Moana. Other potential impacts raised in the report include:

- Effects on Patuharakeketanga, ahurea as the port development will not provide for te reo Māori me ōna tikanga, and cultural and spiritual wellbeing.
- Erosion of the mauri of the harbour resulting from the proposed dredging, and subsequent effects on kaitiakitanga, mātauranga Māori, and mana.

Consistent with the Māori view of the existing environment, these effects span the past, present, and future.

Additional concerns have been raised in respect to the impacts on applications for CMT under the MACA. It is noted in this respect that all applicant groups seeking grant of CMT in the area likely to be impacted by the proposal have been notified and their views sought.

5.2.6 Economic effects

While acknowledging the potential benefits of the port expansion to the local and regional economy, the Patuharakeke CEA expresses concern over past negative economic impacts on hapū through the loss of land, loss of resources, and impacts on low-income families (e.g. inability to supplement weekly kai budget with kaimoana). While this concern is acknowledged, it is extremely difficult to quantify these impacts in the context of a proposed port expansion. However, they provide the backdrop for further discussion and potential mitigation.

The CEA expresses concern over the boom-and-bust nature of past employment generating industry in the area. This is interpreted as a likely reference to the recently decommissioned Marsden Point Oil Refinery. Conversely, ports are not typically boom/bust type developments, and have much greater longevity given their more sustainable role in facilitating long-term inter-regional and international trade.

Citing the 'Patuharakeke Draft Hapu Strategic Plan' the CEA questions whether the proposed port expansion aligns with the goals and measures of that document.

Northport reiterates its commitment to working with mana whenua to explore pathways for training, education, and employment in response to the issues raised in the CEA.

5.2.7 Social hauora/health effects

Patuharakeke have expressed concern over the growth that has occurred in their rohe without holistic infrastructure planning and future proofing. They see the construction of Northport and SH15 as having enabled growth which has increased pressure on natural resources, without improving the social, economic, and cultural well-being of Patuharakeke. Specific concerns include:

- There is a general feeling that development has alienated the local people from the harbour and its resources.
- Air and noise emissions have impacted on the experiential qualities of the cultural landscape at Poupouwhenua.
- The inability of the Ruakaka Wastewater Treatment Plant to cope with the growth has resulted in a resource consent for an ocean outfall.
- Local roads and the highway are less safe for the community.

The general view expressed in the Patuharakeke CEA is that the expansion of Northport will exacerbate these impacts.

Referring to the Draft Hapu Strategic Plan, and in particular Pou Hauora (Whānau health pillar), Pou Mātauranga (Education), and Pou Tai Tamariki-tanga (Succession), the CEA considers these are all affected by the social impacts of the proposal.

5.2.8 Measures to address cultural effects

Consultation with mana whenua to date has raised a number of issues. Some of these remain unresolved the time of lodgement. However, Northport is committed to continuing to directly and meaningfully engage with mana whenua to understand, and where possible address, these issues post -lodgement.

Measures to address some of the effects identified in the Patuharakeke CEA are summarised in **Table 12** below.

Table 12: Summary of project measures relevant to cultural effects

Effect	Response
Marine mammals	<p><u>Construction</u></p> <ul style="list-style-type: none"> ▪ Potential involvement of mana whenua in effects management, particularly during construction. <p><u>Construction and operation</u></p> <ul style="list-style-type: none"> ▪ Approval and implementation of a Marine Mammal Management Plan (MMMP), including measures to minimise underwater noise and ship strike.
Avifauna	<p><u>Construction</u></p> <ul style="list-style-type: none"> ▪ Approval and implementation of avifauna effects management measures contained in the CEMP. <p><u>Construction and operation</u></p> <ul style="list-style-type: none"> ▪ Provision of additional roosting area for VOC.

Traffic	<p><u>Construction</u></p> <ul style="list-style-type: none"> Approval and implementation of a construction management plan. <p><u>Operation</u></p> <ul style="list-style-type: none"> Monitoring of port traffic and potential future upgrades of SH15/local road intersections.
Coastal access	<ul style="list-style-type: none"> Public park/reserve development and associated access.
Stormwater discharges/water quality	<p><u>Construction & dredging</u></p> <ul style="list-style-type: none"> Approval and implementation of a dredge management plan(s). Sedimentation avoidance measures during construction. <p><u>Operation</u></p> <ul style="list-style-type: none"> Compliance with water quality discharge conditions of consent designed to maintain water quality in the harbour receiving waters. On-port mitigation.
Noise (construction and operation)	<p><u>Construction</u></p> <ul style="list-style-type: none"> Approval and implementation of a construction management plan addressing inter alia potential construction noise. <p><u>Port operations</u></p> <ul style="list-style-type: none"> Port Noise Management Plan. Mechanical ventilation for affected properties.
Air quality	<p><u>Construction</u></p> <ul style="list-style-type: none"> Compliance with conditions of consent, including management plan(s). <p><u>Operation</u></p> <ul style="list-style-type: none"> General commitment to reducing emissions from combustion engines where practicable.
Archaeology	<ul style="list-style-type: none"> Adherence to accidental discovery protocol.

It is expected that there will be conditions to mitigate cultural effects in addition to those identified in **Table 12** above. However, this will require further consultation and collaboration between Northport and iwi/hapū post lodgement.

5.3 Coastal processes

5.3.1 General

Potential effects (including cumulative effects) on coastal processes from the construction of the expanded port have been assessed by T+T with technical support from MO. The conclusions from this assessment are summarised below. Further detail is provided in the T+T report in **Appendix 10**.

5.3.2 Reclamation and seawalls

The reclamation and seawalls will be built using a combination of land-based equipment and barge mounted equipment. The potential effects of construction will be the diversion of tidal currents and waves due to the location of the completed structures, the occupation of the seabed, and the increase in suspended sediment plumes during the construction of the seawalls. Provided the rocks used are relatively free from dirt and contaminants, the likelihood of any significant sediment plume extending beyond the port development boundary is low. Accordingly, T+T concludes that construction effects on physical coastal processes outside the port area for the reclamation and seawalls will be **negligible**.

5.3.3 Dredging

The sediment to be dredged is fine silty sand, similar to the general seabed morphology in the inlet and lower harbour areas. Based on an analysis of sediment chemistry from previous investigations, dredged sediment is clean with most potential contaminant levels either below detection or within the lower range of acceptable guidance criteria.

Modelling by MOS (2022c) shows that mean total sediment concentrations will follow the main channel. There is more sediment concentration evident with the TSHD than either the cutter suction dredge or backhoe dredge. From a coastal process perspective, the main impact of these sediment concentrations is the accretion that may occur in these areas.

The release of sediment during dredging is largely limited to the dredge footprint and along the main channel immediately to the west of the dredging areas. Deposition within the dredging footprint will be addressed by the dredging plant in achieving the required dredge levels. T+T predicts that any sedimentation to the west is likely to return to the dredged area over time, to be recovered during maintenance dredging campaigns.

Observations from previous dredging campaigns, including the original port construction and maintenance dredging carried out in 2018 shows significantly lower values of suspended solids than predicted by the numerical modelling.

Overall, T+T conclude that dredging effects on physical coastal processes outside the port area will be **minor**.

5.3.4 Waves

Northport is sheltered from the larger waves in Bream Bay. However, the proposed reclamation extends seaward to be closer to the inlet entrance and is likely to slightly increase wave turbulence during extreme events due to the more reflective surface of the port reclamation.

T+T state that while the predicted changes in wave heights during high energy events have the potential to locally increase erosion and scour of the beach and inter tidal area between the port and the CINZL jetty, the related effects will be **minor**.

5.3.5 Currents and sediment transport

MO modelling (see **Figure 66** below) shows a reduction in tidal currents along the intertidal and side channel extents between the port and the CINZL jetty of 0.6m/s immediately east of the reclamation, reducing towards the east along the port frontage. The modelling also shows some slight increases of around 0.2m/s within the base of the channel adjacent to the seaward edge of the reclamation, a small increase in currents towards Marsden Bay, but no significant change to the east of the CINZL jetty. Within the port basin area changes in peak currents are less than 0.5m/s.

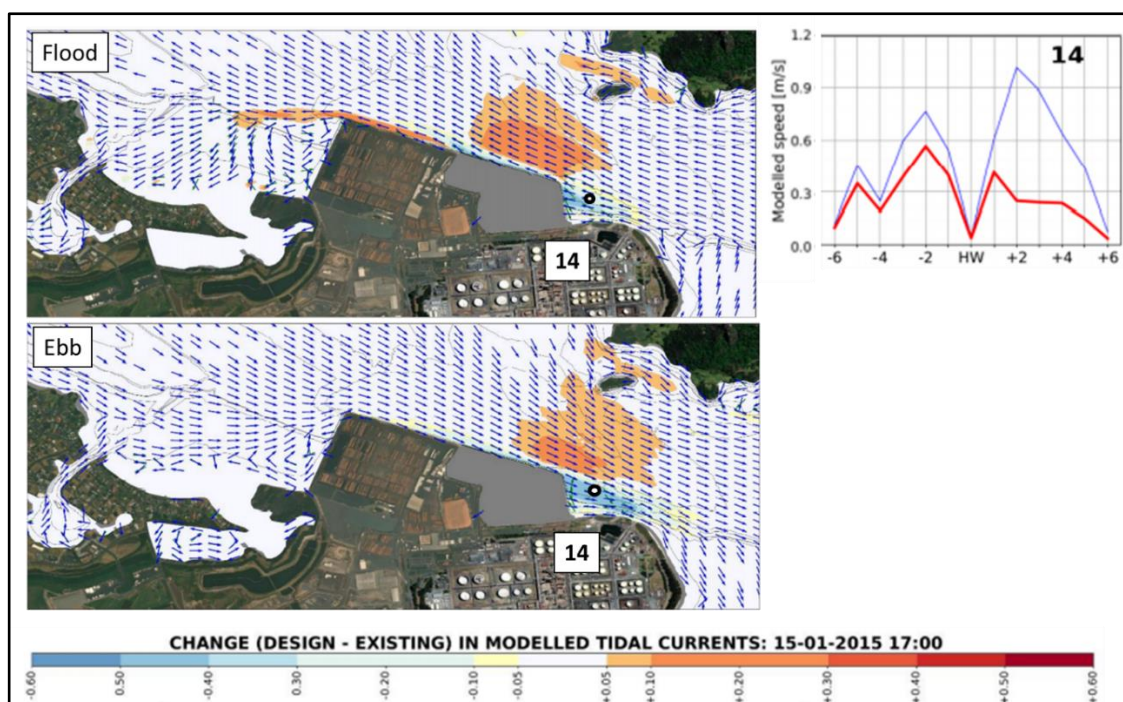


Figure 66. Difference in peak tidal currents (flood and ebb)

The reduction in currents to the immediate east of the reclamation is predicted to affect sediment transport patterns in this area as the reduced currents are likely to support sedimentation. Specifically, the MO modelling shows an area of slight accretion at the eastern edge of the reclamation and along the edge of the main channel, but no significant morphological change.

Based on the predicted morphological response, T+T concludes that the reduction in current velocity that extends towards the CINZL jetty may enable accumulation on the upper banks of the channel, in the port mooring area, and in other areas between Northport and the CINZL jetty. No significant sediment transport change is observed further to the east of the CINZL jetty. Northport will continue to engage with CINZL to ensure that sedimentation is appropriately managed, including by undertaking maintenance dredging as required.

5.3.6 Water level

Based on MO studies and the relatively small area of reclamation relative to the harbour area, there will be no measurable change to the water levels within the harbour and the effects will therefore be **negligible**.

5.3.7 Expected changes to the inner harbour

MO modelling indicates that there will be no morphodynamic change to the inner harbour west of Marsden Bay. T+T conclude that the associated effects will be **negligible**.

5.3.8 Expected changes along the entrance channel

The entrance channel area⁵³ is relatively sheltered from waves generated in Bream Bay. This, together with the small fetches in this area, means that the potential for locally wind generated waves is low. MO modelling shows some changes to tidal currents, with reductions along the southern edge of the channel. T+T concludes that while this could result in accretion along the southern edge of the channel, the overall effects are expected to be **minor**.

5.3.9 Expected changes to the ebb tide shoal and Mair Bank

The ebb tide shoal is a large, stable, medium to fine sandy feature formed by tidal currents and waves. Mair Bank is a coarse sand and shelly/gravel feature within the intertidal and sub-aerial part of the shoal that has a large biological component (pipi and mussels). The upper parts of the shoal and Mair Bank are more dynamic features that can vary in horizontal elevation by ± 0.5 m and vertical position by ± 2.0 m from year to year responding to higher energy wave events.

The MO velocity and morphodynamic studies shows small changes in tidal currents, with reduced currents along the southern edge of the channel. T+T considers that while this could result in accretion along the southern edge of the channel, it may occur as a small one-off adjustment, with a new equilibrium restored after conditions stabilise. Accordingly, T+T conclude that the overall effects are expected to be **minor**.

⁵³ This area includes the small bays along the rocky coast from Mount Aubrey to Home Point including Calliope Bank, Urquarts Bay and Taurikura.

5.3.10 Expected changes to the open coast shoreline

The results of the MO velocity and morphodynamic studies suggest no change in the physical processes to the east of the CINZL jetty. Therefore, T+T concludes that the expected effects of the proposed expansion on the open coastline will be **negligible**.

5.3.11 Expected effects on existing and future coastal hazards

The sandy shoreline along the northern part of Bream Bay and within the Whangarei Harbour are susceptible to coastal erosion and are likely to experience greater erosion pressure as a result of sea level rise and climate change effects. The main driver for change will be increased sea levels that allow higher waves to reach the nearshore environment for all wave conditions.

Increased sea level will reduce the effect of the proposed dredging on wave processes as the greater water depth will reduce nearshore processes. The potential for increased tidal flow from the harbour will not be affected by the proposal as the throat of the inlet will not be modified and it is this area that controls the tidal flows.

The proposal is expected to have a minor effect on tidal flows in the present day, and T+T concludes that the effects on existing and future coastal hazards are expected to remain **minor**.

5.3.12 Tsunami

The existing harbour area is vulnerable both to distant and local tsunami sources. The high velocities resulting from the tsunami are likely to result in large scale movements within the sandy systems of the nearshore, ebbside delta, coastline, and inner harbour.

No tsunami wave modelling has been carried out as the narrowest part of the inlet throat will not be modified by the proposal. Accordingly, T+T concludes that the proposed expansion is unlikely to change the large-scale effects of tsunami on the wider environment.

5.3.13 Effects of proposed bird roost

Short term

The construction activity associated with the proposed bird roost will have negligible effects on coastal processes.

Long term

The inclusion of sand and the ongoing top-ups will have a beneficial effect on coastal processes by increasing the sediment budget within Marsden Bay. This offsets, to some degree, sea level rise effects, and potentially reduces the overwash and landward retreat of the existing barrier beach. The sheltering provided by the roost is also likely to enable the renewal of the mangrove stand that has currently eroded due to the landward migration of the barrier beach.

The sheltering effect may also result in some shoreline adjustment of the existing barrier beach, but these changes are likely to be negligible.

Overall, T+ T consider that the effects of the proposed bird roost on coastal processes will be **beneficial** due to the re-introduction of sediment to the western end of Marsden Bay and the sheltering of the existing barrier beach, reducing the observed landward migration of this feature.

5.3.14 Long term monitoring

T+T recommends monitoring of the areas within Marsden Bay and along the shoreline from the port to the CINZL jetty and Mair Bank. Much of these areas are already subject to hydrographic survey (including beach profiling), and this should continue in order to provide a comprehensive topographic and bathymetric dataset. Surveys should be carried out after completion of each stage of the development and at least annually for a period of not less than five years.

T+T advise that monitoring elevation changes (if any) in seabed and shoreline in these areas is the most useful form of long-term monitoring combined with ongoing measurement of waves and water level at the Wave Rider Buoy so that changes in shoreline and seabed elevations can be assessed together with changes in wave energy and water level fluctuations. Sediment sampling and analysis of surficial sediments within the eastern end of Marsden Bank could also be carried out to confirm any change in sediment properties that may potentially affect ecology in this area.

T+T notes that while it is anticipated that the turning area will need to be infrequently dredged as part of the port operations, this area is already subject to annual survey.

T+T recommends that pre and post dredging surveys should be retained by the consent holder in a compatible format to augment this dataset and information on the volumes and locations of deposition of both the capital and maintenance dredging recorded.

5.3.15 Overall effects conclusions

T+T concludes that effects on coastal processes for the eastern reclamation will be moderate, largely due to the occupation of the seabed within the reclamation footprint affecting coastal processes within this footprint as well as changes to currents, waves, and sediment transport patterns along the eastern side of the inlet channel. Excluding the effect of the occupation of the eastern reclamation, the remaining effects on coastal processes are **minor**.

5.4 Landscape values

5.4.1 General

Potential effects (including cumulative effects) on landscape values from the construction, maintenance and operation of the expanded port have been assessed by BNZL. The conclusions from this assessment are summarised below. Further detail is provided in the BNZL report in **Appendix 15**.

5.4.2 Impact ratings scale

The impact ratings used in the BNZL assessment (and in the AEE) are based on NZILA guidelines (described in **Table 13** below). These descriptors do not use RMA terminology, but they can be converted where this is needed to address key provisions of the RMA and associated planning documents.

Table 13: Impact ratings scale

Impact (effect)	Description
Very low	The proposed wharf extension(s) would be largely screened from view or 'lost' within its wider coastal landscape setting, and would have little or no impact on its character and values.
Low	A small part of the wharf extension(s) and/or some dredging activity would be discernible, but it / they would remain a minor, to very minor, component of the Whangarei Harbour landscape and environment. It / they would have a very limited impact on the character and related values of that wider setting.
Low-moderate	The proposed wharf extension(s) and/or dredging would constitute a discernible component of the harbour landscape and would change the profile of the existing port, but such awareness would not have a marked effect on the overall character and values of the landscape and coastal environment of Whangarei Harbour.
Moderate	The wharf extension (s) would be a clearly discernible component of the harbour landscape, resulting in changes to its composition and character. However, the harbour's values and identity would remain substantially intact.
Moderate-High	The wharf extension(s) and/or dredging would result in significant changes to the harbour landscape and environment, affecting its character / composition and values to an appreciable degree.
High	The wharf extension(s) and/or dredging would become a dominant feature within outer Whangarei Harbour, adversely affecting its character and values to a significant degree.
Very High	The wharf extension(s) / and /or dredging would be so dominant that it / they fundamentally change the nature of the landscape and coastal environment near Marsden Point, seriously degrading both the values and identity of the wider harbour.

Given the importance of the RMA effects terminology for interpreting some of the provisions in the PRP, the RMA terminology is shown in bold and brackets alongside the NZILA terminology in the assessment below.

5.4.3 Landscape effects on Marsden Point Beach

The beach to the immediate east of Northport, including its dune fringe and inter-tidal area, are large enough to register as a landscape within the wider Marsden Point coastline. Despite adjoining industrial development on three sides, it remains distinctive, different, and largely intact. It also has a clear sense of association with both Whangarei Harbour and the Whangarei Heads, and it is of significance to Patuharakeke.

The beach will be substantially diminished by the proposed expansion. The landscape effects associated with the loss of approximately two-thirds of the 'beach' are considered to be high (**significant**) albeit localised to the area within and immediately around the beach.

5.4.4 Landscape effects experienced from Reotahi

Reotahi will be the residential area most impacted by the proposed expansion. Specifically, the expansion will infill most of Marsden Point Bay, while the associated Ship to Shore (STS) Cranes, container stacks and other elevated structures will significantly change the visual profile of the port.

The proposed changes will be fully exposed to much of the suburban and beachside development at Reotahi. The STS Cranes will become signature features of the Marsden Point skyline when viewed from this area. Together with realignment of the shoreline in front of Marsden Point Beach and the extended lines of ship berths, the proposed expansion would therefore bring the Port perceptibly closer to Reotahi.

Notwithstanding the relative exposure to the proposed expansion, Reotahi is already exposed to the largely industrial nature of the Marsden Point landscape. This limits the degree to which the proposal will modify the fundamental character and values of the harbour. Despite Berth 4 and the proposed expansion being clearly visible from a range of vantage points around Reotahi, increasing the profile and heightening the skyline of the current industrial landscape will not greatly alter the nature of most views across the harbour to Marsden Point.

Considering the existing landscape context described above, the cumulative landscape effects of the proposed expansion (together with Berth 4) from Reotahi viewpoints have been assessed as moderate-high (**more than minor**).

5.4.5 Landscape effects experienced from the Harbour

When viewed from the Whangarei Harbour, the proposed expansion would largely merge with the existing Northport berths and associated shipping, and the CINZL facility (including its own jetty, berths, and shipping).

When viewed from near the harbour entrance the proposed expansion will be clearly visible, displacing most of Marsden Point Beach and its bay area.

Notwithstanding the above, the overall context for views of Marsden Point Beach from the harbour is against a coastal landscape that is already dominated by shipping, jetties, berths, oil tanks,

CINZL facility stacks, log piles, other industrial paraphernalia, and a range of maritime activities. Although boaties and those working on vessels that pass close to the current port would clearly see more of the proposed reclamation, the loss of most of Marsden Point Beach and bay will do little to change the perception of this highly developed and, for the most part, industrialised, part of Whangarei Harbour's coastline.

On balance, the landscape effects associated with mid-harbour views towards Marsden Point Beach have been assessed as moderate (**more than minor**).

5.4.6 Landscape effects from elsewhere

When viewed from elsewhere, the effects of the proposed expansion will be limited. The main effect of the expansion will be to heighten the skyline profile of the port, with the introduction of the STS and Gantry Cranes, taller container stacks and the reefer towers. This will be exacerbated at night-time by lighting on the STS Cranes as well as on the new light towers. These effects will typically be secondary to those associated with the current port, but still discernible, including for:

- Parts of SH15
- The Albany Road Beachfront
- The Marsden Cove Canal Entrance
- Taurikura Bay

The landscape effects on the majority of locations (other than Reotahi) will be low to very low (**less than minor**).

5.4.7 Effects on ONLAs & ONFs

The expanded port will remain some distance from most of the ONLAs ONFs at Whangarei Heads. Although the proposed expansion would affect perceptions of these key landscapes and features when viewed from south of the harbour (primarily around Marsden Bay and One Tree Point), the expanded port is expected to have only a limited effect on public perception of the ONLAs and ONFs. They would continue to frame the harbour, whilst remaining quite separate from those coastal margins more directly associated with the existing port and CINZL facility on the near side of the harbour. As a result, the effects on the ONLAs and ONFs of the proposed expansion, including cumulative with Berth, will be low (**minor or less**), and consistent with Policy 15(a) and (b) of the NZCPS.

5.4.8 Overall effects conclusions

The BNZL conclusions in respect to landscape effects are summarised in **Table 14** below.

Table 14: Summary of potential landscape effects

Viewpoints/areas	Magnitude of effects
Marsden Point Beach	High (but localised to the area within and immediately around the beach) (significant)
Reotahi	Moderate (more than minor)
Whangarei Harbour	Moderate-High (more than minor)
Elsewhere	Low to very low (less than minor)
ONLAs & ONFs	Low (minor or less than minor)

5.5 Natural character

5.5.1 General

Potential effects (including cumulative effects) on natural character from the construction, maintenance and operation of the expanded port have been assessed by BNZL. The conclusions from this assessment are summarised below. Further detail is provided in the BNZL report in **Appendix 15**.

5.5.2 Impact ratings scale

The impact rating scale used for describing the magnitude of effects on natural character is the same as for landscape effects (see **Table 13** in Section 5.4.2).

5.5.3 Effects on natural character

Unlike the more remote coastline from Busby Head through to Bream Head, nearly every view towards Marsden Point and Northport is contextualised by human activities and developments.

While the proposed expansion will exacerbate the existing interplay between the more developed and natural parts of the harbour, it will not fundamentally alter the nature or extent of this interplay. The expansion will concentrate new maritime development where natural character has already been significantly impacted, and natural character values have been eroded.

Although the character and values of Marsden Point Beach would be appreciably changed by the proposed expansion, this will not alter the natural character values of the wider Marsden Point coastline to a commensurate degree.

While locations such as Marsden Bay and Reotahi will be exposed to the new extensions to a greater degree than most other harbour-side settlement and public vantage points, the related level of change to the natural character values of the harbour for those viewing areas will remain limited, at or below a moderate level (**more than minor**), and not ‘significant’ with reference to Policy 13(1)(b) of the NZCPS.

5.5.4 Effects on High and Outstanding Natural Character Areas

There are Outstanding and High Natural Character areas near the proposed expansion, including McDonald, Calliope and Mair Banks, the inshore area west of One Tree Point, the coastal margins of Mt Aubrey, and the intertidal area of Blacksmiths Creek. However, the proposed expansion will avoid all these areas, instead being located within a part of the Whangarei Harbour that is already strongly linked to both the current Port and the CINZL facilities.

5.5.5 Overall effects conclusions

While locations such as Marsden Bay and Reotahi will be exposed to the proposed expansion to a greater degree than most other harbour-side settlement and public vantage points, BNZL consider that the related level of change to the natural character values of the harbour for these viewing areas will remain at or below a **moderate** level (**more than minor**) and not ‘significant’ with reference to NZCPS Policy 13(1)(b). This reflects the existing nature of Marsden Point, the way in which existing development (housing, roading, etc) frames views towards the existing port, and the wider balance between natural and cultural elements apparent within and around the Whangarei Harbour as a whole.

5.6 Amenity values

5.6.1 General

Potential effects (including cumulative effects) on amenity values from the construction, maintenance and operation of the expanded port have been assessed by BNZL. The conclusions from this assessment are summarised below. Further detail is provided in the BNZL report in **Appendix 15**.

5.6.2 Impact ratings scale

The impact rating scale used for describing the magnitude of effects on amenity values is the same as for landscape and amenity effects (see **Table 13** in Section 5.4.2).

5.6.3 Effects on amenity values at Marsden Point Beach

The extent of development on Marsden Point Beach will appreciably diminish the recreational utility and appeal of the beach and bay. Furthermore, Patuharakeke will lose a key component of the ceremonial way and access to *Poupouwhenua Mataitai* at the distal end of the Marsden Point spit.

Overall, the effects of the proposed expansion on the amenity values of the eastern beach are assessed as moderate-high (**significant**).

5.6.4 Effects on amenity values at Reotahi

Reotahi will be exposed to the eastern reclamation, including new berths and shipping, new cranes, container and cargo areas, lighting, and other port activities. The port will appear more visually imposing than at present, while lighting on the STS cranes, gantry cranes and new light towers will change/expand the port profile at night-time.

Potential effects on amenity values at Reotahi and Taurikura will be contextualised by both the current port and CINZL facility, as well as by the coastal settlements and residential areas that frame most views across, and up and down, the harbour. More specifically, the CINZL facility is an industrial backdrop to the proposed expansion area, while related port activities are already part the current landscape.

Overall, the effects of the proposed expansion on the amenity values for Reotahi will be moderate-high (**more than minor**).

5.6.5 Effects on amenity values of the wider harbour

Given the existing context of port and other industrial activities, the proposed expansion, together with Berth 4) is expected to make little difference to the wider character and amenity values of the Whangarei Harbour or the identity of nearby parts of the harbour, including the various settlements of Whangarei Heads and Marsden Bay.

Overall, the effects of the proposed expansion on the amenity values of the wider harbour range between low and very low (**less than minor**).

5.6.6 Overall effects conclusions

Marsden Bay, Reotahi, and Marsden Point Beach will be subject to the highest levels of effects on amenity values. Overall, BNZL consider that the amenity effects of the proposed expansion on these areas will be moderate-high (**more than minor**) but contextualised by both the current Port and CINZL facility, and coastal settlements in residential areas that frame most views across, and up and down the harbour. The effects on amenity values for other areas range between very low (**less than minor**) and low-moderate (**minor**).

5.7 Marine ecology

5.7.1 General

Potential effects (including cumulative effects) on marine ecology from the construction, maintenance and operation of the expanded port have been assessed by Coast and Catchment (C+C). The conclusions from this assessment are summarised below. Further detail is provided in the C+C report in **Appendix 11**.

The C+C report has been peer reviewed by Cawthron Institute, who have confirmed that the C+C report covers a suitable range of ecological receptors; that the spatial scale is appropriate; and that the assessment is founded upon a suitable coverage of historical and recent survey data. A letter from Cawthron Institute summarising the recommendations from the peer review is attached as **Appendix 12**.

5.7.2 Assessment context

Policy D.2.18 of the PRP directs that when assessing the potential adverse effects of activities on identified values of indigenous biodiversity a system-wide approach to large areas of indigenous biodiversity should be employed, recognising that the scale of the effect of an activity is proportional to the size and sensitivity of the area of indigenous biodiversity. In essence, this approach avoids micro-level assessment of effects with no cognisance of relevant scale and magnitude.

Marine ecology is complex, inter-related, and multi-faceted. Therefore, there is no single system or scale that is appropriate for all aspects. Therefore, in terms of achieving sustainable management and in the context of Policy D.2.18, C+C consider the appropriate scales for assessment of effects on different aspects of marine ecology to be as set out in **Table 15** below.

Table 15: Relevant system for assessing effects on components of marine ecology

Potential effects	Relevant system
Benthic habitats and macrofauna	Harbour
Kaimoana shellfish	Harbour
Subtidal habitat and benthic macrofauna (Reclamation)	OHEZ (Outer Harbour Ecological Zone)
Subtidal habitat and benthic macrofauna (Dredging)	OHEZ
Seagrass (dredging)	Harbour
Macroalgae (seaweeds)	OHEZ

Fish	Harbour
Reef habitat and biota	Harbour
Stormwater discharges	Beyond the mixing zone

Notwithstanding this, C+C have considered the effects of the proposal on marine ecology at three scales, being the footprint, OHEZ and harbour-wide scales for completeness.

5.7.3 Actual and potential effects identification

The actual and potential effects of the proposed reclamation, dredging and stormwater discharges are identified broadly as follows:

- Loss of marine habitat and biota living within the reclamation footprints, with associated effects on related values, including ecological biodiversity, productivity, and other environmental services.
- Indirect effects arising from alteration to currents, wave and/or sedimentation patterns.
- The effects of sediment suspension, dispersal, and deposition beyond dredged areas.
- Displacement of species that utilise the reclamation areas, but do not permanently live within it.
- Effects associated with hardening the shoreline around reclamations (the proposed reclamation will result in the loss of approximately 375 m of natural shoreline).
- Construction-related effects, associated with establishing temporary staging areas, or having machinery working in the CMA beyond the reclamation footprint.

The C+C report has adopted the EIANZ guideline terminology for assessing the magnitude of marine effects in this report (see **Table 16** below). The report notes that a “Low” EIANZ effect is considered to be a “minor” or “less than minor” effect under the applicable RMA planning/legal framework; and a “Moderate” EIANZ effect is considered to straddle a “minor” and “more than minor” range.

Table 16: Ranking systems developed by EIANZ for assessing adverse environmental effects

EIANZ guidelines	
Magnitude	Description
Negligible	Very slight change from the existing baseline condition. Change barely distinguishable, approximating to the ‘no change’ situation; AND/OR Having negligible effect on the known population or range of the element/feature.
Low	Minor shift away from existing baseline conditions. Change arising from the loss/alteration will be discernible, but underlying character, composition and/or attributes of the existing baseline condition will be similar to pre-development circumstances or patterns; AND/OR Having a minor effect on the known population or range of the element/feature.
Moderate	Loss or alteration to one or more key elements/features of the existing baseline conditions, such that the post-development character, composition and/or attributes will be partially changed; AND/OR Loss of a moderate proportion of the known population or range of the element/feature.
High	Major loss or major alteration to key elements/features of the existing baseline conditions such that the post-development character, composition and/or attributes will be fundamentally changed; AND/OR Loss of a high proportion of the known population or range of the element/feature.
Very high	Total loss of, or very major alteration to, key elements/features/ of the existing baseline conditions, such that the post-development character, composition and/or attributes will be fundamentally changed and may be lost from the site altogether; AND/OR Loss of a very high proportion of the known population or range of the element/feature.

Given the importance of RMA effects terminology for interpreting the indigenous biodiversity policies in the PRP, C+C have confirmed the equivalent RMA terminology in their report for key flora and fauna, and this is also shown in bold and brackets alongside the EIANZ terminology in the assessment below.

5.7.4 Dredging effects

Existing environment

The existing environment within the dredge area can be broadly grouped into three zones based on past dredging activity:

- A shallow area towards the west, that is yet to be dredged, where a mix of sand and shell gravel, scattered red algae, and a variety of species including occasional starfish, sponges, anemones, and infrequent scallops and octopus were observed in the November 2021 video survey.
- The batter slope between that area and the adjoining, previously dredged area, which consisted of bare sand that gave way to a dredged seafloor completely covered with a variety of sessile organisms such as sponges, bryozoans, hydroids and macroalgae.
- Other parts of the previously dredged area which contained a mix of sand, scattered and dense shell, and biogenic species such as red algae and sponges.

Northport holds capital and maintenance dredging consents associated with Berths 1-4.⁵⁴ These consents enable dredging to a depth ranging between 13m and 14.5m across the area denoted by the purple pecked line in **Figure 67**. The proposed dredging extent as shown with a red line.

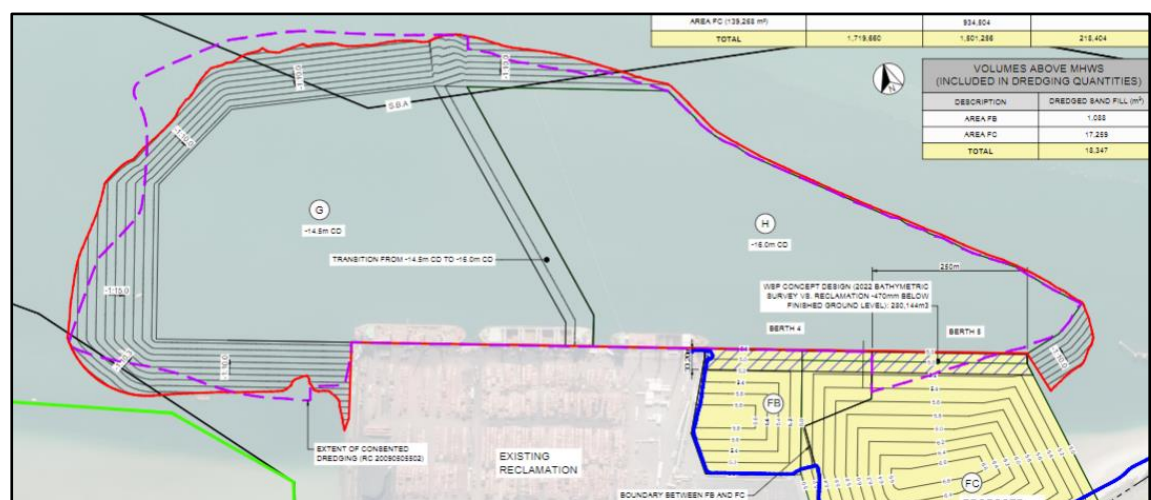


Figure 67: Existing consented dredging extent

⁵⁴ CON19960505511 (Berths 1 & 2), CON20030505529 (Berths 3 & 4).

The relevant water quality standards in these consents are as follows:

Berths 1 and 2 – CON20090505502 (capital)

21. *Dredging shall be carried out using the appropriate design of cutter head and operation to minimise suspension of sediment into the water column to the extent that:*

- (i) The visual clarity (as measured using a black disk or Secchi disk) of harbour water shall not be reduced by more than 20% of the median background visual clarity at the time of measurement; and*
- (ii) There shall be no conspicuous scums or foams, floatable or suspended material in harbour water, as a result of dredging immediately outside of a 400 m radius of the point of dredging.*

Berths 1 and 2 – CON19960505511 (maintenance)

11. *All maintenance dredging, including any operations consequent upon the excavation and transportation of dredged material, shall be carried out in a manner that minimises the suspension of sediment into the water column so that the following standards are met immediately outside of an 800 m radius of the point of dredging:*
- (i) The visual clarity (as measured using a black disc or Secchi this) of harbour water shall not be reduced by more than 20% of the median background visual clarity at the time of measurement.*
 - (ii) The hue shall not be changed by more than 10 Munsell units of the median background hue at the time of measurement.*
 - (iii) Where Z_{eu} is the euphotic depth, defined as the depth at which photosynthetically available radiation [PAR] is reduced to 1% of the level of surface water, the light penetration in the harbour water deeper than $0.5 Z_{eu}$ shall not be changed by more than 10% of the median background euphotic depth at the time of measurement. The light penetration in harbour water shallower than $0.5 Z_{eu}$ shall not be reduced by more than 20% of the median background euphotic depth at the sediment bed, at the time of measurement.*
 - (iv) There shall be no conspicuous scums or foams, floatable or suspended material in the harbour waters.*

Berths 3 and 4 – CON20030505522 (capital)

19. *Dredging shall be carried out using the appropriate design of cutter head and operation to minimise suspension of sediment into the water column to the extent that:*

- (i) The visual clarity (as measured using a black disk or Secchi disk) of harbour water shall not be reduced by more than 20% of the median background visual clarity at the time of measurement; and*
- (ii) There shall be no conspicuous scums or foams, floatable or suspended material in harbour water, as a result of dredging immediately outside of a 400 metre radius of the point of dredging.*

Berths 3 and 4 – CON20030505529 (maintenance)

12. *All maintenance dredging, including any operations consequent upon the excavation and transportation of dredged material, should be carried out in a manner that minimises the suspension of sediment into the water column so that the following standards are met immediately outside of a 400 m radius of the point of dredging:*

- (i) *The visual clarity (as measured using a black disc or Secchi disc) of harbour water shall not be reduced by more than 20% of the median background visual clarity at the time of measurement.*
- (ii) *There shall be no conspicuous scums or foams, floatable or suspended material in the harbour waters.*

The capital dredging consent for Berths 1 and 2 has an area of 9ha that is yet to be dredged. This equates to 641,800m³ of material (around a third of the proposed dredge volume under the current proposal).

Dredging effects relative to the existing environment

As shown in **Figure 67**, the proposed dredging will largely be limited to an area where dredging has already occurred or is currently consented under CON19960505511 (Berths 1 & 2), and CON20030505529 (Berths 3 & 4). In addition to the slight increase in the dredge footprint, the depth will be increased from 13-14.5m to 14.5 – 16m.

The removal of existing macroalgae and disturbance or removal of substrates they attach to (shell gravel) within the dredging footprint are largely provided for under the existing capital and maintenance dredging consent.

The proposed dredging effects over and above those provided for under the existing consents are as follows:

- (1) Minor changes to dredge extent (see **Figure 67**) – on balance, the effects are similar.
- (2) Increase in dredge depth (1.5m) potentially changing sediment composition in the swing basin).
- (3) Slightly reduced current velocities due to increased depth.
- (4) The dredge duration for the proposal (estimated to be approximately 200 days depending on the dredge method) is likely to be longer than the duration of consented capital and maintenance dredging (estimated to be approximately 70 days depending on the dredge method).

The proposed dredging will also include more robust and modern consent conditions (positive effect).

Deepening of the swing basin

If the characteristics of the seabed substrates at the proposed dredging depth are similar to those existing at the currently consented depth, C+C predict that a similar community of benthic macroinvertebrates will reform once the dredging is complete. However, macrofaunal diversity would likely be lower if areas of dense shell were permanently lost.

Sediment plumes

Modelling of sediment dispersal plumes was done for three potential dredging methods: trailing suction hopper dredger (TSHD), cutter suction dredger (CSD), and backhoe dredger (BHD). The models were run for dredges operating continuously from a fixed position for 24 hours a day, 7

days a week, over a 1-month period (Cussioli *et al.*, 2022). That, together with comparisons between previous modelling results and observations from actual dredging campaigns, suggests the modelling was conservative and indicative of the upper bound of potential effects (Reinen-Hamill, 2022).

In addition, the modelling of predicted sediment depositional depths did not account for any resuspension and redispersal of the sediment. As indicated by MO, the cumulative deposition footprints obtained from the simulations assume that sediments stay in place once they settled on the seabed when in reality, some sediment resuspension is possible, the extent of which depends on the sediment type (percentage of fines etc.).

Consequently, the models are generally expected to over-predict TSS concentrations and deposition depths. However, in the absence of alternative predictions, the following assessments of ecological effects are based on the modelling results.

Key findings of ecological relevance from the dispersal plume modelling are:

- Sediment plumes generated by BHD are likely to be very localised and of little, if any, ecological consequence.
- Sediment plumes generated by CSD are likely to disperse in a narrow band beyond the dredging area. Mean concentrations are predicted to rapidly decline with distance, to levels that are likely to be of little ecological consequence.
- Sediment plumes generated by TSHD are predicted to produce the largest sediment plume and the highest sediment concentrations, with the modelling predicting that a large plume of sandy-silt will extend in a band along the southern, subtidal portion of the main channel, with mean concentrations predicted to rapidly decline with distance from the TSHD. A silty-sand plume was predicted to have a similar form but was more limited in extent.
- Model predictions showed near-bed concentrations of sandy-silt exceeding 20 mg/l for <30% of the time beyond the dredging footprint, with the percentage of time declining with distance. The predictions also showed that concentrations in a smaller area exceeded 160 mg/l for <30% of the time, and comparisons between the existing and proposed scenarios showed that the plume footprint reduced in size as dredging progressed and depth increased.
- At the proposed depth, near-bed sandy-silt concentrations of >160 mg/l will be largely contained within the dredged area.

5.7.5 Effects on intertidal sediment habitats and macrofauna

While the proposed reclamation will eliminate 6.6 ha of intertidal habitat, the overall abundance of common infauna will only be slightly reduced within the harbour and OHEZ, and changes to the diversity of macrofauna at those scales are not expected.

The proposed bird roost is in an area of moderate taxa diversity and abundance. The 2022 survey indicates that benthic communities around the feature are typical of those found in the upper to mid intertidal zone and associated with sand ridges in Marsden Bay. Based on the small area

affected, the effects of the proposed roost on intertidal habitats and macrofaunal diversity are expected to be low.

Reclamation effects on coastal processes such as currents and sediment transport are expected to be moderate within the area bounded by the eastern extent of the port and the CINZL wharf (Reinen-Hamill, 2022). The proposed reclamation is predicted to cause a reduction in currents that may cause sediment accretion on the channel banks between Northport and the Channel Infrastructure wharf and around the margin of the development. C+C predict that the corresponding ecological effects associated with the predicted sediment changes will be low to negligible.

Dredging is not proposed in intertidal areas, and sediment plumes and deposition associated with the dredging are predicted to be largely confined to subtidal channels. Accordingly, C+C concludes that the intertidal ecological effects from dredging are there expected to be **negligible**.

Overall, effects at the harbour and OHEZ scales on the extent of sandy intertidal habitat, the abundance and diversity of benthic macrofauna are assessed to be moderate, primarily based on the permanent loss of 6.6 ha of intertidal habitat.

5.7.6 Effects on subtidal habitat and benthic communities

Reclamation

Surveys indicate that infaunal benthic macrofauna values around the port are very high. The proposed reclamation site contained similar assemblages to sites on the western side of Northport, and although 14 taxa obtained from the proposed reclamation area were not found in the other areas sampled, all were common taxa.

While subtidal habitats within the reclamation footprint appear healthy and contribute to the broader diversity and ecological values of the harbour, C+C concludes that the proposed reclamation site does not contain unique or special ecological qualities and that the proposal is unlikely to reduce overall biodiversity values or compromise ecological functions and processes. That, together with the small scale of reclamation area relative to the overall amount of subtidal habitat within the Whangārei Harbour (at the OHEZ scale, reclamation will lead to the loss of a small proportion (0.26%) of natural subtidal habitat), leads C+C to conclude that the effects of reclamation on subtidal macrofauna will be **moderate** at the harbour and OHEZ scales.

Dredging

Modelling predicts that sediment plumes generated during dredging will affect the surrounding habitat. Subtidal areas predominantly to the west of the port are predicted to be periodically subjected to elevated suspended sediment concentrations, which if sustained for extended periods, could adversely affect sensitive macrofaunal species by reducing their physiological condition, growth, and survival. The scale, magnitude and duration of effect will depend on the type of dredging, length of time taken, and interactions between dredge operations and plume generation, tides, and the vagaries of winds and waves.

Model predictions indicate that if a TSHD is used, a relatively large area of the channel between Marsden Bay and Snake Bank may experience suspended sediment concentrations that approach levels and durations where adverse effects on subtidal habitats and communities occur. Those effects would be compounded by the impacts of sediment deposition which smothers seabed communities and habitats (particularly shell gravel). Modelling predicts that the effects of suspended and deposited sediment likely to be much more localised for CSD and BHD operations. In all cases, the effects of suspended sediment would cease at the conclusion of dredging and over time T+T predict that sediment deposited west of the dredged area will return to the dredge basin.

Key points to note are:

- The percentage of time that near-bed TSS concentrations exceed 80 mg/l is predicted to dissipate with distance from the dredging site.
- Sediment will be gradually dispersed and deposited, rather than depositing as one-off dumps.
- The models exclude real-world dynamics that will affect dispersal and deposition. For instance, the modelling does not account for any resuspension and redispersal of the sediment, and a static dredging position was used continuously for a month in the model.
- The sediments are of marine origin, which is likely to reduce their capacity to adversely affect benthic species.
- Multiple assessments have shown that effects of sediment disposal in subtidal sites tend to be relatively minor and short-lived. However, as noted earlier, this area contains extensive biogenic habitat, that includes large sessile filter feeders, macroalgae meadows and shell, which is likely to be particularly sensitive to smothering.
- The area has been previously dredged, but still retains high benthic ecological values.
- The modelling is conservative in several respects, including that it assumes the dredge operates continuously for the one month model period, which is not reflective of reality.
- Assuming that shell gravel habitat re-establishes, ecological recovery is expected to occur over a period of 5 or more years.

C+C concludes that while some uncertainty remains about the scale and magnitude of dredging effects, the impacts of dredging in subtidal areas are likely to vary depending on the method of dredging and range from:

- **High** at the OHEZ and Harbour scales if a TSHD is used; and,
- **Moderate** at those scales for CSD and BHD operations.

Based on the high ecological values observed in and around previously dredged areas, and assuming that shell gravel habitat re-establishes, ecological recovery is expected to occur over a period of 5 or more years.

5.7.7 Effects on kaimoana shellfish

The proposed reclamation will permanently eliminate existing shellfish (cockles) from the intertidal areas within the expansion footprint, noting that cockle densities within the proposed reclamation footprint were representative of densities found throughout Marsden Bay, and generally not of harvestable size.

No pipi or scallops were found to the east of Northport.

Given the widespread distribution of cockles around the harbour, and the lack of pipi or scallops to the east of Northport, the direct effects on kaimoana shellfish are assessed as low at the harbour and OHEZ scales.

5.7.8 Effects on seagrass and macroalgae

Reclamation

Patches of intertidal seagrass (approximately 0.33ha) are present in the area that will be covered by the proposed reclamation. Based on that, C+C concludes that the broader and local scale effects of seagrass being lost from within the proposed reclamation areas are **low** at all scales. This equates to a **less than minor** level of effect. In addition, based on the above analysis, C+C concludes that reclamation effects on any macroalgae classified as threatened or at risk are likely to be **low** or **negligible** at all scales. This equates to a **less than minor** level of effect.

Dredging

Seagrass

Seagrass is not present within the dredging footprint and so will not be directly affected by the proposed dredging. While sediment plumes have the potential to adversely affect seagrass in the surrounding area, modelling of the sediment dispersal plumes predicts that there will be little, if any, overlap between dredging related sediment plumes or sediment deposition, and subtidal seagrass.

In light of the above and given the ability of seagrass to tolerate short-term reductions in light, C+C concludes that the effect of sediment mobilisation on seagrass will be **low** at all scales (equating to a **less than minor** effect).

Macroalgae

Dredging could affect macroalgae through:

- Direct physical removal;
- Physically removing substrates that macroalgae attach to, particularly shell gravel.
- Deepening, which permanently reduces the amount of light reaching the seabed;
- Smothering macroalgae beneath mobilised sediment;

- Smothering substrates that macroalgae attach to, particularly shell gravel;
- Temporarily reducing the amount of light reaching the seabed through the suspension and dispersal of sediments.

Current velocities and the associated flux of nutrients will also be reduced, but those changes are not expected to have a tangible effect on macroalgae.

For the most part, the proposed dredging will be limited to an area where dredging has already occurred or is already consented, and so the effects are largely part of the existing environment.

If shell gravel is still present at the dredged depths, or reaccumulates after dredging ceases, then recolonisation by macroalgae is expected to occur in the dredged basin. However, changes to light conditions may alter the composition of the macroalgae community within that area. Recolonisation is expected to take around five or more years depending on whether attachment substrates remain after dredging or reaccumulate after dredging.

Fewer macroalgae are likely to recolonise the dredged area if shell gravel is not present at the dredged depths or does not reaccumulate after dredging ceases. Macroalgae are still likely to attach to other substrates such as living shellfish (e.g., horse mussels) and other material that accumulates on the seabed.

While some uncertainty remains about the scale and magnitude of indirect dredging effects, the C+C assessment indicates that impacts of dredging in subtidal areas on macroalgae are likely to vary depending on the method of dredging and range from:

- **High** at the OHEZ and Harbour scales if a TSHD is used; and,
- **Moderate** at those scales for CSD and BHD operations.

Based on the presence of macroalgae in and around previously dredged areas, and assuming that gravel-shell lag habitat re-establishes, C+C predict that ecological recovery will occur over a period of 5 or more years.

C+C note their conclusions with respect to levels of effects are conservative (for the reasons outlined in Section 5.7.4), and because risks will be reduced through monitoring and management processes proposed through conditions of consent.

Note that potential effects on macroalgae species assessed as threatened or at risk are assessed separately above.

5.7.9 Effects on reefs

While reef habitat is a relatively minor component of the Whangārei Harbour ecosystem, it makes an important contribution to the biodiversity values of the harbour.

The revetments along the western and eastern margins of Northport are narrow artificial reefs, with similar habitat and community values to naturally occurring reefs in the harbour. They contain a variety of macroalgae, sponges, echinoderms, crustaceans, and other marine

invertebrates typical of north-eastern New Zealand reefs, and support a relatively diverse assemblage of fish, including obligate reef dwellers.

The proposed reclamation will remove around 155m of existing rock revetment and create around 483m of rock revetment. All biota living in and around the eastern revetment that cannot, or does not, move from the existing structure prior to the reclamation commencing will be lost. In the medium term (5–10 years), those effects will be offset by the colonisation of a new revetment by a similar assemblage, along the margin of the proposed eastern reclamation.

Because the revetment is an artificial construction, more revetment will be created than lost, there are other natural reefs in the harbour, any adverse effects on reef species that are threatened or at risk will be low at worst (equating to a **less than minor effect**), dredging is unlikely to affect existing reefs, and recovery will occur over a period of around 5 years, the overall effect of reclamation on reef habitat and biota will be **low** immediately, and positive in the medium to long term. The overall effect of dredging on reef habitat and biota is considered to be **negligible** at all scales.

5.7.10 Effects on fish

The Whangārei Harbour has relatively diverse fish assemblages, with multiple species that forage on benthic macroinvertebrates, such as small crustaceans, polychaete worms, molluscs, and anemones.

For the most part the proposed dredging is located in an area that is already subject to capital and maintenance dredging consents associated with the existing port (see **Figure 67**).

Modelling indicates that sediment plumes generated during dredging and the resulting sediment deposition may affect surrounding habitat and benthic communities. The scale, magnitude and duration of the effects will depend on a range of factors including the type of dredging, the duration, and environmental conditions at the time of the dredging.

As outlined above, C+C predicts that the combined effects of dredging on benthic communities that are important to fish, including macroalgae will range between high at the OHEZ and Harbour scales if a TSHD is used, and moderate at the OHEZ and Harbour scales for CSD and BHD operations.

Ecological recovery is expected to be around 5 years.

However, impacts on fish are expected to be lower and temporary, because:

- The species potentially affected are able to move to other areas.
- Fish stock sizes are managed through fishing controls set under the Fisheries Management Act.
- Fish populations are unlikely to be limited by habitat or resource availability because fishing (carried out under the Fisheries Act) has reduced the populations of targeted species to levels well below those historically occurring.
- None of the fish potentially affected are Threatened or At-Risk species.

Overall, C+C concludes that the effect of disturbing or losing fish habitat within the dredging and reclamation footprints is assessed as **low** at all scales.

5.7.11 Stormwater discharges

Overall, the available information suggests that the current discharge poses little ecological risk. This conclusion is supported by toxicity testing (WETT)⁵⁵ carried out by NIWA in 2003 and 2005 and more recently in 2017, which showed no significant toxicity at 200 times dilution, and even under the highest concentrations tested (32% and 63.5% for marine algae and the wedge shell *M. liliiana*, respectively), there were no adverse effects on the test organisms relative to the control.

The existing stormwater system will be upgraded to accommodate runoff from the proposed reclamation areas. Importantly, no logs or other bulk freight will be stored on the proposed reclamation areas. Consequently, stormwater contaminant loads from the proposed reclamation are expected to be relatively low. Discharge water quality is therefore expected to be similar to, or better than, that provided by the existing system (due to inputs of cleaner stormwater), but discharge loads may increase slightly. Overall, the proposed reclamation is expected to have a low effect on sediment and water quality based on:

- Past monitoring and assessments that indicate key contaminant concentrations are well below toxicity guidelines after reasonable mixing;
- The outfall discharges to a high flushing area;
- Contaminants are unlikely to permanently settle and accumulate in the local receiving environment.

Assuming that past monitoring results are representative of existing discharge quality, and that a similar discharge quality will be maintained, the addition of the proposed reclamation area is **not expected to cause any additional adverse ecological effects**. However, C+C recommends that stormwater monitoring requirements be reviewed to ensure:

- They remain aligned with port operations (e.g. the addition of total organic carbon is recommended); and,
- They provide a timely warning for management intervention if unanticipated changes in the discharge occur.

⁵⁵ Whole Effluent Toxicity Testing.

5.7.12 Proposed avoidance and/or mitigation measures

The following avoidance and/or mitigation measures are proposed:

Minimising sediment plumes

- Adherence to a dredge management plan(s), and associated conditions of consent, including:
 - Dredging methodology.
 - Monitoring of turbidity.
 - Potentially removing key species from affected sites prior to reclamation/capital dredging where practicable

Stormwater

- Compliance with conditions of consent relating to stormwater discharge quality.

5.7.13 Overall effects conclusions (excluding cumulative effects)

A summary of the potential effects (excluding cumulative effects) in accordance with EIANZ guidelines (at all scales) is provided in **Table 17** below:

Table 17: Summary of ecological effects (excluding cumulative effects) at the harbour, OHEZ and footprint scales
(the most relevant system for each effect is unshaded)

Potential effects	System		
	Harbour	OHEZ	Footprint
Intertidal sediment habitats and macrofauna	Moderate	Moderate	Very high
Effects on kaimoana shellfish	Low	Low	High
Direct effects on subtidal benthic macrofaunal diversity from reclamation.	Moderate	Moderate	Very High
Direct effects on subtidal benthic macrofaunal diversity from dredging.	Moderate to High	Moderate to high	Moderate to High
Effects on seagrass	Low	Low	Very High
Effects on macroalgae	Moderate to High	Moderate to high	Moderate to High
Effects on fish	Low	Low	Low

Effects on reef habitat	Positive in the medium term to long term	Positive in the medium to long term	Positive in the medium to long term
Effects of stormwater discharges.	Low	Low	Low

C+C concludes that the ecological effects of the proposal (including cumulative effects) with respect to; threatened or at-risk species; and identified SEAs will either be **negligible to less than minor** at worst (and in some cases **temporary**).

The C+C report also concludes that if best practice methods for managing dredging effects are applied, then the ecological effects on any other potential areas of significant indigenous vegetation and habitats of indigenous fauna under Appendix 5 of the Regional Policy Statement (RPS) could also be kept within **minor** and/or **transitory** levels.

As outlined in the C+C report, the conclusions with respect to effects associated with the proposal are conservative in several important respects, including because:

- The sediment plume modelling informing the assessment of dredge effects includes conservative assumptions;
- The assessments do not take into account the range of effects already authorised by Northport's existing consents (see below) and
- Effects will be reduced through management regimes imposed via conditions (as detailed in Section 5.7.12).

5.7.14 Existing environment/cumulative effects

Existing environment

As identified in Section 5.7.5 of this AEE, Northport has consents to capital dredge and then maintain the water depth in front of the existing port. It also has consent for an additional 4.08ha reclamation associated with the construction of Berth 4, although that consent is not yet fully implemented. In addition to the Northport consents, CINZL holds consents to deepen and realign the commercial shipping channel. The CINZL consents have also not yet been implemented. All these consents are located within the OHEZ.

As outlined above, many of the effects associated with the current proposal are already provided for under the existing capital and maintenance dredging consents held by Northport.⁵⁶ However, C+C has stated that it is difficult to be precise regarding the difference in adverse effects as between the effects of the existing Northport consents and the effects of the current proposal. The

⁵⁶ The only changes are related to the slight difference between the currently consented and proposed dredging footprints and the different dredge depths involved.

C+C assessment does not take into account the effects that are already authorised by the existing Northport consents and so the assessment is highly conservative.

Potential cumulative effects

The potential effects of the proposed reclamation, dredging and stormwater discharges outlined above are:

- Loss of marine habitat and biota living within the dredging and reclamation footprints;
- Displacement of species that utilise the reclamation area, but do not permanently live within it;
- Effects of sediment suspension, dispersal and deposition beyond the dredging zone;
- Indirect effects arising from alteration to currents, wave and/or sedimentation patterns;
- Effects on reef habitat;
- Ecological effects associated with potential changes to water quality from stormwater discharges.

Cumulative loss of marine habitat

A breakdown of the areas affected by consented intertidal and subtidal reclamation and dredging areas is provided in **Table 18** below.

Table 18: Cumulative reclamation and dredging areas

	Intertidal	Subtidal	
Development area	Reclamation footprint (ha)	Reclamation footprint (ha)	Dredging footprint (ha)
This project	6.56	5.13	61
Northport (consented)	0.14	4.35	60
CINZL	0	0	40
Total	6.33	9.86	101

Overall, consents have been obtained or sought for around 70 ha of dredging and reclamation in the OHEZ. An additional 0.54ha of intertidal area will be lost through the construction of the bird roost.

Reclamation will result in a permanent reduction in the extent of physical and biological features that support diversity values and important ecosystem services. Dredging will physically alter (deepen) habitats and disturb such features. However, in the case of dredging, observations from around Northport and around the world indicate that similar, high value habitats and ecological features will reform once dredging ceases.

The significance of ecological effects associated with reclamation and dredging have been individually assessed for the proposed reclamation and for combinations of those developments and other dredging and reclamation projects that have already been consented (specifically the Berth 4 reclamation and the CINZL dredging).

Key results from the assessment are contained in the following **Table 19**.

Table 19: Cumulative effects summary

Potential effects	Relevant system	Level of effect
Benthic habitats and macrofauna	Harbour	Moderate
Kaimoana shellfish	Harbour	Low
Subtidal habitat and benthic macrofauna (Reclamation)	OHEZ	Moderate
Subtidal habitat and benthic macrofauna (Dredging)	OHEZ	Moderate to High
Seagrass (dredging)	Harbour	Low
Macroalgae (seaweeds)	OHEZ	Moderate to High
Fish	Harbour	Low
Reef habitat and biota	Harbour	Positive (medium to long term)
Stormwater discharges	Beyond the mixing zone	Low

5.8 Avifauna

5.8.1 General

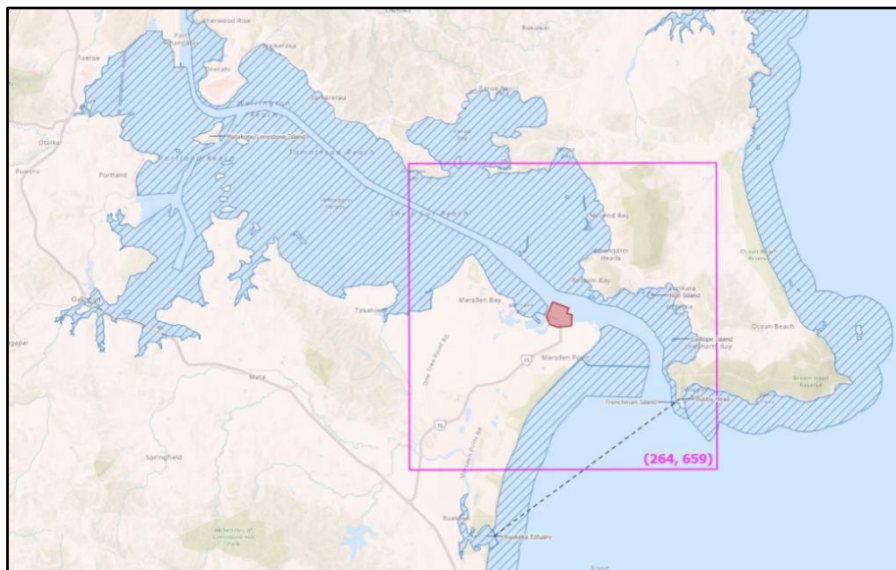
Potential effects (including cumulative effects) on avifauna from the construction, maintenance, and operation of the expanded port have been assessed by BML. The conclusions from this assessment are summarised below. Further detail is provided in the BML report in **Appendix 13**.

5.8.2 Assessment context

Policy D.2.18 of the PRP⁵⁷ directs that when assessing the potential adverse effects of activities on identified values of indigenous biodiversity a system-wide approach to large areas of indigenous

⁵⁷ This policy is operative under Section 86F of the RMA.

The assessment of avifauna effects carried out by BML considers the effects of the proposed port expansion on avifauna at the scale of the wider Whangarei Harbour (i.e. the coastline and harbour waters to the west of a line drawn from Busby Head in the north to Ruakaka Estuary to the south), being the area shown on **Figure 68** below.



This scale is deemed appropriate based on the habitat types within this area and the way the species being assessed use those habitats.

The actual and potential effects on avifauna from the proposed expansion are broadly described as:

- The assessment is species focussed and takes into account the avoidance and mitigation measures detailed in Section 5.8.8 of this report.

Given the importance of the RMA effects terminology for interpreting the indigenous biodiversity policies in the PRP, this AEE expresses the equivalent RMA terminology in bold and brackets alongside the EIANZ terminology used in the BML assessment.

5.8.4 Effects of permanent loss of habitat

Loss of foraging and roosting habitat

The proposed 13.7ha expansion footprint contains a combination of dune, intertidal and subtidal areas. 6.2ha of this is inter-tidal habitat which represents less than 1% of the soft shore sandy habitat in the outer harbour area, and 0.11% of the intertidal area in the outer harbour and entrance zone.

The inter-tidal and high-tide areas within the footprint are used for foraging and roosting by a variety of bird species, including eleven *Threatened* or *At-Risk* species.

Fourteen bird species were recorded foraging in the inter-tidal area within the proposed footprint during the surveys carried out for the assessment. The four most abundant species recorded relative to the local harbour population was as follows:

- Caspian tern: 0.38%
- NZ Dotterel: 3.4%
- Red-billed gull: 5.86%
- Variable oystercatcher: 7.86%

Thirteen species were recorded roosting in the high tide area within the proposed footprint. The four most abundant species recorded relative to the local harbour population were as follows:

- White fronted tern: 0.13%
- South Island pied oystercatcher: 3.6%
- Red-billed gull: 4.1%
- Variable oystercatcher: 14.36%

The proposal will permanently remove the foraging and roosting habitat located within the expansion footprint.

Foraging

The benthic macroinvertebrate survey data reported lower taxa diversity and abundance on the eastern side of the Northport relative to the western side. Therefore, the availability of a more diverse and abundant food source on the western side of Northport means that the loss of the intertidal habitat on the eastern side will not detrimentally impact the foraging ability and food supply of the New Zealand dotterel or VOC. Accordingly, BML considers that the effects in relation to the loss of foraging habitat are **low (less than minor)**.

Roosting

Due to the proportion of New Zealand dotterel and VOC that utilise the high-tide area for roosting, the potential effects, as detailed in Section 3.11 of this AEE, additional high tide roosting habitat is proposed to the west of Northport to avoid the effects associated with the loss of habitat within the proposed reclamation footprint. This will involve the reconstruction of an historic sandbank. This habitat will be created prior to the reclamation commencing so that it is available for use prior to the loss of habitat.

Taking into account the additional roost habitat on the western side of Northport prior to construction and its ongoing maintenance, the potential effects of the loss of roosting habitat associated with the eastern reclamation will be low (**less than minor**) for New Zealand dotterel and VOC.

Other species

Due to the low numbers of other species known to utilise the habitat within the expansion footprint, the effects of the loss of foraging and roosting on other avifauna species ranges from low to very low (**less than minor**).

5.8.5 Injuries and/or mortalities

Construction effects

The mobile nature of most avifauna species means that the potential for direct mortalities associated with construction activities are likely to be confined to birds that may be nesting or with young chicks or, in the case of little penguins (kororā), moulting at which time they are unable to swim.

There is only one known instance of birds nesting in the expansion footprint, being a pair of VOC successfully nesting and raising two chicks in the eastern revetment in 2019. While the revetment around the Northport site provides potential nesting habitat for kororā, they have not been detected during the surveys conducted to date. However, for the purpose of the assessment and associated effects management, it has been assumed that they are present.

Subject to implementation of the measures contained in the CEMP the adverse effects on nesting and moulting species are predicted to be **negligible** and short-term (i.e. limited to the period of construction). The overall effects on both species (kororā and VOC are predicted to be **very low** (**less than minor**).

Operational effects

As is the case with potential construction effects, the mobile nature of most avifauna species means that the potential for direct mortalities associated with operational activities is likely to be confined to birds that may be nesting or with young chicks. To date, VOC, pied stilt, and Northern NZ dotterel have all been recorded breeding on the existing and operational Northport site.

Due to the relatively low number of birds recorded nesting on the existing Northport site, and the proven ability of those birds to raise chicks in this environment, the potential for mortalities during the operational phase is expected to be **low (less than minor)** for NZ dotterel and very low (**less than minor**) for pied stilt and VOC.

5.8.6 Disturbance and displacement

Construction effects

Indirect disturbance to foraging and roosting may occur as a result of construction activities such as noise, vibration, and plant movement.

While the potential adverse effects of disturbance to foraging and roosting birds during construction cannot be avoided, there are other nearby areas of habitat to undertake these activities beyond the area of disturbance.

The magnitude of effect in relation to construction disturbance to foraging New Zealand dotterel is predicted to be negligible based on the availability of a more diverse and abundant food source nearby on the western side of Northport. Accordingly, any birds that are disturbed by construction will not have to expend significant amounts of energy to locate food. Furthermore, based on the re-creation of the sandbank on the western side of Northport prior to construction commencing, the potential effect of the loss of roosting habitat associated with the proposal will be low (**less than minor**) for New Zealand dotterel and variable oystercatcher.

With respect to underwater noise disturbance associated with piling activities, foraging little penguins will be exposed to the greatest disturbance due to the amount of time they spend underwater, especially when a hydraulic impact hammer is used.

BML consider that there will be an overall **Moderate** level of effect from underwater noise disturbance associated with the use of hydraulic impact hammer. In order to reduce this potential effect, measures such as bubble curtains may be employed during piling activities that involve a hydraulic impact hammer. Based on the likely location of breeding birds relative to the piling works, the overall effect of piling activities on little penguin will be **Low**.

Operational effects

Based on a 45 m disturbance zone around the project footprint, disturbance from the operation of the proposed expansion could result in an additional effective loss of 3.73 ha of intertidal foraging habitat. In addition, there may also be effects due to displacement by other birds and increased recreational pressure at the eastern end of the reclamation.

Due to the small number of birds recorded as utilising the area to the east of Northport relative to the wider Whangarei populations, the potential effects of operational disturbance and displacement on species recorded foraging or roosting within the 45 m operational disturbance zone are predicted to range between **low to very low (less than minor)** for all species.

5.8.7 Effects of construction sediment suspension on food supply and foraging

The reclamation construction and dredging may result in the release of sediment into the marine environment. This could result in adverse effects on avifauna prey species and reduce the visibility of prey species for species such as penguin, shags, terns, and herons.

Experience from previous dredging activities at Northport provides a level of confidence that turbidity effects can be minimised through good plume management/monitoring (in real time) including potentially the use of silt curtains in the shallower high-risk areas. This, combined with the depth and duration of the dredge activity, result in the predicted effects of construction activities on food supply and foraging ranging between low and very low (**less than minor**).

5.8.8 Artificial lighting

An increase in artificial lighting is not expected to adversely affect the nocturnal foraging of waders. Other potential effects of artificial lighting are:

- Attraction and subsequent collision with structures.
- Increased vulnerability to predation.
- Diversion towards the lights and away from breeding colonies.

There is already a level of artificial lighting present in the existing environment associated with existing Northport, CINZL and residential development. The proposed lighting for the expanded port will not significantly increase the existing ambient levels or the range of species that might be affected. However, there will be a small cumulative increase in lighting on the coastal margin.

Measures to minimise construction and operational lighting will be employed, including:

- Lighting will be kept to the minimum required for safe operation; and
- Wherever practicable lighting will be directed downwards and shielded to reduce light projecting horizontally towards coastal waters and avoid light projecting vertically to passing birds.

Based on the above measures, the potential adverse effects of lighting causing fatalities or impacting foraging of local (wider Whangarei Harbour) populations of coastal avifauna species is predicted to range from low to very low (**less than minor**).

5.8.9 Pollution

The location of seabirds at or near the top of the marine food web makes them particularly sensitive to marine contaminants such as hydrocarbons, heavy metals, hydrophobic persistent organic contaminants, and small plastic debris.

Construction effects

Dredging operations can result in the release of toxins through the remobilisation of contaminated sediments.

The 2021 analysis of intertidal sediment to the east and west of Northport showed that heavy metals and PAHs are not elevated and are not occurring in concentrations that can adversely affect habitats or biota. Also, a review of water quality measures associated with previous capital and maintenance dredging by Northport reported that metals and PAHs in the decant discharge were at levels below analytical detection. Accordingly, the C+C marine ecology assessment for the eastern reclamation proposal determined that the adverse effects of remobilised contaminants on the marine habitat and biota would be negligible for all potentially affected species.

Based on the C+C conclusions and the related supporting information, the effects of pollution from construction activities on coastal avifauna will be **low to very low (less than minor)** for all species.

Operational effects

Stormwater run-off from the operational port facility could result in contaminants entering the marine environment. However, based on actual water quality data for present day discharges, the additional stormwater from the expanded port is not expected to adversely affect water quality. Therefore, the predicted operational effects of stormwater discharges from the expanded port range between low and very low (**less than minor**).

5.8.10 Effects of proposed high-tide roost habitat

The location of the proposed high tide roost within the intertidal zone will result in the removal of a confined area of foraging habitat.

A total of 97 birds were recorded over the course of all the shorebird surveys under the footprint of the proposed high tide roost comprising of the following species:

- Northern NZ dotterel
- Lesser knot
- Pied stilt
- White-faced heron
- Caspian tern

Assuming that these birds were utilising this area to forage, the proposed high tide roost will result in the loss of approximately 4,573 m² of foraging habitat for these species.

BML have concluded that the effects of the loss of foraging habitat on those species will be low to very low (**less than minor**) for all species. This conclusion is based on the benthic macroinvertebrate data which identified a more diverse and abundant prey source further to the west of the proposed high tide roost. Also, with respect to Caspian tern, this species primarily

feeds on small surface-swimming fish, and forages much less frequently in the soft mud and shallow water.

5.8.11 Cumulative effects

BML have considered the cumulative effects of the proposal with other consented but not yet constructed projects⁵⁸ in the Whangarei Harbour.

Based on the effects identified by the other consented projects, there will be no cumulative effects on coastal avifauna in relation to discharges into the marine environment or increased lighting on the coastal margin.

None of the projects identified the permanent loss of habitat for variable oystercatcher or Northern NZ dotterel. Therefore, there will be no cumulative effects on coastal avifauna in relation to permanent habitat loss.

While the Port Nikau marina assessment noted the potential for disturbance to foraging wading birds, the species and level of effect was not identified. Thus, based on the information provided in the Port Nikau marina assessment, BML concludes that there will be no cumulative effects on coastal avifauna in relation to construction related disturbance associated with the proposal.

5.8.12 Mitigation and/or avoidance measures

The following measures are proposed to avoid or otherwise minimise effects on avifauna:

Avifauna section of the CEMP

Potential injuries/mortalities can be avoided through adherence to the measures included in the avifauna section of the CEMP, which will include measures to avoid direct impacts and manage nesting kororā and variable oystercatcher. These measures will include:

- For kororā:
 - Pre-construction (including rock removal) surveys by a suitably qualified and experienced coastal ornithologist to determine the presence of kororā within the western boundary riprap revetment;
 - Establishment of exclusion zones around nesting and / or moulting birds⁵⁹;
 - Rock removal works to occur under the guidance of a suitably qualified and experienced coastal ornithologist;
 - Measures to ensure that kororā are not trapped by construction works.

⁵⁸ Northport Berth 4, CINZL channel optimisation, Port Nikau marina expansion, Whangarei Marina Trust new marina.

⁵⁹ Under no circumstances should nesting birds, nest contents or moulting penguins be moved. Furthermore, a DOC Wildlife Act permit is required to handle species listed in the Wildlife Act (1954).

- Measures to minimise underwater noise during piling activities, to be informed by underwater noise modelling.
- For variable oystercatcher:
 - If construction works are to occur within 20m of an area identified as potential variable oystercatcher nesting habitat during the breeding season, a suitably qualified and experienced coastal ornithologist should check for the presence of active nests.
 - If an active nest is detected, a 20m exclusion zone should be established around the nest to ensure machinery and personnel do not come within 20m of the nesting bird.

Loss of roosting habitat

- Construction of additional roosting habitat for VOC and NZ Dotterel, to be completed prior to reclamation construction works commencing.

Sedimentation

- Adherence to the measures in the dredging/construction management plans and associated conditions of consent.

Lighting

Measures to minimise construction and operational lighting will be employed, including:

- Lighting will be kept to the minimum required for safe operation; and
- Wherever practicable lighting will be directed downwards and shielded to reduce light projecting horizontally towards coastal waters and avoid light projecting vertically to passing birds.

5.8.13 Overall effects conclusions

BML concludes that (subject to the measures outlined in Section 5.8.12 above) the cumulative (overall) effects of the proposed expansion low to very low (**less than minor**) for all avifauna species.

5.9 Marine mammals

5.9.1 General

Potential effects (including cumulative effects) on marine ecology from the construction, maintenance and operation of the expanded port have been assessed by CI. The CI assessment interprets and relies in part on the technical modelling from Styles Group (SG) in respect to underwater noise. The conclusions from this assessment are summarised below. Further detail is provided in the CI report in **Appendix 14**.

5.9.2 General construction noise

Underwater noise can affect marine mammals as they rely heavily on underwater sounds for communication, orientation, predator avoidance, and foraging. It can elicit three types of responses in marine mammals being:

- Behavioural (e.g. changes in surfacing or diving patterns),
- Acoustic (e.g. changes in type or timing of vocalisations)
- Physiological injury (e.g. auditory threshold shifts and stress).

Construction of the reclamation and associated seawalls will involve the movement and disposal of rocks, sand, and gravel material. The level of disturbance and underwater noise that these construction activities will produce are expected to be several orders of magnitude less than those associated with pile driving and dredging activities.

The potential underwater noise effects on marine mammals resulting from construction activities will be temporary only due to the localised scale, intermittent (hours), and short-term duration. Underwater noise produced by general construction activities has the potential to disturb individual animals visiting the immediate port facility, with responses to this disturbance potentially being temporary avoidance of the Whangarei Harbour entrance waters while the activities are occurring, but more likely, directed movement away from the immediate vicinity until the activities have stopped. This conclusion is based on:

- The proposed reclamation site is not unique or rare habitat for any marine mammal species in terms of feeding, resting and / or breeding activities;
- Most underwater noises generated from these activities are expected to be within the lower frequency ranges and intermittent in duration, similar to the underwater noise produced by existing commercial vessels visiting the port;
- Relevant environmental factors of the site (e.g. intertidal / shallow depths and soft mud) may, to some degree, naturally dampen any underwater noise production.

5.9.3 Pile driving noise

Background

Pile driving is one of the noisiest of all construction sounds and will be the most intense of the underwater noises produced during construction of the proposed reclamation. Pile driving generates a very high source level as broadband impulses (i.e. sound pulses across a wide range of frequencies). This has the potential to disrupt marine mammal hearing and behaviour up to many kilometres away. When in proximity, these impulses could induce acute stress and cause hearing impairment.

Potential physical effects

An underwater noise propagation model has been developed by SG to estimate the potential noise levels generated by the various construction works. The model incorporates data on local bathymetry, water temperature, tidal flow, and sediment type, all of which affect how noise travels through water. Acoustic models were then built for the largest proposed steel piles (i.e. 914 mm) with the most potential impact on marine life in order to predict the 'worst-case' distance ranges of piling generated noise. The model is explained in detail in the SG report attached in **Appendix 25**.

There are currently no national or standard guidelines for pile-driving activities within New Zealand waters. Therefore, to determine the distance that predicted noise levels could cause physical impairment or injury to local species, SG used previously established functional hearing groups to distinguish between different marine mammal species and the relevant underwater acoustic thresholds defined by the NOAA⁶⁰ *Revision to Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0- 2018)*.

The acoustic thresholds are based on the species most likely to visit the wider Whangarei and Bream Bay area. These thresholds are weighted, meaning they are based on the functional hearing ranges over which the hearing of individual species is most sensitive, and then considers the frequencies over which the majority of sound energy might be concentrated for a particular sound source (in this case pile driving strikes).

Given the estimated distance ranges for pile driving noise, pile-driving is expected to physically disturb dolphins, orca, and fur seals only when they are within the immediate vicinity of the construction site (100-200 m). Any visiting baleen whales or leopard seals will experience adverse effects at greater distances, either when they enter the harbour and/or move towards the entrance from inner harbour regions (if already in the harbour). For baleen whale species, this level of noise may result in a general avoidance of harbour waters while pile driving is underway.

Potential displacement or behavioural effects

Based on recent overseas studies, behavioural responses to impulse noise can occur at sound levels as low as 140 re 1µPa rms with more moderate responses at sound levels of 160 re 1µPa rms. Based on these thresholds, the distance ranges for potential low and moderate level behavioural effects were estimated for all species.

It is predicted that behavioural responses will be contextual and situation dependent. Animals are expected to respond more adversely to intermittent and unexpected noise than more consistent or regular intervals of noise, regardless of the energy level. Therefore, management measures such as soft start or ramping up are used by operators to avoid sudden or unexpected full-force piling noise.

The potential behavioural responses from impact driving are predicted to be confined (spatially) to within the inner Whangarei Harbour waters and the entrance, and any animal attempting to

⁶⁰ USA National Oceanic and Atmospheric Administration.

enter the Harbour underwater will likely exhibit at least lower-level behavioural responses while piling is underway.

Owha, the visiting leopard seal, is expected to continue to utilise any existing haul-out sites in the harbour and/or nearby marinas throughout the proposed construction period as in-air piling sound levels are expected to be much lower than in-water levels and seals often swim with their heads out of water when near human activity.

Overall, the sound modelling carried out by SG suggests that for most species (with the exception of visiting baleen whales), pile-driving noise without appropriate management has the potential to cause temporary hearing impairment only within close proximity of the piling source. While the potential is greater for visiting baleen whales and leopard seals, very few individuals visit these waters in any one year (1-3 animals) and these species tend to have a stronger seasonal presence (winter migrations for whales). Therefore, the likelihood of any adverse displacement or behavioural effects occurring is low and any hearing injury effects will be managed such that they are nil to negligible.

Pile driving noise, with management measures in place, will most likely elicit varying levels of non-detrimental behavioural responses with potential momentary masking of some acoustic signals⁶¹ at variable distances of a few 100m up to 2km from the source, depending on the species and individual animals.

Subject to the recommended management measures, including the establishment of marine mammal observation zones (MMOZ) and soft start/ramping up procedures, any residual effects are expected to be **nil to less than minor**.

5.9.4 Dredging noise

The act of breaking and/or removing bottom substrate (of itself) is not expected to directly affect any marine mammals known to frequent Whangarei Harbour. However, the associated increase in the production of underwater sound and physical disturbance within the harbour is more likely to adversely affect marine mammals. Noise produced from dredging activities differs from pile driving in that it is a continuous rather than impulse noise occurring at frequencies mostly below 1 kHz.

No permanent hearing injuries are predicted for any marine mammals with the onset of any hearing impairment estimated to occur only when an animal is within 1m of the operating dredge.

The probability of a behavioural response occurring (either low or moderate) will increase as an individual animal gets closer to the dredge vessel. However, the estimated initial onset distance for any low-level behavioral responses is 1.6km or less (depending on both the type of dredge vessel and species). These predicted distance ranges decrease for any potential moderate level behavioral responses to within 600m or less from the dredger. Any short-term auditory masking

⁶¹ For example, members of the same species may find it more difficult to communicate across particular frequencies/levels while in proximity to piling activity).

effects between two individuals of the same species are predicted to occur within a similar distance or less.

Based on the SG modelling, any effects from dredging generated underwater noise will likely be transitory and non-injurious. Effects will be predominantly limited to the momentary masking of some noise signals and a range of potential behavioural responses if animals approach to within a kilometre or less of the dredging location (depending on the type of dredge vessel and species). There is no likelihood of any hearing injury effects occurring.

5.9.5 Vessel strike

General

While the potential for any boat strike of local marine mammals from the proposed dredge platforms is nil to **negligible**, increasing the port capabilities and/or capacity means that additional large commercial ships will be expected to visit the port, Whangarei Harbour and the wider area each year. This increases the potential for collision risks with local marine mammals.

The likelihood of vessel strike depends on several operational factors including vessel type, speed, and location. Although all types and sizes of vessels have hit whales, the most severe collisions (e.g. fatal injury or mortality) typically occur with large (> 80 m) ships travelling at speeds over 11 knots.

It is expected 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. Currently most south-bound container ships pass around the Hen and Chicken Islands and transit towards the Ports of Auckland via the Jellicoe Channel. The expansion of Northport would simply result in a proportion of these movements turning and entering the Whangarei Harbour rather than continuing south, and north-bound ships either transiting through the Hauraki Gulf or around Great Barrier Island before heading towards the Whangarei Harbour and Northport.

The species considered most vulnerable to any potential vessel collisions include Bryde's, humpback, and southern right whales and to a lesser extent, bottlenose dolphins and orca (given their current endangered species status rather than proneness for vessel strike).

Despite the potential increase in vessel traffic due to the proposed port expansion, the likelihood of a vessel strike (injury or mortality) is assessed as low for migrating baleen whales, odontocete and pinniped species. This is based on the following factors:

(a) Spatial and temporal factors

- Low probability of port-related commercial ships encountering a migrating whale within the Whangarei Harbour and the wider Bream Bay region as currently only 1–3 individual whales are sighted within these waters each year.
- The majority of migrating whales currently pass by Hen (Taranga) and Chicken Islands in deeper, more offshore waters (e.g. further than 5 to 10 nm) where they are likely encountering

the same south-bound ships currently travelling to Ports of Auckland and that may be diverted into Northport in the future.

- Most whales occur in the area for a limited period each year, mainly in the winter months and some spring months, and most only remain for a day up to a week.
- Most odontocete and pinniped species known to frequent Whangarei waters are in regular contact with all types and speeds of commercial and recreational vessels throughout their entire distributional range with few to no reported ship strikes.

(b) Known collision factors

- Vessel traffic is expected to increase mainly from the south as more commercial ships may be diverted further north and likely travelling through Mangawhai / Bream Bay coastal waters;
- Any expansion of the Hauraki Gulf Transit Protocol⁶² into and behind Whangarei waters provides the best chance of significantly reducing fatal injuries and mortalities of baleen whales due to vessel collisions in this region. Implementation of the protocol (i.e. reducing average speed to 10 knots) has been estimated to reduce the probability of a lethal ship strike from 51% to 16% (Riekkola 2013) in the Hauraki Gulf.
- Most dolphin species have a general attraction to boats and safely approach and / or bowride with numerous vessels. Fur seals often respond neutrally to boats when in the water (although they may bowride occasionally).
- With the exception of Bryde's whales, whale species do not usually feed while migrating past New Zealand's north-eastern coastline to and from their northern tropical breeding and southern sub-Antarctic / Antarctic feeding sites.
- Whangarei Harbour and Bream Bay are not considered unique or important feeding, resting or nursery habitats for any visiting species, hence individuals are less likely to be 'distracted' by such activities, and are thus less vulnerable to collision risk.

5.9.6 Marine debris and possible entanglements

The major hazard associated with marine debris for marine mammals is the possibility of entanglement. Whales, dolphins, and pinnipeds are often attracted to floating debris with a potential risk of becoming entangled in floating lines and netting. Loose, thin lines and nets pose the greatest entanglement risk and especially lost nets, ropes, and lines.

Marine debris generation is generally non-existent in well-maintained coastal projects with proper waste management programmes in place (including secure onboard storage of lines, nets, and waste). In such cases, any effects to marine mammals are expected to be **nil to negligible**.

⁶² Northport is currently supporting an initiative to extend the Hauraki Gulf Transit Protocol for Commercial Shipping up to the Poor Knights (Sea Change – The Hauraki Gulf Marine Spatial Plan). This protocol was instigated in 2013 to protect the endangered Bryde's whales by voluntarily limiting speed for all commercial ships travelling within the Gulf to 10 knots and designating a crew member to watch for any signs of whales during daylight hours.

5.9.7 Ecological effects of habitats and prey species

The potential ecological effects from any loss of existing intertidal, subtidal, and benthic biota and loss or alteration of the habitats within the immediate region of the proposed activities are discussed in detail in the ecological assessment.

Due to the limited effect (both spatially and temporally) that the proposed construction activities are expected to have on local habitats and associated prey resources, there are unlikely to be any long-term flow-on effects to local marine mammals. This is based on the following factors:

- A relatively small percent of habitat loss to reclamation within the Port area relative to similar intertidal and subtidal habitats found in the wider lower harbour.
- Dredged habitat is expected to recover (or new habitat colonised) relatively rapidly after construction is complete.
- Dredged sediments are expected to be relatively clean and unpolluted while any turbidity effects from dredging are predicted to be confined to a limited region around construction sites. Any affected fauna is expected to fully recover as demonstrated by the results of previous dredge monitoring.
- A large proportion of subtidal areas within the proposed construction area are already modified environments due to previous dredging campaigns.
- Short-term displacement of individual prey resources as a result of the small spatial scale of disturbance with no effect on species recruitment.
- Home ranges of local marine mammal species are large and overlap with similar types of habitats in other parts of the harbour and along most other coastal bay regions.

5.9.8 Cumulative effects

Those marine mammals passing through Whangarei and the wider Bream Bay region are exposed to a variety of other anthropogenic activities that generate underwater noise, including large-scale commercial shipping, recreational boating, and commercial fishing vessels.

The underwater noise model prepared by SG is based on actual measurements of the current ambient noise that incorporates all underwater noise in the existing harbour environment. It is important to note that additional underwater noise is not often cumulative. The louder source merely covers up the other sources, as opposed to all sources combining to make the environment noisier than the baseline position.

If pile driving and dredging are taking place in the vicinity of the proposal site at the same time, the louder pulses of piling will be heard over the top of the more constant low frequency noise of the dredger each time the hammer falls. The overall effect will not necessarily result in louder source noises but may instead mean that noise thresholds are reached over a shorter exposure period (less than 24 hours).

Other consented but not yet implemented marine development projects within the lower harbour (most notably the CINZL channel deepening project and the construction of Berth 4) are relevant to the consideration of potential cumulative effects. Specifically, if the proposed expansion was implemented consecutively with these two consented projects, underwater noise levels would have the potential to be elevated for up to 6 years.⁶³

Notwithstanding the potential cumulative effects, it is highly unlikely that all projects will occur immediately following each other, and it is looking increasingly unlikely that the CINZL channel deepening and widening consent will be implemented (at least fully). It is more likely that any increases in underwater noise levels will be variable and intermittent, and undertaken over weeks or months rather than constant.

From a noise management perspective, it would be better if the dredging and piling aspects of the proposal are completed together, so that effects occur over a shorter overall duration.

5.9.9 Mitigation measures

Overall, the residual effects of the proposal on marine mammals are assessed as **less than minor** to **nil** subject to the implementation of effects management measures recommended in the CI report. These measures will avoid adverse effects on threatened or at-risk taxa, and avoid, remedy, or mitigate any other adverse effects.

To ensure that the most appropriate effects management measures are in place, a MMMP will be developed by marine mammal and underwater acoustic experts in consultation with others, including the Department of Conservation, before commencing construction operations. The MMMP will outline the procedures necessary to reduce or manage the effects of underwater noise, and other effects. It will include appropriate reviewing and reporting timelines for management actions and any implemented effects management procedures to ensure their effectiveness during operations. A draft MMMP is attached in **Appendix 5**.

The MMMP will follow accepted best practices to minimise the adverse effects of underwater noise. Consistent with the draft MMMP, the key management measures and actions are as follows:

- Verification of the *in-situ* noise levels produced from pile-driving activities by measuring the associated underwater noises of these activities as soon as practicable once the project has begun. Results will be reviewed against the same parameters used for acoustic modelling by SG and any necessary adjustments made to effects management actions (e.g. revised MMOZ).
- Reduction of noise levels at the source, including:
 - The use of vibro driving whenever possible, due to a continuous and generally lower level of sound generated using this technique compared to intense, discrete pulses of impact driving. Further consideration should also be given to other environmental factors such as substrate type and duration implications.

⁶³ CINZL (6 months to 1 year), Berth 4 (2.5 years), eastern expansion (2.5 years).

- Considering any recent developments in reducing noise at the source including bottom-driven piles, air balloons inflated within open piles to reduce ringing and / or bubble curtain technology.
 - The smallest possible pile size should be used that meets the specific operational need (the smaller the pile, generally the lower the noise level, subject to different piling methodologies).
 - The use of 'soft start' or 'ramping up' procedures, where pile-driving energy is gradually increased to normal operating levels to give nearby animals (close to or just outside the MMOZ) an opportunity to move away from the area before sound levels increase to an extent that may cause discomfort or injury. This process is also expected to help mediate more moderate and some low behavioural responses from nearby animals, giving them a chance to habituate to the pulses of sound over time before increasing the noise level.
 - The use of a sacrificial, non-metallic hammer cushion cap (or dolly) for impact piling.⁶⁴
 - Modifying the pile strike by changing the contact time of the hammer should theoretically reduce the noise generated by the impact through a reduction in the amplitude of the pile vibration.
- Establishment of shut down zones around the construction area to minimise any risk of hearing impairment to marine mammals from pile-driving activities only⁶⁵. The presence of any marine mammals within these zones would require the cessation of pile driving, with commencement or continuation not to occur until the animal leaves the pre-determined zone. The final size of these zone(s) will be determined once *in-situ* sound levels are verified.
 - A central contact point should be established with DOC to obtain up-to-date regional sighting information for the duration of the project, particularly in regard to visiting baleen whales.
 - A similar contact should be established with Marsden Cove marina staff in order to receive sightings updates of the leopard seal Owha in the marina throughout the duration of the project.

⁶⁴ This is made of wood, nylon, or polymer plastic and sits between the hammer and the top of the pile where it is used to reduce wear. Appreciable reductions in both underwater noise and airborne noise levels have been achieved with this method.

⁶⁵ Shut down zones for dredging activities are not considered necessary based on predicted noise levels and relative to other similar and relevant dredging consents, i.e. Refining New Zealand's deepening and realignment of Whangarei Harbour channel entrance. Any significant differences in actual dredging noise levels may necessitate reconsideration of a shutdown zone option.

- If practical, the various piling stages of the project should be timed so that most of the piling work does not occur over successive seasons, e.g. back to back winters. The use of the area of interest is seasonal for some marine mammal species (e.g. baleen whales) and successive interactions of this type may affect an animal's decision to return to these waters in the near future.

5.9.10 Monitoring

The continued presence (or absence) of the relevant marine mammal species within the harbour and/or near the construction site by MMOs can be used to test the effectiveness of the proposed management measures.

In addition to the MMO monitoring, it is suggested that underwater acoustic monitoring continues at the established baseline stations across the Whangarei Harbour while pile-driving and dredging activities are underway. This informative monitoring can help assist in both verifying actual sound levels while determining the potential presence of any behavioural effect(s) and at what sound level(s) they may be occurring. These results will assist in determining the efficacy of implemented management actions for further monitoring throughout the proposed reclamation project.

5.9.11 Overall effects conclusions

A comprehensive assessment of all relevant effects of dredging and construction activities was undertaken by CI. That assessment identified pile driving as the main activity associated with the proposed port expansion that could adversely affect marine mammals through high underwater noise levels.

Underwater acoustic modelling work undertaken within the proposed reclamation sites suggests pile-driving noise is expected to be detectable within the entrance and lower harbour waters, depending on the piling location. Given the potential for temporary hearing impairment near the piling source for endangered species, such as bottlenose dolphins and orca, and at further distances for visiting baleen whale species, actions are necessary to avoid these effects. With appropriate actions in place, as set out in the draft MMMP provided as part of this application, piling and dredging activities are expected to only elicit short-term, non-injurious behavioural responses with the potential for momentary masking of some acoustic signals from visiting marine mammals while in close proximity to construction activities.

The completion and certification of the draft MMMP by marine mammal and underwater acoustic experts in consultation with NRC and DOC is recommended to ensure that the most appropriate measures are in place to minimise any potential adverse effects prior to commencing operations. Informative monitoring is recommended and based around a combination of recording visual sightings of marine mammals (from dedicated marine mammal observers) and the continuation of simultaneous passive underwater acoustic monitoring.

5.10 Channel and navigation safety

5.10.1 General

Northport commissioned a Navigation Safety Report for the proposed expansion, both with and without the CINZL channel dredging (attached in **Appendix 26**). The report includes the results of ship simulations completed for the proposed expansion using the Northport in-house simulator,⁶⁶ and considers the impact of the proposed expansion on navigation safety in the Whangarei Harbour. The results of the report are summarised below.

5.10.2 Navigation safety

Northport has a safety management system which manages navigation safety through a series of risk control mechanisms, including:

- Dynamic Under Keel Clearance (DUKC).
- Environmental limitations.
- Ship simulations.
- Turning basin size/dimensions.
- Pilotage and towage.
- Navigation Aids.
- Local Port Service.

The Navigation Safety report considers the proposed port expansion (including additional shipping movements and the consented Berth 4) and how the risk control mechanisms above will be used to maintain navigation safety. It also considers the possibility that the CINZL consented channel deepening and realignment will be carried out.

The report reaches the following conclusions:

- The reduction in the size of the Northport turning basin (resulting from the proposed reclamation) will not significantly impact ships with a length of 300m or less.
- Channel navigation to and from the Northport berths (including the proposed tug berthing facility) will not be significantly impacted. The existing CINZL jetties already impose a speed

⁶⁶ The simulator mimics the environment in which ships safely operate. By imposing high winds, strong tides and large waves, the marine pilot and tug master can trial environmental conditions not often experienced in normal operations. This can be used to set realistic environmental limitations on the movement of ships to ensure they can be controlled at all times.

restriction on Northport traffic and project further north into the harbour than the proposed new Northport berths.

- Recreational boating will not be significantly restricted by the proposed expansion. Recreational traffic moving to and from Whangarei Heads is already restricted to the northern part of the shipping channel due to the presence of both the existing Northport berths and CINZL jetties. The proposed expansion will impact an area not often used by recreational craft, as the CINZL jetties already prevent recreational boating use.
- Any deepening and/or realignment of the channel by CINZL will not materially affect the above conclusions.

In addition, it is also relevant that the management of vessel traffic in the harbour has been improved since 2016 for a range of reasons including:

- Implementation of a Local Port Service.
- Establishment of a ship handling simulator for conducting risk assessments and training of marine service staff.
- Ongoing and continuous risk assessments using risk assessment tools (Hazman2).
- Presence of a local Deputy Harbourmaster in the Lower Whangarei Harbour.

Overall, it is concluded that the proposed port expansion will not negatively impact on navigation safety for both commercial and recreational vessels.

5.10.3 Marine spill risk

The existing oil spill response plans are considered to be robust, and will be regularly reviewed in accordance with s297 of the Maritime Transport Act 1994.

5.11 Biosecurity

5.11.1 Biosecurity risks at Northport

There are potential biosecurity risks associated with the proposed port expansion. Broadly, these risks arise through:

- Specialised vessel movements during the construction phase.
- Additional submerged port infrastructure (additional surface area for marine pests).
- Potential changes in the frequency and geographic origin of shipping.

5.11.2 Construction phase biosecurity risks

Increased abundance of pest species from dredging

The relevant biosecurity risk during dredging is the alteration and disturbance of the seabed by dredging and spoil disposal, which may increase the susceptibility of seabed habitats to colonisation by NIS.⁶⁷

Increased abundance of pest species from overseas specialised vessels and equipment

It is possible that specialised construction vessels (such as dredges, barges) and equipment will be sourced from overseas, and this could pose a marine biosecurity risk. Such vessels are likely to operate around Northport for a considerable period of time (weeks to months). Barges and dredge vessels are typically slow-moving and their travel history is characterised by long residency periods at previous destination ports. Because of this operational profile, they tend to accumulate higher levels of fouling biomass compared with faster moving vessels (e.g. container ships) that tend to stay in port for shorter periods (hours to days, usually < 1 week). Biofouling on slow-moving and towed vessels often contains marine NIS.

Other transport mechanisms (e.g. ballast water, residual dredge spoil) associated with specialised vessels can also pose a biosecurity risk.

5.11.3 Operational phase biosecurity risks

Increased abundance of pest species on new structures

It is likely that new submerged structures installed within Northport will provide a settlement habitat for NIS. Artificial substrates such as pilings, pontoons and seawalls are known to provide good habitats for biofouling assemblages and often have an over-proportional representation of NIS. Conversely, rip-rap walls are usually more impoverished and support less diverse assemblages, but in some cases, they are also known to feature extensive populations of fouling pests.

Increased abundance of pest species from changed vessel patterns

The proposed port expansion is likely to increase the frequency of vessel movements to and from Northport. While speculative, it is reasonable to assume that an increase in the vessel traffic (and possibly different types of vessel), as well as a change in the geographical origin of vessels arriving in the port, has the potential to pose a biosecurity risk to the region.

⁶⁷ Non-indigenous marine species.

5.11.4 Mitigation measures

Construction risk mitigation

A CEMP will be prepared as a condition of consent. As part of this plan, a biosecurity management plan will be prepared to manage the risk of biosecurity incursions. This plan will include the following:

- (a) A description of the vessel and its attributes that affect risk, including key operational attributes (e.g. voyage speed, periods of time idle), maintenance history (including prior inspection and cleaning undertaken), and voyage history since last dry-docking and antifouling (e.g. countries visited and duration of stay);
- (b) A description of the key sources of potential marine biosecurity risk from ballast water, sediments, and biofouling. This should cover the hull, niche areas, and associated equipment, and consider both submerged and above-water surfaces;
- (c) Findings from previous inspections;
- (d) If Northport is the first New Zealand destination, a description of the risk mitigation taken prior to arrival in New Zealand, including but not limited to:
 - i. Routine preventative treatment measures and their efficacy, including the age and condition of the antifouling coating, and marine growth prevention systems for sea chests and internal sea water systems;
 - ii. Specific treatments for submerged and above-water surfaces that will be undertaken to address the Import Health Standard (IHS) and Craft Risk Management Standard (CRMS) requirements prior to departure for New Zealand. These could include, for example, in-water removal of biofouling, or above-water cleaning to remove sediment;
 - iii. Additional risk mitigation planned during transit to New Zealand, including expected procedures for ballast water management;
 - iv. Expected desiccation period of above-water surfaces on arrival to New Zealand (i.e. period of air exposure since last dredging operations);
- (e) If Northport is the first New Zealand destination, the nature and extent of pre-border inspection that will be undertaken (e.g. at the overseas port of departure) to verify compliance with IHS and CRMS requirements; and
- (f) If Northport is the first New Zealand destination, record keeping and documentation of all mitigation undertaken (i.e. prior to and during transit to New Zealand) to enable border verification if requested by Ministry for Primary Industries or its successor, and to facilitate final clearance.

Operational risk mitigation

Mitigation of marine biosecurity risks associated with increased shipping operations will continue to be in accordance with the requirements of the IHS administered by MPI, the Marine Pathways Plan, and Proposed Regional Plan rules administered by the Northland Regional Council.

5.12 Noise & vibration (terrestrial)

5.12.1 General

Potential effects (including cumulative effects) of terrestrial noise and vibration from the construction, maintenance and operation of the expanded port have been assessed by MDL. The conclusions from this assessment are summarised below. Further detail is provided in the MDL report in **Appendix 4**.

5.12.2 Vibration

Construction vibration is predicted to be imperceptible at the closest sensitive receivers due to the very large setback distances.

5.12.3 Construction noise

Permitted baseline

Section 6.2 of the NAV section in the WDP requires noise from demolition/construction activities to be measured and assessed in accordance with New Zealand Standard NZS 6803: 1999 “*Acoustics - Construction Noise*”.

The permitted daytime construction noise limits in the WDP are:

- 70 dB L_{Aeq} and 85 dB L_{Amax} (7:30am-6pm), Monday to Saturday
- 45 dB L_{Aeq} (6pm-7:30am) Monday to Sunday
- Transitional shoulder periods apply in the morning, evenings and on Sunday.

Predicted construction noise levels

Predicted construction noise levels are shown in **Table 20** below.

Table 20: Predicted construction noise levels

Activity	Equipment	Sound power level (dB L _{WA})	Required setback to comply with 70 dB L _{Aeq} daytime limit	Required setback to comply with 45 dB L _{Aeq} night-time limit
Reclamation	Medium excavator (up to 40T)	105	30m	300m
	Large excavator (up to 180T)	113	65m	630m
	Pumps (for slurry)	93	<10m	100m
	Backhoe dredge	111	50m	525m
	Trailing suction hopper/cutter dredge (TSHD/TSCD)	107	36m	365m
	Mobile crane (placing rocks)	98	15m	160m
Piling	Vibro piling	116	85m	<i>Not proposed</i>
	Impact piling	114	70m	<i>Not proposed</i>
	(with dolly and casing mitigation)	111	50m	<i>Not proposed</i>
	Bored piling	108	40m	400m
	Large crane			
General	Truck movements	105	30m	300m
	Concrete truck and pump	103	25m	250m

Given that the closest receivers (being the dwellings at Reotahi) are approximately 900m from the closest construction works, predicted construction noise levels for key activities will comply with the permitted WDP construction noise limits.

Construction noise effects

During the daytime, the predicted levels would be comparable to the ambient environment but may be noticeable due to the different character (e.g. the piling works). However, the levels are very low for construction, and will readily comply with the WDP day-to-day noise limit of 55 dB L_{day}.

All potential night-time activities are predicted to comply with the permitted night-time noise limits and would be largely indistinguishable from normal port activities, including excavation, dredging, equipment/material deliveries and concrete pours.

5.12.4 Operational Noise

Permitted baseline

The permitted noise levels for the Port Zone as set out in the NAV chapter of the District Plan are as follows:

- Daytime (0700-2200): 55 dB L_{Aeq}
- Night-time (2200-0700): 45 dB L_{Aeq} 75 dB L_{AFmax}

These are the same limits for activities in the CMA as contained in the PRP.

Predicted future peak period noise levels

Current predicted peak period port activities comply with the WDP 55 dB L_{day} daytime noise limit, and are at, or near, the 45 dB $L_{Aeq (15min)}$ night-time limit.

Predicted future peak period port activities on the expanded port are predicted to remain within the WDP 55 dB L_{day} daytime limit but would exceed the 45 dB $L_{Aeq (15min)}$ night-time limit in both Marsden Bay and Reotahi. The predicted exceedance is up to 7 decibels at the most exposed dwellings and controlled by the proposed expanded container operations.

L_{AFmax} noise levels are associated with discrete events (e.g. log or container placement). Representative events are expected to occur more frequently with increasing activity intensity but continue to comply with the 75 dB L_{AFmax} NAV limit.

Effects of a change in noise levels

While it is acknowledged that people may subjectively have an annoyance reaction to a greater or lesser degree, these individual and subjective variances are not used as a basis for assessing and controlling noise effects – instead an objective approach based on population level sensitivities is used.

The subjective impression of changes in noise can generally be correlated with the numerical change in noise level. While every person reacts differently to noise level changes, research shows a general correlation between noise level changes and subjective responses. Indicative subjective responses to explain the noise level changes discussed in the assessment below are provided in **Table 21**.

Table 21: Noise level change compared with general subjective perception

Noise level	Effect description	Effect level under RMA
1-2 decibels	Insignificant/imperceptible change	Negligible
3-4 decibels	Just perceptible change	Slight
5-8 decibels	Appreciable to clearly noticeable change	Moderate
9-11 decibels	Halving/doubling of loudness	Significant
>11 decibels	More than halving/doubling of loudness	Substantial

It is relevant to note that noise is measured on a logarithmic scale. For example, a doubling in port activity intensity would result in a noise level increase of 3 decibels (a just-perceptible change). A tenfold increase would result in a noise level increase of 10 decibels, which would sound twice as loud.

Effects assessment

Port noise consists of two distinct components:

- The general ‘hum’ of port operations.
- Intermittent events such as ‘banging’ from log or container handling.

Detailed and technical modelling undertaken by MDL predicts the increased port noise levels associated with the proposal. Modelled noise levels are described below. For a detailed explanation of the modelling inputs and assumptions, refer the MDL report in **Appendix 4**.

Daytime ‘hum’ (Outdoor Areas)

Daytime noise effects are primarily associated with outdoor amenity.

The dwellings most exposed to port noise currently receive peak period levels of 42 – 46 dB L_{day} in Marsden and Reotahi respectively. These levels would not influence conversation voice level or general amenity in outdoor spaces.

Future peak period external noise levels are predicted to increase noticeably by about 5 decibels in both Marsden and Reotahi. The dwellings most exposed to port noise are predicted to receive peak period levels of 48 – 51 dB L_{day} . These levels are still well below the 55 dB L_{day} permitted level in the WDP. They are appropriate for residential amenity and would still not influence conversation voice level or general amenity in outdoor spaces, but general annoyance would likely increase.

Night-time ‘hum’ (Outdoor Areas)

Residential communities are more noise sensitive at night, primarily during sleeping.

Currently the dwellings most exposed to port noise receive external noise levels of up to 41 – 46 dB L_{night} . Inside bedrooms with the windows open, levels are predicted to be approximately 26 – 31 dB L_{night} .

There are typical noise level reductions from predicted external levels to those received inside a typical bedroom of 15 decibels with open windows⁶⁸ and 20 – 25 decibels with shut windows⁶⁹. Further detail of design level ranges for evaluation of internal noise levels is set out in AS/NZS 2107: 2016, as discussed in the MDL report.

In general, port noise is expected to be audible inside bedrooms at times but generally acceptable for most of the population.

Future peak period external noise levels are predicted to increase noticeably to 47 – 51 dB L_{night} for the most exposed dwellings. The corresponding noise level received inside bedrooms with the windows open is predicted to increase proportionally to 32 – 36 dB L_{night} . Port noise levels would be clearly audible inside bedrooms on busy nights and intrusive at times with open windows. Some residents may choose to shut windows to improve sound insulation performance during these busy times.

Intermittent noise events (L_{Amax})

There is no change to predicted representative L_{Amax} noise event levels (e.g. container and log placement). An increase in the number of noise events is predicted to be proportional to the increase in intensity of future port activities.

Port noise complaints are often aligned with outlier noise events, such as closing ship hatches ‘hard’ or inadvertently dropping a log or logs into the bottom of the ship’s hold. These events are not regular, repeatable, or predictable, but the number of outlier events should reduce further as port noise management measures continue to evolve as the Port Noise Management Plan is updated and implemented.

5.12.5 Mitigation Measures

The proposed port noise limits detailed in Section 3.4 of this report are part of a package of provisions, collectively designed to manage the effects of port noise on sensitive (primarily residential) activities. These provisions include a requirement that, for dwellings that are modelled to be exposed to noise levels above the specified limit (55 dB L_{dn} (5-day)), the port offer to pay for mechanical ventilation to enable windows to be closed at night, as a means to managing the night-time hum in habitable rooms. Regardless of noise level, they also require the implementation of a Port Noise Management Plan (PNMP) to manage (amongst other things) intermittent noise events in accordance with best practice.

The overarching objectives of the PNMP are:

- *Ensure the port complies with the relevant noise performance standards*
- *Provide a framework for the measurement, monitoring, assessment, and management of noise*
- *Identify and adopt the BPO for the management of noise effects*

⁶⁸ Assumes a typical window open on security stays for ventilation purposes (e.g. 100mm opening width).

⁶⁹ Assumes 20 decibels for lightweight older style dwellings with timber joinery and 25 decibels for modern lightweight dwellings with aluminium joinery.

- *Require engagement with the community and timely management of complaints*

A draft PNMP is included in the MDL report in **Appendix 4**.

Specific mitigation measures are as follows:

Night-time hum – mechanical ventilation

NZS 6809:1999 “*Acoustics – Port Noise Management and Land Use Planning*” recommends a maximum of 45 dB $L_{dn(5-day)}$ in habitable indoor spaces. While the Northport modelling predicts that this can be achieved with no mitigation, Northport proposes to offer mechanical ventilation to enable windows to be closed at night to achieve a spatial average indoor design sound level of 40 dB $L_{dn(5-day)}$.

The implementation of the above requirement will be primarily informed by the annual review of the port noise contours required under the PNMP. Therefore, a requirement for the port to offer noise mitigation for existing dwellings will be triggered when the noise effects materialise (i.e. when predicted or measured noise exceeds 55 dB $L_{dn(5-day)}$).

Intermittent noise events – best practice

Intermittent noise effects (bangs and crashes) will be managed by the adoption of best practice under the Port Noise Management Plan.

5.12.6 Cumulative effects

The current peak period port night operations period was measured in 2018 at 14 The Heights, Reotahi in a joint monitoring project between Northport and Refining NZ. This site was chosen due to:

- **Availability/security:** There was an existing relationship between the refinery representative and the site owners.
- **Exposure:** Excellent line of sight to both the refinery and the port.
- **Position:** Elevated away from busy roads and the water’s edge.

The long term monitoring data was supplemented with attended measurements in the Reotahi and Marsden communities and near the water’s edge.

The cumulative noise level (47 dB $L_{Aeq(15min)}$) was a mix of Northport (43 dB $L_{Aeq(15min)}$), Refinery (44 dB $L_{Aeq(15min)}$), and other environmental and community components (39 dB $L_{Aeq(15min)}$).

The Refinery stopped its refining activities in June 2022. Residual storage and logistic activities are yet to be quantified through measurements in isolation, but noise contributions received in Reotahi are expected to be reduce appreciably. It is assumed that the Refinery contribution to overall noise will reduce by 10 decibels at 14 The Heights, Reotahi from that measured in 2018.

A noticeable increase in port noise levels is predicted as a result of the proposed expansion, but a negligible to just-perceptible increase in cumulative noise levels (relative to measured levels prior to the Refinery shut down in June 2022).

It is important to note that these predictions focus only on the peak 5 days of the year, and the peak 15-minute night-time period in the year. The annual median noise level for a fully developed New Zealand

port is typically 3 decibels below the peak operating period based on long-term measurement results from other similar sized ports in New Zealand (e.g. Napier). Overall, the changes would be less noticeable outside the peak operations periods.

5.12.7 Overall effects conclusions

Overall, provided that compliance with the proposed noise limits (based on modelled results) is achieved, coupled with the proposed mitigation measures, port noise effects will be **no more than minor**.

MDL's effects conclusions are as follows:

- **<50 dB Ldn (5 day): Less than minor** (Marsden and Reotahi generally)
 - Port may be audible at times but continues to be generally compliant with the operative WDP port noise limits.
 - Negligible increase in cumulative noise level (i.e. inclusive of port, refinery and other environmental and community noise contributions) by 2035 compared with the measured noise environment prior to the refinery shut down in 2022.
- **50 - 55 dB Ldn (5 day): Minor** (14 existing dwellings in Marsden and 14 in Reotahi, rising to 49 in Marsden and 60 in Reotahi by 2035)
 - Negligible to just perceptible increase in port noise enabled above the operative WDP night-time port noise limit of 45 dB LAeq (but remains compliant with other noise limits).
 - Negligible to just perceptible increase in cumulative noise level by 2035.
 - Northport propose a Noise Management Plan to minimise port noise effects (but no façade mitigation eligibility in this band).
- **55 – 58 dB Ldn (5 day): Moderate** (no existing dwellings, but 16 in Reotahi by 2035)
 - Noticeable increase in port noise enabled above the operative WDP night-time noise limit of 45 dB LAeq.
 - Just perceptible increase in cumulative noise level by 2035.
 - Northport propose port funded mitigation for dwellings (reviewed annually for eligibility) – then effects will be **minor**.

5.13 Archaeology

5.13.1 General

Potential effects on archaeology from the construction of the expanded port have been assessed by C+A. The conclusions from this assessment are summarised below. Further detail is provided in the C+A report in **Appendix 16**.

5.13.2 Effects

No archaeological deposits were encountered during the survey by C+A. The potential for undetected subsurface remains within the project area is 'very low'.⁷⁰

5.13.3 Mitigation measures

The accidental discovery protocol will be adhered to being:

- If subsurface archaeological evidence should be unearthed during construction (e.g. intact shell midden, hangi, storage pits relating to Māori occupation, or cobbled floors, brick or stone foundation, and rubbish pits relating to 19th century European occupation), work should cease in the immediate vicinity of the remains and Heritage NZ and the Council should be notified.
- If modification of an archaeological site does become necessary, an Authority must be applied for under Section 44(a) of the HNZPTA⁷¹ and granted prior to any further work being carried out that will affect the site. (Note that this is a legal requirement).
- In the event of koiwi tangata (human remains) being uncovered, work should cease immediately in the vicinity of the remains and the tangata whenua, Heritage NZ, NZ Police and Council should be contacted so that appropriate arrangements can be made.
- Since archaeological survey cannot always detect sites of traditional significance to Māori, such as wahi tapu, the tangata whenua should be consulted regarding the possible existence of such sites within the project area.

5.14 Recreation effects

5.14.1 General

Potential effects (including cumulative effects) on recreation values from the construction and operation of the expanded port have been assessed by RGA. The conclusions from this assessment are summarised below. Further detail is provided in the RGA report in **Appendix 19**.

⁷⁰ Clough and Associates Archaeological Assessment (2021), Page 23

⁷¹ Heritage New Zealand Pouhere Taonga Act 2014.

5.14.2 Assessment context

The assessment of recreation effects carried out by RGA is based on the matrix contained in Table 17 of the RGA report (reproduced below).

Table 17: Scale of impact on recreation values considering magnitude of effect					
		Recreation value			
		Very High	High	Moderate	Low
Magnitude of effect	High or severe	Significant	Significant	Moderate	Minor
	Moderate or medium	Significant	Moderate	Minor	Minor
	Low or minor	Moderate	Moderate	Minor	Minor
	Negligible	Negligible	Negligible	Negligible	Negligible

In respect to this matrix, the report describes a ‘significant’ adverse effect as one that is likely to force many or most people to recreate in other settings, at different times, or not at all, but not necessarily for all activities which occur there, and where amenity will be degraded. It describes a ‘minor’ adverse effect as one that will displace a small number of users for short periods, but amenity will almost always be preserved for the majority of activities and users. It also states that the scale of effect may be reduced if the area affected is confined and there are ample suitable alternative opportunities for relevant activities.

5.14.3 Potential effects

The following are potential adverse effects of the proposed expansion:

Construction and maintenance

- Turbidity effects on recreation settings (particularly swimming and diving areas) and visual amenity at and near the Harbour entrance.
- Mobilisation of contaminants and potential effects on shellfish and other seafood, and for water-contact recreation,
- Effects on marine ecology and the quality, abundance, and catchability of marine species, during the dredging period/s,
- Occupation of marine settings by dredges working or in transit and the creation of hazards for (especially) boat users.

Operation

- Changes to tides, currents and wave patterns resulting from altered bathymetry.
- Loss of a section of the beach to the east of Northport.

- Loss of access to the eastern ferry pontoon for fishing and transferring walkers on the Te Araroa Trail.
- Changes to navigation patterns of recreational boats due to larger scale of the wharf structures.

5.14.4 Effects related to construction and maintenance activities

Turbidity and contaminants

Based on the conclusions in the MO and T+T coastal processes reports, and research undertaken for the CINZL harbour deepening proposal, the temporary effects from turbidity and contaminants from dredging and reclamation construction activities are unlikely to be significant due to the clean nature of sand at the harbour entrance.

Effects of dredging activity on recreational boating

Because most of the proposed dredging area is already subject to maintenance dredging and navigation restrictions when ships are in port, the effects of dredging activity associated with the proposed expansion on recreational boating will be **minor**.

Changes to tides and currents

The harbour entrance is a naturally high-current speed setting, with depth changes and coastal rocks directing flows and creating natural variations in flow speed and direction. The modelled changes in current speed are unlikely to be recognised by recreational boaters in such a dynamic setting, and where a reasonable level of competence is expected of skippers.

Access closures to Marsden Bay Beach during construction

There will be periods of approximately 6 to 12 months where access to the beach to the east of Northport will be limited while the revetment is constructed, and public facilities are built. Alternative access to the beach will be available via Mair Road south of the CINZL terminal – a distance of 2km. There are many alternative fishing and swimming sites in the harbour and around the Harbour entrance area, including the local fishing platform on the western side of Northport. Effects from temporary closures at the regional level will be minor, but locals who regularly visit the beach are likely to be more inconvenienced. Effects will, however, be temporary. Alternative boat access to Marsden Cove will be available for the Te Araroa Trail ferry.

5.14.5 Operational effects

Changes to currents and wave patterns resulting from altered bathymetry

Hydrodynamic modelling indicates a minor increase in current speed in Marsden Bay and a minor decrease in current speed on the northern side of the harbour entrance opposite the wharf. The modelled speed changes in current are unlikely to be recognised by recreational boaters in such a dynamic setting, and where a reasonable level of competence is expected of skippers.

Loss of part of beach & fishing pontoon

The proposed expansion will remove just over half of the beach located to the east of Northport. This will affect the ability of beach users to disperse themselves along the beach and result in a reduced sense of scale.

As detailed in Section 3.9 of this report, Northport has committed to retaining the key recreation opportunities to the east of the port including:

- Creation of a public park/reserve area at the eastern end of the expanded port.
- A relocated carpark and toilets to allow easy access to the beach.
- A new pontoon for fishing, swimming, and socialising, and to operate as a terminal for the Te Araroa Trail ferry.
- Beach and water access points suited to socialising and swimming, developed to attract such users to the western end of the beach away from one of the preferred fishing areas near the CINZL wharf, and to reduce disturbance of roosting birds along the beach.

Notwithstanding the mitigation measures described above, adverse recreation effects on the beach to the east of Northport will remain due to the loss of beach area and diminution of the scale of the setting. RGA concludes that adverse recreation effects on the beach will remain due to the loss of beach area and diminution of the scale of the setting, which are likely to be significant locally and more than minor regionally.

Te Araroa Trail

The delivery or uplift of walkers on the Te Araroa Trail could be either via the new fishing pontoon, via the Marsden Cove marina facilities, or directly onto the Marsden Bay Beach.

Navigation by recreational craft

Navigation by recreation craft around the new port facilities is likely to continue as it does now, but with more caution required by skippers as they navigate a busier port setting (noting the port exclusion zone as established in the Navigation Safety Bylaw). Considering the continued large-scale recreational boating in areas such as Auckland and Tauranga Harbours, with their substantial port services and large recreational fleets, there is no indication that recreation navigation will be disrupted.

Recreational fishing and shell fishing

Fishing was the dominant activity recorded at Marsden Bay Beach. The marine ecology assessment found that effects on fish are likely to be negligible because of their mobility, the relatively small scale of habitat permanently lost, and likely recovery of habitats of importance to fish in existing wharf areas. The existing rock revetment at the wharf (a length of 155m) which provides marine reef habitat, will be replaced with 483m of revetment, which, once recolonised, presents a net benefit to local reef habitat.

While a 'very high' number of cockles were identified within the proposed reclamation footprint by the marine ecology assessment, very few were of harvestable size, and no pipi of harvestable size were found. Very little shell-fishing was observed as a recreational activity on Marsden Bay Beach during the two user surveys. At the regional level, effects on recreational shell fishing are likely to be minor considering the scale of alternatives and low level of activity at Marsden Bay Beach.

The marine ecology assessment also concluded 'less than minor' adverse effects on water quality from the discharge of stormwater from the reclamation area once operational.

5.14.6 Mitigation measures

Park/reserve

A public park/reserve area is to be developed at the eastern end of the expanded port, above the residual beach area (see details in **Section 3.9** of this report).

Fishing/water taxi pontoon

While the existing eastern pontoon was not specifically established for fishing or swimming, the use of the wharf by the public for these activities is recognised. It is therefore proposed to incorporate a public pontoon and associated public access on the eastern side of the port with access provided via the public park/reserve.

5.14.7 Overall effects conclusions

The effects on recreation values and activities are as follows:

- Effects relating to construction and maintenance activities will be **minor**, although there will be temporary displacement of most use of the beach to the east of Northport for at least 6 to 12 months of the construction period.
- Notwithstanding the mitigation measures described above, adverse recreation effects on the beach to the east of Northport will remain due to the loss of beach area and diminution of the scale of the setting. RGA concludes that adverse recreation effects on the beach are likely to be **significant** locally and **more than minor** regionally.
- There will be no change to the Te Araroa trail harbour connection.
- Effects on navigation due to changes in currents and large vessel activity will be **minor or less**.
- There will be some **minor** temporary effects on recreational fishing post dredging and construction until recovery.

RGA concludes that the cumulative effects of the proposal, together with completion of Berth 4 and the CINZL dredging consents will not be appreciably different from the effects of the proposal on its own, those being **significant** locally and **more than minor** regionally according to the matrix in Section 5.14.2 of this report.

5.15 Stormwater discharges

5.15.1 General

The potential effects of stormwater discharges from the proposed port expansion have been considered by C+C with technical support from HGL. The key conclusions are summarised below. Further detail is provided in the technical report in **Appendix 20**.

5.15.2 Potential effects

Logs are likely to have the greatest influence on the quality stormwater from the Northport site. Other sources of contaminants include bulk cargoes transferred through the port, including phosphate rock, palm kernel, grain, coal, gypsum, sulphur, and refined fertiliser. Special provisions are made for potentially hazardous products or processes, which are banded and or self-contained so that they are effectively isolated from the stormwater system.

5.15.3 Assessment

Stormwater will continue to be managed via the existing pond and canal-based stormwater containment system described in Section 4.16.2 of this report, potentially augmented by proprietary devices depending on the final port design.

System capacity

Stormwater from the expanded port footprint will exceed the dead storage volume currently available in the existing pond by 510m³. However, calculations carried out by HGL have confirmed that this additional volume can be provided within the base of the lengthened canal network.

Water quality

Container operations on the expanded port are not high-risk activities in respect to stormwater. Therefore, the same treatment methodology employed for the existing port will be retained for the expanded port.

Results from the monitoring indicate that Northport has displayed a high level of compliance with the terms of the NRC discharge consent, and that the quality of discharged stormwater is high. These same requirements are to be included as conditions of the new consent being sought for the expanded port.

Based on monitoring data and state of the environment reporting, the current discharge poses little ecological risk.

5.15.4 Mitigation measures

- Compliance with conditions of consent relating to stormwater discharge quality.
- Removal of bark and wood debris to off-site landscape suppliers.
- Routine sweeping.
- Dust suppression measures.
- Regular cleaning of catchpits and treatment devices.

5.15.5 Overall effects conclusions

Discharge water quality is expected to be similar to discharges from the existing system, notwithstanding that there will be a slight increase in total discharge volume.

Overall, the proposed expansion is expected to have a **negligible** effect on water quality and ecological values, based on the following:

- Past monitoring and assessments indicate that key contaminant concentrations are well below toxicity guidelines after reasonable mixing.
- The outfall discharges to a high flushing area.
- Due to the containment and management prior to discharge, contaminants are unlikely to permanently settle and accumulate in the local receiving environment.

5.16 Air quality

5.16.1 General

Potential effects (including cumulative effects) on air quality from fugitive dust emissions during the construction and operation of the expanded port have been assessed by PDP. The conclusions from this assessment are summarised below. Further detail is provided in the PDP report in **Appendix 21**.

5.16.2 Nuisance dust emissions during construction

Assessment methodology

PDP undertook a FIDOL⁷² assessment to assess the potential nuisance dust effects from the construction and reclamation process. The assessment considered the following matters:

- Frequency - noting that only winds above 5 m/s have the potential to cause dust nuisance effects on the nearest sensitive receptors.

⁷² Frequency, Intensity, Duration, Offensiveness and Location.

- Intensity – potential for intense dust effects on the beach.
- Duration – Period in which effects may be experienced at any one time.
- Offensiveness – contingent on quantity of dust present at any one time.
- Location – Distance from the nearest dwelling, and proximity to beach and public carpark.

Frequency

In dry windy conditions, particularly if disturbed, the marine sediments can be lifted by winds greater than 5 m/s at ground level. Based on wind speed data, the frequency of winds above 5 m/s from the west to the northwest (which have the potential to carry dust from the new port area to the beach) is between 1.3 and 2.2 percent of the time. Likewise, winds from the north to the northeast have the potential to transport dust towards the carpark at Ralph Trimmer Road with the frequency of winds (greater than 5 m/s) from this direction between 0.9 and 3.4 percent of the time. These percentage of winds are classified as infrequent, and the associated effects will be **low**. This in combination with the proposed mitigation and monitoring, means that that the frequency of any effects associated with the reclamation will be **low**. Furthermore, people are less likely to go to the beach during strong winds, therefore further reducing the frequency in which people may be exposed to elevated dust conditions.

Intensity

Without mitigation, there is potential for reasonably intense dust effects on the beach, beach access, and the carpark once material is placed near the perimeter of the reclamation and is above the high tide level. The potential intensity of any effects will reduce as the reclamation moves north. Subject to the mitigation measures outlined below, the intensity will be **low**.

Duration

Based on the visual monitoring, and subject to the mitigation measures outlined below, if a fugitive dust event was to occur, at worst the duration would be limited to a period of no more than one hour at any one time.

Offensiveness

Dust emissions associated with the reclamation/construction process are unlikely to be present in such quantities that they result in any off-site offensive or objectionable effects. This is based on the limited frequency of suitable meteorological conditions, the activities undertaken, and mitigation measures that will be implemented.

Location

The reclamation is located approximately 1,000 metres from the nearest residence. This is well beyond the distance that any dust associated with the construction process would travel.

In terms of the beach and the carpark, while the construction will generally move away from these locations, it will initially be very close.

5.16.3 Fugitive dust emissions during operation

Based on the current container operations at the port, once the new port area becomes operational there will be very little potential for dust emissions from this location.

5.16.4 Emissions from combustion engines during operation

Emission-producing activities for ports can be grouped into the following three sources:

Port Direct Sources - These sources are directly under the control and operation of the port administration entity and include port-owned fleet vehicles, port administration owned or leased vehicles, buildings (e.g., boilers, furnaces, etc.), port-owned and operated cargo handling equipment, and any other emissions sources that are owned and operated by the port administrative authority.

Port Indirect Sources - These sources include port purchased electricity for port administration owned buildings and operations.

Other Indirect Sources - These sources are typically associated with tenant operations and include ships, trucks, cargo handling equipment, rail locomotives, harbour craft, tenant buildings, tenant purchased electricity, and port and tenant employee commuting (train, personal car, public transportation, etc.).

Once the newly reclaimed land becomes operational, the area will be used for container operations which will result in very little air emissions. Given that there will only be a small amount of additional combustion emissions from this area and the current background air quality, the low levels of discharges from vehicles operating in on the port, combined with existing emissions from nearby industry (and noting the reduced level of emissions from CINZL subsequent to the cessation of refining operations), will have less than minor cumulative effects.

Northport has been actively reducing its carbon footprint for some time now as part of its 2050 emissions reduction initiative. Examples include the replacement of fleet vehicles with electric vehicles, and changes to the procurement process whereby new equipment is preferred over older equipment that does not meet modern emission standards.

5.16.5 Mitigation measures

Construction

The proposed mitigation measures for air emissions during the construction phase will be included in an air quality management plan which is to be included as part of the CEMP.

Key components of this plan are as follows:

- Measures to minimise fugitive dust emissions during the movement and placement of material.
- Guidelines for the removal and stockpiling of material during windy conditions.
- Measures to minimise emissions from combustion engines.

Operation

Once the expanded port area becomes operational it will be used for container operations. From an air quality perspective there are very little air emissions from this type of operation other than the emissions from the vehicles used to move the containers.

While not proposed as a condition of consent, Northport is committed to reducing its carbon footprint, and specifically emissions from combustion engines operating on the port.

To minimise emissions from these vehicles Northport will continue to implement management measures which include the following:

- Not leaving vehicles idling while unattended.
- Purchasing new, more efficient machinery where practicable – including machinery that is electrified, or capable of electrification.
- Maintaining vehicles regularly.
- Where practicable, electrification of port plant and equipment when replacement or upgrades are required.
- Consider the use of carbon efficient machinery during construction where practicable.

5.16.6 Overall effects conclusions

Based on the FIDOL assessment, there is very limited potential to be affected by dust (even without mitigation) due to distance, but there may be some adverse effects on users of the beach. However, given the limited period in which members of the public will use the beach and carpark, and subject to the employment of the dust mitigation measures outlined in Section 5.16.5 of this report, it is unlikely that these users will experience offensive or objectionable dust effects during construction of the proposed port expansion.

5.17 Traffic effects

5.17.1 General

Potential effects (including cumulative effects) on traffic safety and efficiency during the construction and operation of the expanded port have been assessed by WSP. The conclusions from the WSP assessment are summarised below. Further detail is provided in the WSP report in **Appendix 27**.

5.17.2 Assessment context/assumptions

The assessment of traffic effects carried out by WSP is based on the full development of Northport (including cruise ships). Key assumptions for the full development traffic are as follows:

- Cruise ships will make use of the facility from year 5 reaching a maximum number in year 10.
- Staff numbers to increase from 300 to 400.
- Total additional port traffic on SH15 will be 806 trips per day, of which 142 trips can be attributed to the 100 additional staff numbers.
- In 2018, the total average daily port traffic was approximately 64% (2,802/4,363) of total SH15 traffic. This ratio is expected to reduce significantly in the future following the planned residential development surrounding SH15. It is estimated that the ratio of total port traffic to total SH15 traffic will be approximately 30% in year 2033 (3,290/10944) and 26% in year 2040 (3,608/13,666).
- The logging related traffic is a large contributor to overall port traffic and is subject to seasonal and cyclical peaks and troughs. According to the Northport wood availability forecast (2018) there is likely to be a reduction in the availability of logs, followed by a longer-term increase in supply.

5.17.3 Affected road network and existing intersection safety

The intersections primarily affected by the proposed port development are as follows:

- SH1/SH15 roundabout.
- SH15/Salle Road intersection.
- SH15/One Tree Point/McCathie Road intersection.
- SH 15/Marsden Point Road Intersection.
- SH15/Marsden Bay Drive/Rama Road Intersection.
- SH15/Mair Road Intersection.

There are no identified immediate visibility or sightline concerns at these intersections. They have adequate shoulder width to allow through traffic to bypass any turning traffic.

5.17.4 Potential injury crashes

An assessment of the crash rate for the six key intersections without the port expansion was conservatively calculated to be 0.6 injury crashes per year. The injury crash rate for these intersections after the proposed port expansion is conservatively calculated to increase injury crashes by 0.01 per year (less than 1 injury crash over a 20 year period).

5.17.5 Carparking

Northport will provide enough parking within the port to ensure that additional port expansion traffic parking does not adversely affect traffic operations on SH15.

5.17.6 Cruise ship tourists

Tourists are expected to begin traveling through the port within the next five years as cruise ships begin to use Whangārei as a destination location. Despite some short-term disruption from COVID, the number of cruise ships is expected to reach a consistent 30 ships per annum within the next 20 years, averaging 1,500 people per ship. It is assumed that most cruise ship visitors will be transported by bus to their respective destinations.

5.17.7 Recreation and access around Northport

Traffic accessing the remaining beach area and the proposed public reserve area to the east of Northport is expected to typically occur outside of peak periods and on weekends. This traffic is not expected to materially affect SH15 traffic.

5.17.8 Impact of full port development on the existing and future road network

Assumptions

The Whangarei Tracks Network Model was used to confirm the future expected traffic volumes with planned land growth both with and without port expansion. Key intersections were modelled in SIDRA to assess the future performance of the network at an intersection level along SH15. The analysis assumed a worst-case scenario, where port traffic occurs at the same peak periods as normal traffic (8.00am to 9.00am for the morning peak and 4.00pm to 5.00pm for the afternoon peak). However, peak port traffic typically occurs outside the normal peak traffic periods and so the model results are conservative.

The model was run with the following four scenarios:

- Scenario 1: 2033 Base Model – Residential growth without additional port traffic.
- Scenario 2: 2040 Base Model – Residential growth without additional port traffic.
- Scenario 3: 2033 Future Model – Residential growth with additional port traffic.
- Scenario 4: 2040 Future Model – Residential growth with additional port traffic.

Comparisons have been made to these scenarios to determine the traffic effects generated from the Northport development at the six key intersections. It has been assumed that full port expansion has occurred by 2033.

SH15 Mid-Block capacity

An assessment was carried out to check if the port expansion traffic would cause mid-block capacity issues on SH15. The predicted daily traffic volume at 2033 (with the uniform growth rate) is 10,456. Adding the estimated additional daily port traffic at 2033 of 806, results in a total SH15 traffic count of 10,944 vehicles per day. With increased residential growth the total SH15 traffic increases to 13,666 vehicles per day in 2040.

The anticipated traffic on SH15 in 2040 means that the single lane highway (urban regional arterial) will still operate within its daily expected capacity.

SH15/SH1 intersection

The modelling results for the SH1/SH15 roundabout for 2040 show that the intersection will operate beyond capacity without the port expansion during the morning peak, and almost at capacity during the afternoon peak, on some approaches. With full port expansion, the roundabout intersection in 2040 is expected to function better compared to the without-port expansion scenario. This is because, by that date, more people will be attracted to live locally in Marsden/Ruakaka due to additional work opportunities, leading to less trips from outside the area.

The 2033 model for the intersection shows that it operates without any issues with and without port traffic in 2033 for morning and afternoon peak results.

SH15/Salle Road intersection

The modelled results confirm that there are no issues during both peaks at the SH15/Salle Road intersection with additional port traffic in 2033 and 2040.

SH15/One Tree Point/McCathie Road intersection

The modelling results show that the intersection will have no issues following the full port expansion in 2033. However, the One Tree Point approach to the intersection will experience long delays and perform beyond capacity with LOS F⁷³ in 2040. Beyond 2033, it is predicted that the intersection will need to be upgraded to prioritise the movement of additional traffic expected on One Tree Point Road from locally generated residential traffic.

SH15/Marsden Point Road intersection

The modelling results confirm that this intersection will have no issues in 2033 with full port expansion. However, during the morning peak the Marsden Point Road approach of the SH15/Marsden Point Road intersection will operate over capacity (LOS F) in 2040 with the port expansion due to the large volume of right turning traffic (343 vehicles per hour) during the

⁷³ **Level of Service (LOS)** involves a qualitative assessment of the quantitative effect of factors such as speed, volume of traffic, geometric features, traffic interruptions, delays, and freedom to manoeuvre. There are six levels of service, with 'A' representing the top level as a condition of free flow in which individual drivers are virtually unaffected by the presence of others in the traffic stream and 'F' representing the bottom level.

morning peak. Beyond 2033 it is predicted that the intersection will need to be upgraded to provide for the additional right turning traffic expected on Marsden Point Road during the morning peak.

SH15/Marsden Bay Drive/Rama Road Intersection

The modelling results show that during both morning and afternoon peaks, the Marsden Bay Drive approach of the SH15/Marsden Bay Drive intersection will operate over capacity (LOS F) in 2040 with full port expansion. The modelling also shows that in 2033 with full port expansion, the approach of this intersection will perform at LOS E in the morning peak. This confirms that at completion of the port expansion, the intersection will be approaching capacity.

SH15/Mair Road intersection

Mair Road provides secondary access to the CINZL terminal. Due to the short right turn bay (60m) on SH15, the critical delay at this intersection will be for the right turning movements from SH15 to Mair Road, to ensure the queue does not extend to the through lane.

Northport has advised that there are very few trucks accessing the Mair Road intersection - an estimated maximum of six to eight trucks during the peak hours. This equates to a peak arrival rate of one truck arriving every 7.5 minutes which would allow ample time for a truck to find a gap in traffic for the right turn movement before the next truck arrives. The impact of the port traffic is expected to be minimal at this intersection.

The recent cessation of refinery functions at the CINZL site, and the change to a dedicated import terminal is expected to have minimal impact on this assessment. If anything, the number, and frequency of truck movements associated with terminal operations is anticipated to be less than during previous refining operations, and so the above assessment is conservative.

Key intersections capacity analysis

Following sensitivity testing it was estimated that some of the critical intersections are likely to reach capacity in 2035 for morning peak hour. This occurs when the intersection volume reaches approximately 1,100 vehicles per hour for SH15/Marsden Point Road, 1,250 vehicles per hour for SH15/One Tree Point Road and 1,300 vehicles per hour at the SH15/Marsden Bay Drive intersection.

Peak spreading sensitivity analysis – all intersections

A sensitivity analysis has confirmed that a 20% reduction of through port traffic during both the morning and afternoon peaks would ensure that the key intersections perform at an acceptable LOS D in 2040. This reduction could be achieved through the mitigation measures identified in Section 5.17.10 below. Accordingly, the proposed mitigations include management methods to reduce port-related traffic movements during those peak times.

5.17.9 Traffic distribution on SH15

Following the anticipated residential development in the Marsden Point area the percentage contribution of heavy vehicles on the SH15 is expected to reduce after the port expansion. This is mostly due to local residential traffic growth contributing to a significant increase in small vehicles on SH15. At present, the percentage of heavy vehicles on SH15 is approximately 20%. This is expected to reduce to 14% heavy vehicles and 1.33% buses, giving a total HV percentage of 15.33% after full port expansion.

5.17.10 Mitigation measures

Port construction

Much of the port construction will utilise on/in water methods. However, there will be some temporary impacts associated with land-based works, which will include minor increases in truck traffic carting construction supplies to and from site.

Any traffic effects arising during the construction period can be suitably mitigated through measures included in a construction traffic management plan, including:

- Methods to manage the effects of temporary traffic management activities on general traffic;
- Measures to manage the safety of all transport users;
- The estimated numbers, frequencies, routes and timing of construction traffic movements, including any specific non-working or non-movement hours to manage vehicular traffic or to manage traffic congestion;
- Site access routes and access points for heavy vehicles, the size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;
- Identification of detour routes and other methods for the safe management and maintenance of traffic flows, including cyclists, on existing roads;
- Methods to maintain vehicle access to property where practicable, or to provide alternative access arrangements when it will not be;
- The management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads;
- Methods to communicate traffic management measures to affected road users such as residents/public/emergency services.

Port operation

To minimise the impact of the port related traffic on SH15 for the worst-case scenario, Northport would need to implement traffic management and mitigation measures during peak times. The sensitivity analysis of the peak hour traffic has shown that a 20% reduction of port through traffic

is needed on SH15 to ensure the critical intersections perform at an acceptable LOS “D” in Year 2040.

It is recommended by WSP that Northport should only review the port traffic trigger volumes against the trigger volumes on SH15 when the total volumes at the critical intersections⁷⁴ are approaching capacity (1,350 vehicles per hour). If, at the time of this review, the port traffic trigger volumes for each intersection are not exceeded, no upgrading of the respective intersection will be necessary. The port traffic trigger volumes are contained in **Table 22** below.

Table 22: Port traffic trigger volumes

Critical intersections	Northport Inbound AM Peak Hour Trigger Volumes	Northport Outbound AM Peak Hour Trigger Volumes
SH15/Marsden Bay Drive	700	200
SH15/Marsden Point Road	700	200
SH15/One Tree Point Road	300	200

Measures that could be employed by Northport to ensure that the trigger volumes are not exceeded include:

- Avoiding the port peak coinciding with the network peak by:
 - Implementing a vehicle booking system for container trucks to distribute the traffic load over the Port’s operating hours (24 hours a day) as much as possible.
 - Encouraging the supply chain to operate 7 days a week to reduce truck movements during the weekdays when the network is busy.
- Reducing traffic volumes to and from the port by:
 - Encouraging mode sharing for staff transport to and from work.
 - Moving freight to rail when available.
 - Transporting cruise ship passengers by buses and disembarking outside peak periods only.

It is only in the situation that total traffic volumes at the critical intersections are approaching capacity, *and* port traffic trigger volumes for the respective intersection are exceeded, that WSP recommends Northport should be responsible for contributing to the upgrade of the relevant intersection(s). This is viewed as an appropriate recognition of the increased traffic demand placed on those critical intersections from a variety of sources.

⁷⁴ SH15/One Tree Point, SH15/Marsden Point Road, SH15/Marsden Bay Drive.

5.17.11 Overall effects conclusions

The potential traffic effects of the proposed port expansion are summarised as follows:

- The supporting road network accessing the port currently operates within its traffic carrying capacity for both intersections and mid-blocks, with intersections performing with good levels of service.
- SH15 is a regional arterial road with one lane each way. The capacity of this road network is between 15,000 to 18,000 vehicles per day.
- With full port expansion SH15 has adequate capacity at midblock sections with SH15 volumes reaching 13,666 vehicles in 2040.
- The safety and sightline assessment of the key side road intersections with SH15 has identified no existing safety issues.
- The crash risk assessment has shown that port expansion induced traffic will increase total injury crash rate for the SH15 corridor by only 0.01 reported injury crashes per year, which equates to one additional injury crash over the next 20 years on SH15.
- Should total and port related traffic reach pre-determined trigger levels at the SH15 intersections, the critical intersections will need to be upgraded to avoid adverse effects.

5.18 Economic effects

5.18.1 General

The potential economic effects of the expanded port have been assessed by ME. The conclusions from this assessment are summarised below. Further detail is provided in the ME report in **Appendix 22**.

National role of ports

The port and freight sectors are key enablers of the supply chain, which in turn impacts on the performance of the economy and therefore the standard of living in New Zealand.

Ports are vital for the New Zealand economy with over 99% of New Zealand exports and imports going through ports. They also enable the movement of coastal container products and bulk goods such as cement and fuel.

Ports form a part of the national transport system which also includes, road, rail, and air. Road and rail provide the bulk of the domestic system (particularly for freight movement) while sea and air are the links to global markets.

The efficiency and free movement of goods across the transport network is needed to ensure that New Zealand remains internationally competitive.

The national importance of ports is recognised in the NZCPS.⁷⁵

Regional role of ports

Ports are an enabling asset in a regional context. They support business productivity and activity, and act as a hub for economic activity, facilitating the movement of goods produced within the region, but also across the hinterland. Examples of goods currently being handled by Northport are:

- Logs.
- Woodchip.
- Other wood product exports.
- Coal.
- Agricultural imports.
- Containers.

An effective port can keep logistics costs competitive and broaden access to markets. An effective port can also act to retain or attract export-based industries that benefit from close proximity to a port. ME project a significant increase in the number of containers handled by Northport as outlined in **Table 23** below. However, the growth in container freight is reliant on an effective port, facilitating the export flows projected in Table 23.

Table 23: Predicted Northport container TEU – 2020 to 2050

Containers (TEU)							
TEU	2020	2025	2030	2035	2040	2045	2050
BAU	12,310	47,000	62,000	77,000	92,000	102,000	112,000
NAI	12,310	47,000	125,000	199,000	271,000	341,000	411,000
UNIPC	12,310	47,000	154,000	262,000	370,000	478,000	586,000
NAG	12,310	47,000	96,000	142,000	185,000	226,000	268,000

As identified in the ME report, Northport will reach capacity constraints in the medium-long term, across all of the projected future scenarios. In those economic growth scenarios, existing container capacity would not be sufficient to enable the Port to maintain its existing regional role or an expanded role beyond the region. Without the ability to expand, there is a risk that Northport's role could be restrained, which would be a loss to the regional economy, and would potentially compromise the efficient operation of the national port network.

⁷⁵ Policy 9, New Zealand Coastal Policy Statement.

5.18.2 Economic impacts

The economic impacts associated with Northport are mainly a result of the trade tasks that the port handles and the flow-on economic activity generated in other businesses that supply the trading businesses. There are a range of positive impacts resulting from Northport's operational expenditure in the local, regional, and national economies, and through investment in infrastructure: all of which provide for the social and economic well-being of people and communities in the district and region.

Research carried out by ME considered the potential economic impacts of four plausible growth scenarios for the existing port being:

- **Business-as-usual Scenario (BAU)** - presents a future which assumes that Northport's role continues to be focused on regional trade.
- **North Auckland Growth (NAG)** - a low future which assumes that Northport captures a share of the growth in container trade from the area north of the Auckland isthmus.
- **North Auckland Imports Scenario (NAI)** - a future with the Port expanding its role to include both regional and national trade.
- **Upper North Island Ports Constrained (UNIPC)** - a high future which assumes that other ports in the Upper North Island become constrained, which results in a larger proportion of trade in Auckland Region being handled at Northport.

The ME research indicates that Northport's role in the Northland economy is expected to range from:

- **BAU** scenario which reaches \$1,094 million GDP and 14,800 jobs by 2050.
- **NAI** scenario which reaches \$1,201 million GDP and 16,200 jobs by 2050.

Its role in the *national* economy could also range from:

- **BAU** scenario which reaches \$2.26 billion GDP and 26,300 jobs by 2050.
- **NAI** scenario which reaches \$5.6 billion GDP and 60,900 jobs by 2050.

The report does not quantify the economic role under the low growth future (NAG) or high growth future (UNIPC), as both of these scenarios will also show a positive economic role which ranges around the NAI and will add little to the understanding of the proposed expansion.

Northport's current role in the regional and national economy is:

- *Northland* - \$438 million GDP and the equivalent of 6,300 jobs.
- *National* - \$907 million GDP and 10,700 jobs.

While robustly prepared by independent experts, it is acknowledged that the above figures are projections that define a range within which the actual figure is likely to sit. Whichever scenario plays out in future, it is likely that Northport will be making a significant contribution to the regional and national economies.

5.18.3 Port capacity – ability to realise economic benefits

The container handling assumptions for each growth scenario are as follows:

- **BAU** scenario assumes a container trade volume of 92,000 TEU by 2040.
- **NAG** scenario assumes a container trade volume of 185,000 TEU by 2040.
- **NAI** scenario assumes a container trade volume of 271,000 TEU by 2040.
- **UNIPC** scenario assumes a container trade volume of 370,000 TEU by 2040.

With planning for the construction of Berth 4 underway, Northport's ability to expand to handle containerised regional trade will be sufficient in the short-medium term. The containerised trade in the BAU scenario (92,000 TEU) will be just within the capacity of Northport's current (i.e. consented) container facilities (estimated at approximately 100,000 TEU).

However, assuming Northport's role expands beyond the region as per the NAG, UNIPC and NAI scenarios, capacity constraints will arise in the short-medium term. If any of these additional demand forecasts eventuate, which are considered likely, Northport will need to expand to provide additional berth space and container handling area in order to keep up with that demand. Without this expansion, Northport's potential role would be constrained, which would be a loss to the national and regional economy with associated effects on the national port network.

Because of the long 'lead time' necessary to design and construct regionally significant infrastructure such as ports, it is considered prudent and necessary (from an economic perspective) to progress the applications for Berth 5 to secure the ability to expand the port area. This would enable the future unconstrained operation of Northport, and ensure that the upper North Island ports, collectively, can meet the needs of the fast-growing Upper North Island and New Zealand economy. It will be able to cater for projected needs and will also ensure that Northport is not subject to a "just in time" approach to its future development. This will, in turn, help enable the significant regional and national economic benefits which flow from an efficient unconstrained port network to be realised.

5.19 Positive effects

There is a range of positive effects associated with the proposal. These are summarised below.

5.19.1 Economic and social benefits

The proposal will result in significant direct and downstream economic and social benefits to the region.

The benefits have been comprehensively assessed, and quantified where possible, by ME. The potential economic benefits (detailed in Section 5.18 of this report) range depending on the future scenario adopted, as summarised below:

- **BAU** scenario which reaches \$1,094 million GDP and 14,800 jobs by 2050.
- **NAI** scenario which reaches \$1,201 million GDP and 16,200 jobs by 2050.

Its role in the *national* economy could also range from:

- **BAU** scenario which reaches \$2.26 billion GDP and 26,300 jobs by 2050.
- **NAI** scenario which reaches \$5.6 billion GDP and 60,900 jobs by 2050.

These projected future benefits can be compared with Northport's current role in the regional and national economy which is:

- *Northland* - \$438 million GDP and the equivalent of 6,300 jobs.
- *National* - \$907 million GDP and 10,700 jobs.

The proposal will also enable wider economic, social and wellbeing benefits for Northland and the nation, for example by improving the efficiency and resilience of the national port network (including by providing improved services for Northland exporters) and acting as a catalyst for a range of supporting business activity in Marsden Point and the region.

As referenced in the ME report, a report by Polis (July 2022) estimated the expansion could bring an additional \$160m annual GDP to Northland by 2060, supporting an additional ~1,500 jobs (medium scenario). This assumes container annual volumes reaching 400,000 TEU by 2060. Based on the graphics in the report⁷⁶, the estimated additional annual GDP by 2050, is around \$117m, supporting ~1,100 jobs. This assumes container volumes of around 300,000 in 2050.

5.19.2 Avifauna roost

The proposed avifauna roost on the intertidal area to the west of Northport has been determined to have positive effects on both coastal processes and avifauna by the Northport coastal processes and avifauna experts respectively.

In respect to coastal processes, T+T concludes that the long term the inclusion of sand and the ongoing top-ups will have a beneficial effect on coastal processes by increasing the sediment budget within Marsden Bay, offsetting to some degree sea level rise effects and potentially reducing the overwash and landward retreat of the existing barrier beach. The sheltering provided by the roost is also likely to enable the renewal of the mangrove stand that has currently eroded due to the landward migration of the barrier beach.

In respect to avifauna, BML concludes that that the location of the proposed roost site is better than other high tide roost sites due to its separation from the coast at high tide which minimises the ability for recreational users (and dogs) to access roosting birds.

⁷⁶ GDP growth by decade average (p.34).

5.19.3 Recreation/public access

Careful design of the proposal will ensure a range of recreational benefits available to the public. These include the proposed pocket park, and associated access and amenities (including swimming steps, carpark, toilet and refuse facilities). In addition, the proposed fishing and water taxi pontoon will have positive effects on recreation values in the vicinity of Northport.

5.19.4 Ecological

The proposal will also result in several positive ecological outcomes. These include additional habitat for key species, including as provided for by the proposed sandbank renourishment to the west of the existing port (which will provide additional roosting habitat for key avifauna species) and the additional rock revetment surrounding the reclamation (which will provide suitable artificial rocky reef habitat for a range of flora and fauna).

5.20 Overall summary of effects

The effects of the project are summarised in **Table 24** below.

Table 24: Summary of effects

Effects	Avoidance and/or mitigation measures	Magnitude
Cultural effects		
<ul style="list-style-type: none"> ▪ Environmental effects <p>General deterioration of:</p> <ul style="list-style-type: none"> - Marine ecology. - Avifauna. - Marine mammals. - Water quality. - Air discharges. - Climate change. - Coastal processes. 	<p>Marine mammals</p> <p><u>Construction</u></p> <ul style="list-style-type: none"> ▪ Potential involvement of mana whenua in effects management, particularly during construction. <p><u>Construction and operation</u></p> <ul style="list-style-type: none"> ▪ Approval and implementation of a Marine Mammal Management Plan (MMMP), including measures to minimise underwater noise and ship strike. 	<p>Minor or less (based on expert advice)</p>

	<p>Avifauna</p> <p><u>Construction</u></p> <ul style="list-style-type: none"> Approval and implementation of effects management measures contained in the CEMP. <p><u>Construction and operation</u></p> <p>Provision of additional roosting area for VOC.</p>	Minor or less (based on expert advice)
	<p>Stormwater</p> <p><u>Construction & dredging</u></p> <ul style="list-style-type: none"> Approval and implementation of a dredge management plan (s). Sedimentation avoidance measures during construction. <p><u>Operation</u></p> <ul style="list-style-type: none"> Compliance with water quality discharge conditions of consent designed to maintain water quality in the harbour receiving waters. On-port mitigation. 	Minor or less (based on expert advice)
<ul style="list-style-type: none"> Cultural effects Specifically: <ul style="list-style-type: none"> Cultural landscapes and seascapes. Loss of Takutai Moana. Loss of Mauri. Loss of Mana. Reduction in ability to exercise Kaitiakitanga. 	<p>Archaeology</p> <ul style="list-style-type: none"> Adherence to accidental discovery protocol. 	TBC
<ul style="list-style-type: none"> Economic effects <ul style="list-style-type: none"> Loss of land. Loss of resources. Impacts on low impact families to 		Positive

<p>self-sustain (living off the land and sea).</p> <ul style="list-style-type: none"> - Benefits not accruing to Maori. 		
<ul style="list-style-type: none"> ▪ Social effects <ul style="list-style-type: none"> - Alienation of people from resources and the harbour. - Air and noise emissions affecting the quality of the environment at Poupouwhenua. - Additional pressure to build the wastewater ocean outfall. - Exacerbation of safety issues on local roads and the highway. 	<p>Coastal access</p> <ul style="list-style-type: none"> ▪ Park/reserve development and associated access. <p>Traffic</p> <p><u>Construction</u></p> <ul style="list-style-type: none"> ▪ Approval and implementation of a construction traffic management plan. <p><u>Operation</u></p> <p>Monitoring of port traffic and potential future upgrades of SH15/local road intersections.</p> <p>Noise (terrestrial)</p> <p><u>Construction</u></p> <ul style="list-style-type: none"> ▪ Approval and implementation of a construction management plan addressing inter alia potential construction noise. <p><u>Port operations</u></p> <ul style="list-style-type: none"> ▪ Port Noise Management Plan. <p>Mechanical ventilation for affected properties.</p> <p>Air quality</p> <p><u>Construction</u></p> <ul style="list-style-type: none"> ▪ Compliance with conditions of consent, including management plan(s). <p><u>Operation</u></p> <p>General commitment to reducing emissions from combustion engines where practicable.</p>	TBC

Coastal processes		
Waves	N/A	Minor
Currents and sediment transport	N/A	Moderate (between Northport and CINZL jetty)
Water level	N/A	Negligible
Changes to the inner harbour	N/A	Nil
Changes to the entrance channel	N/A	Minor
Changes to the ebb tide shoal and Mair Bank	N/A	Minor
Changes to the open coast shoreline	N/A	Nil
Changes to recreational surfing	N/A	Nil
Effects on existing and future coastal hazards	N/A	Negligible
Tsunami	N/A	Negligible
Landscape effects		
Landscape effects on Marsden Point Beach	N/A	Significant
Landscape effects experienced from Reotahi	N/A	More than minor
Landscape effects experienced from the Harbour	N/A	More than minor
Landscape effects from elsewhere	N/A	Less than minor

Effects on ONLAs ONCAs & ONFs	N/A	Minor or less		
Natural character				
Level of change to natural character values of the harbour for most exposed viewing areas	N/A	More than minor		
High and Outstanding Natural Character Areas		Negligible		
Amenity values				
Effects on amenity values for users of the beach to the east of Northport	N/A	Significant		
Effects on amenity values at Reotahi	N/A	More than minor		
Effects on amenity values of the wider harbour	N/A	Less than minor		
Marine ecology (excluding cumulative effects)				
		System (appropriate system/scale unshaded)		
		Harbour	OHEZ	Footprint
Intertidal habitats and macrofauna	N/A	Moderate	Moderate	Very high
Loss of kaimoana shellfish from reclamation	N/A	Low	Low	High
Direct effects on subtidal benthic macrofaunal diversity from reclamation	N/A	Moderate	Moderate	Very High
Effects on seagrass	N/A	Moderate to High	Moderate to high	Moderate to High

Effects on macroalgae	N/A	Moderate to High	Moderate to high	Moderate to High
Loss of important fish habitat	N/A	Low	Low	Low
Loss of existing artificial reef habitat and biota and replacement with new artificial reef habitat	N/A	Positive in the medium term to long term	Positive in the medium to long term	Positive in the medium to long term
Effects of stormwater discharges	<ul style="list-style-type: none"> Compliance with conditions of consent relating to stormwater discharge quality. 	Low	Low	Low
Avifauna				
Permanent loss of habitat	CEMP		Minor or less	
Injuries and/or mortalities	<p>Potential injuries/mortalities can be avoided through adherence to mitigation measures included in the avifauna section of the CEMP, which will include measures to avoid direct impacts and manage nesting kororā and variable oystercatcher. These measures will include:</p> <ul style="list-style-type: none"> For kororā: <ul style="list-style-type: none"> Pre-construction (including rock removal) surveys by a suitably qualified and experienced coastal ornithologist to determine the presence of kororā within the western boundary riprap revetment; Establishment of exclusion zones around nesting and / or moulting birds⁷⁷; 		<p><u>Construction</u></p> <p>Less than minor</p> <p><u>Operation</u></p> <p>Minor or less (Dotterel)</p> <p>Less than minor (Pied Stilt and VOC)</p>	
Disturbance and displacement			<p><u>Construction</u></p> <p>Minor or less for NZ dotterel and variable oystercatcher</p> <p><u>Operation</u></p> <p>Minor or less for all species</p>	

⁷⁷ Under no circumstances should nesting birds, nest contents or moulting penguins be moved. Furthermore, a DOC Wildlife Act permit is required to handle species listed in the Wildlife Act (1954).

Construction sediment suspension effects	<ul style="list-style-type: none"> - Rock removal works to be occur in the presence of a suitably qualified and experienced coastal ornithologist; - Measures to ensure that kororā are not trapped by construction works. <ul style="list-style-type: none"> ▪ For variable oystercatcher: <ul style="list-style-type: none"> - If construction works are to occur within 20 m of an area identified as potential variable oystercatcher nesting habitat during the breeding season, a suitably qualified and experienced coastal ornithologist should check for the presence of active nests. - If an active nest is detected, a 20 m exclusion zone should be established around the nest to ensure machinery and personnel do not come within 20 m of the nesting bird. <p>Loss of habitat</p> <ul style="list-style-type: none"> ▪ Construction of additional roosting habitat for VOC and NZ Dotterel. <p>Dredging/construction sedimentation</p> <ul style="list-style-type: none"> ▪ Adherence to the measures in the dredging/construction management plan and associated conditions of consent. <p>Lighting</p> <p>Measures to minimise construction and operational lighting will be employed, including:</p> <ul style="list-style-type: none"> ▪ Lighting will be kept to the minimum required for safe operation; and ▪ Wherever practicable lighting will be directed downwards and shielded to reduce light projecting horizontally towards coastal waters and avoid light projecting vertically to passing birds. 	Minor or less
Artificial lighting		Less than minor
Pollution		Less than minor

Marine mammals		
General construction noise	<ul style="list-style-type: none">Marine Mammal Management Plan	Temporary (not specified)
Pile driving noise (displacement or behavioural effect)		Less than minor
Dredging noise		Less than minor
Vessel strike		Low (for Baleen whales) – most vulnerable
Entanglements		Negligible
Cumulative effects		Minor or less.
Overall effects		Less than minor to nil.
Channel navigation and safety		
Reclamation, structures, dredging (Navigation and spill risk)	<ul style="list-style-type: none">Dynamic Under Keel Clearance (DUKC).Environmental limitations.Ship simulations.Turning basin size/dimensions.Pilotage and towage.Navigation Aids.	No adverse impacts on existing Northport and CINZL berthage (navigation). Slight increase in marine spill risk based on vessel size (not appreciable).
Biosecurity		
Potential introduction of pest species on construction vessels and additional shipping	<ul style="list-style-type: none">CEMP and associated biosecurity management measures.	Potential increase in biosecurity risks for the region due to additional ships. Mitigation required to minimise the risks.
Noise and vibration (terrestrial)		
Construction noise	<ul style="list-style-type: none">Construction management plan.	Will comply with permitted activity limits.

Additional port noise	<ul style="list-style-type: none"> Compliance with specified noise limits. Implementation of measures in the Port noise management plan. Offer to install mechanical ventilation at specified noise threshold. 	<ul style="list-style-type: none"> Dwellings that are not eligible to receive mitigation: Ranging between minor and less than minor. Dwellings that will receive mitigation: Minor
Archaeology		
Potential discovery of archaeological sites	<ul style="list-style-type: none"> Accidental discovery protocol. 	Negligible.
Recreation effects		
Construction and maintenance effects (effects of turbidity, effects of dredging on recreational boating, changes to tides and currents)	<ul style="list-style-type: none"> Dredge/construction management plan (s) 	Minor or less.
Loss of beach and pontoon	<p>Park/reserve</p> <ul style="list-style-type: none"> A public park/reserve area is to be developed at the eastern end of the expanded port, above the residual beach area (see details in Section 3.9 of this report). <p>Replacement fishing wharf</p> <ul style="list-style-type: none"> While the existing eastern pontoon was not specifically established for fishing, the use of the wharf by the public for this purpose is recognised. It is therefore proposed to incorporate a public fishing area and associated public access on the eastern side of the port with access provided via the public park/reserve. 	<ul style="list-style-type: none"> Significant effect for recreational beach users. Minor effects (district-wide) Less than minor effects (region-wide) Temporary effects on recreational fishing post dredging until recovery.

Economic effects		
Economic benefits and/or lost opportunities	N/A	<p>Northport role in the regional economy could range from:</p> <ul style="list-style-type: none"> ▪ BAU scenario which reaches \$1,094 million GDP and 14,800 jobs by 2050. ▪ NAI scenario which reaches \$1,201 million GDP and 16,200 jobs by 2050. <p>Northport role in the <i>national</i> economy could range from:</p> <ul style="list-style-type: none"> ▪ BAU scenario which reaches \$2.26 billion GDP and 26,300 jobs by 2050. ▪ NAI scenario which reaches \$5.6 billion GDP and 60,900 jobs by 2050.
Stormwater discharges		
Additional stormwater discharge to the CMA via pond system	<ul style="list-style-type: none"> ▪ Compliance with conditions of consent relating to stormwater discharge quality. <p>On port mitigation will include:</p> <ul style="list-style-type: none"> ▪ Removal of bark and wood debris to off-site landscape suppliers ▪ Routine sweeping ▪ Dust suppression measures. ▪ Regular cleaning of catchpits. 	<ul style="list-style-type: none"> ▪ Negligible.

Air Quality		
Construction	<ul style="list-style-type: none"> Compliance with conditions of consent, including management plan(s). 	Minor.
Operations	<ul style="list-style-type: none"> Commitment to emissions reductions. 	Negligible.
Traffic effects		
Construction	<ul style="list-style-type: none"> Compliance with construction traffic management plan. 	Minor.
Operations	<ul style="list-style-type: none"> Upgrading intersections if trigger volumes exceeded. 	Minor.

The effects summarised in **Table 24** above are integral to the statutory planning assessment in Section 6 of this report, particularly in respect to marine ecology, avifauna, marine mammals, landscape, and natural character.

6. Statutory Planning Assessment

6.1 Introduction

This section of the AEE identifies the statutory framework under which the various WDC and NRC consents are to be considered and summarises the assessment of the proposal against the various national, regional, and district planning documents contained in **Appendix 28**.

6.2 Relevant statutory planning documents

6.2.1 Statutory framework

The statutory framework against which the proposal is to be assessed is shown in **Figure 69** below:

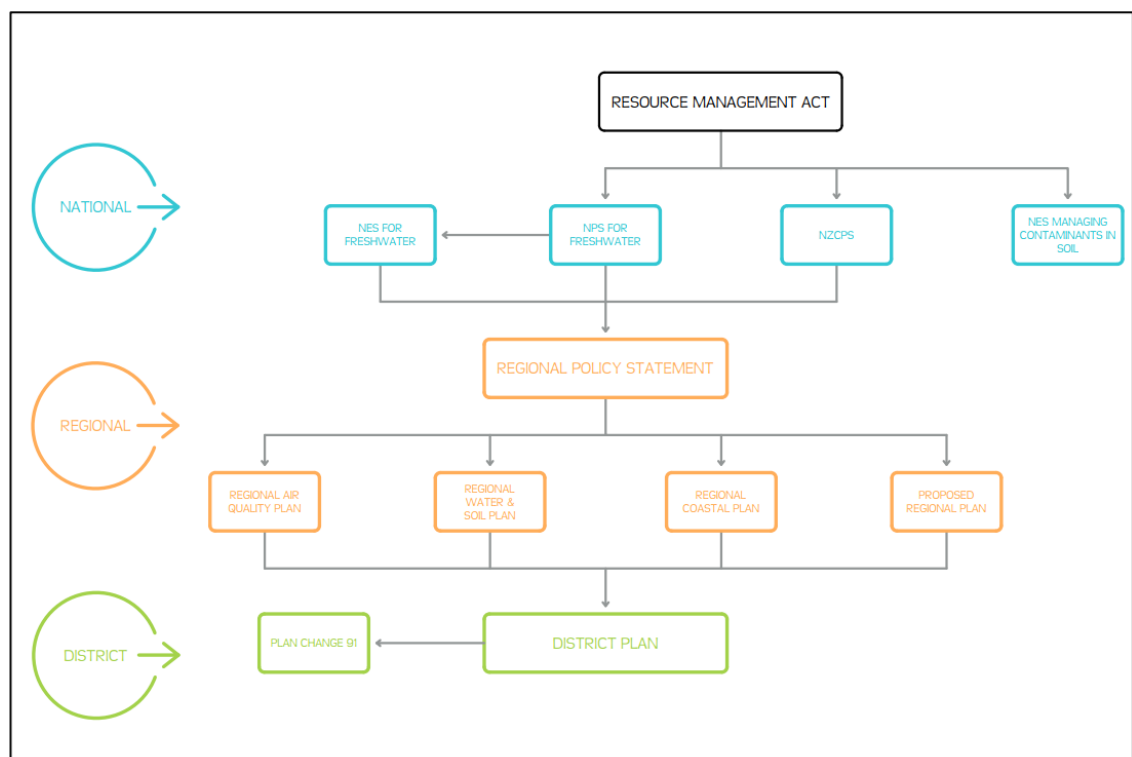


Figure 69: Statutory framework

Given the hierarchical nature of planning documents under the RMA, and the requirement for lower order documents to “give effect to” higher order documents, the principal documents are the PRP (given the very advanced progress of appeals on this plan) and the WDP, both of which have been prepared under the NZCPS and RPS. However, for completeness, all of the documents have been considered in the analysis in **Appendix 28** and summarised below.

6.2.2 National planning documents

National Policy Statement for Freshwater Management 2020 (NPSFM)

The NPSFM sets a national framework for how freshwater is to be managed across the country, according to a fundamental concept, Te Mana o te Wai. Regional and district plans are required to give effect to the NPSFM according to its terms.

Resource Management (National Environment Standards for Freshwater) Regulations 2020 (NESFM)

The NESFM contains regulations for carrying out certain activities that pose risks to freshwater and freshwater ecosystems.

The standards are designed to, among other things, protect existing inland and coastal wetlands.

At the time of filing this application, MfE are publicly consulting on possible changes to the NESFM to clarify that the wetland provisions should not apply to the CMA.

Resource Management (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NESCS)

The NESCS is a nationally consistent set of planning controls and soil contaminant values. It ensures that land affected by contaminants in soil is appropriately identified and assessed before it is developed and, if necessary, the land is remediated, or the contaminants contained to make the land safe for human use.

New Zealand Coastal Policy Statement 2010

The NZCPS is the only compulsory NPS required under the RMA. The purpose of the NZCPS is to state policies in order to achieve the purpose of the Act in relation to the coastal environment of New Zealand. Regional and district plans (including the RPS) are required to give effect to it according to its terms.

6.2.3 Regional planning documents

Regional Policy Statement 2016

The RPS provides the broad direction and framework for managing the region's natural and physical resources. It identifies significant resource management issues for the region and sets out how resources such as land, water, soil, minerals, plants, animals, and structures will be managed in an integrated way. Regional and district plans must give effect to the RPS.

Proposed Regional Plan (Appeals Version)

The PRP is a combined regional air, land, water, and coastal plan, which will replace the three existing operative regional plans.⁷⁸ This plan contains objectives, policies, and rules relating to these matters. The PRP must give effect to the national planning documents and the RPS.

The PRP was notified in 2017 and is very well advanced, with the majority of appeals now resolved.

Operative Regional Coastal Plan for Northland 2004

This plan covers the Northland coastal marine area, which is the area from mean high water springs to the 12 nautical mile (22.2 km) limit of New Zealand's territorial sea. The purpose of the Regional Coastal Plan (RCP) is to assist the Northland Regional Council, in conjunction with the Minister of Conservation, to promote the sustainable management of resources in the coastal marine area.

The Regional Coastal Plan for Northland manages the following activities:

- Structures (e.g. wharves and boat ramps)
- Reclamation and impoundment
- Discharges to water
- Dredging
- Moorings and Marinas
- Aquaculture

The Regional Coastal Plan was not prepared under any of the current national planning documents or the RPS.

Operative Regional Water and Soil Plan for Northland

The rules related to earthworks in the PRP are now treated as operative under Section 86F of the RMA. Further, given that the PRP is very advanced through the appeals process, considerably greater weight is placed on the Objective and Policy framework in the PRP compared to the Operative Water and Soil Plan for Northland (RWSP).

Operative Air Quality Plan for Northland

The air quality rules in the PRP are now treated as operative under Section 86F of the RMA. Further, given that the PRP is very advanced through the appeals process, considerably greater weight is placed on the Objective and Policy framework in the PRP compared to the Operative Air Quality Plan for Northland.

⁷⁸ Air Quality Plan, Regional Coastal Plan, Regional Water and Soil Plan.

6.2.4 District planning documents

Whangarei District Plan Operative in Part 2022

The Whangarei District Plan manages land use and subdivision in the Whangarei District. This plan does not have jurisdiction for activities below MHWS. It was prepared under the NZCPS and RPS and has given effect to these documents.

The chapters that are relevant to the proposal are as follows:

- **Port Zone (PORTZ)** – Operative.
- **Natural Open Space Zone (NOSZ)** – Operative.
- **Coastal Area (CA)** – Operative.
- **District Growth and Development (DGD)** – Operative.
- **Urban Form and Development (UFD)** – Operative.
- **Transport (TRA)** - The rules in this chapter are treated as operative under s86F of the RMA. There is one outstanding appeal relating to setbacks from state highways and railways, neither of which are relevant to the proposed expansion. Accordingly, considerably greater weight can be placed on the Objective and Policy framework of this chapter of this Plan relative to its predecessor.
- **Three Waters Management (TWM)** – Operative.
- **Earthworks (EARTH)** – Operative.
- **Lighting (LIGHT)** – Operative.
- **Noise and Vibration (NAV)** – Operative.

Plan Change 91 ‘Hazardous Substances’

Plan Change 91 (PC91) ‘Hazardous Substances’ proposes to amend the operative Hazardous Substances chapter of the District Plan to give effect to the 2017 amendments to the Resource Management Act 1991, which removed the explicit function for local authorities to control the adverse effects of the storage, use, disposal, and transportation of hazardous substances.

As there are no hazardous substances associated with the proposed expansion, this chapter is of limited to no relevance to the proposal.

6.3 Whangarei District Plan zones/overlays

6.3.1 General

The proposed expansion footprint is primarily located in the coastal marine area. However, a portion of the footprint (currently esplanade reserve) is also located in the Natural Open Space Zone (NOSZ). The existing port is located in the Port Zone (PORTZ). Both the existing port and the esplanade reserve are also located within the Coastal Area (CA) overlay.

6.3.2 Port Zone (PORTZ)

The PORTZ applies to the existing port. The proposed expansion, being in the CMA, is not located within this zone. However, it has peripheral relevance to the proposal, with many of the proposed conditions designed to align with the rules in the PORTZ.

The PORTZ recognises the significance of the Port and its importance to the Whangārei District and the Northland Region as regionally significant infrastructure. The stated purpose of the PORTZ is:

- To enable the ongoing and future growth and development of the Port and any associated operational areas and facilities; and
- To provide for operations relating to the transportation of people and freight including within the PORTZ.
- To enable appropriate commercial and industrial development adjacent to Marsden Bay Drive, and to otherwise manage non-port related activities so as not to compromise or constrain the primary purpose of the zone.

The PORTZ is split into three sub zones. The existing port (owned by Northport Ltd) is located in 'Port Operations Area A', being the only area containing and limited to the functions and operations of the Port. 'Port Management Areas B and C', while stated in the plan as being to provide for the future expansion of the Port's operations, together with ancillary and supporting commercial and industrial activities, are owned and managed by Marsden Maritime Holdings (MMH) and are not sufficiently proximate to the berth frontages to be viably used for port operations.

6.3.3 Natural Open Space Zone (NOSZ)

The NOSZ identifies areas of open space land primarily managed for the conservation and protection of natural resources. The Natural Open Space Zone has associated objectives, policies, and rules that provide for the natural, ecological, landscape, cultural and heritage values of these open spaces.

6.3.4 Coastal Area (CA)

The CA is an ‘overlay’ that applies to land where the coast has a significant influence, and where land use activities can have effects on the coastal marine area. It defines the landward extent of the area covered by the NZCPS.

The CA was originally defined in the RPS and has since been introduced to the District Plan. The CA chapter contains objectives, policies, and rules to manage the effects of land use and development on the coastal environment. These provisions apply in addition to the rules for the underlying Zone (unless otherwise stated).

6.3.5 District-wide chapters

The relevant district-wide chapters identified in Section 2.2.4 contain objectives, policies, and rules that apply to all zones across the district.

6.4 Regional Coastal Plan zones/overlays

6.4.1 Marine 5 (Port Facilities) Management Area

The proposed expansion footprint (including the reclamation and dredging areas) is located within the ‘Marine 5 (Port Facilities) Management Area’ in the RCP (see pink area on **Figure 70** below).

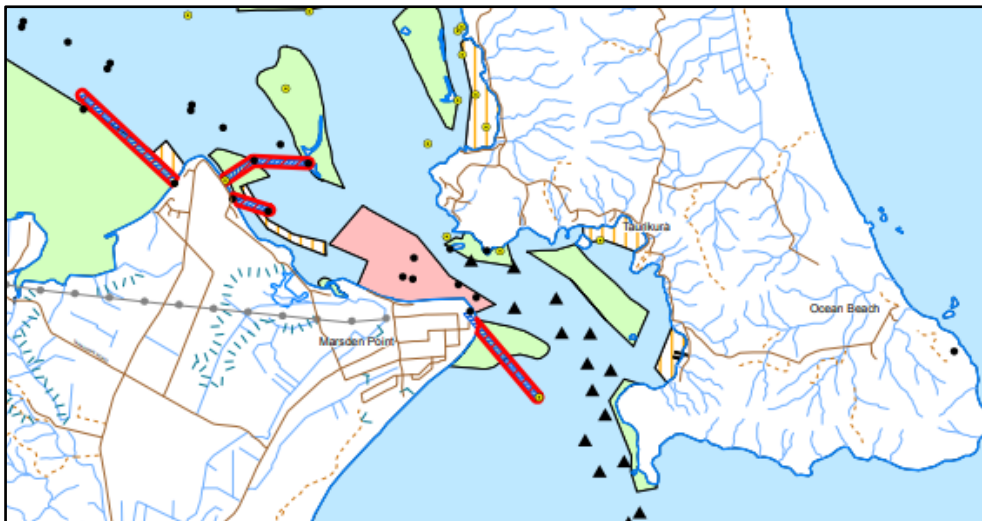


Figure 70: Operative Regional Coastal Plan planning map excerpt

The RCP states that Marine 5 areas are to be “*managed primarily for port-related purposes as a means for providing for the continuation of such activity, where appropriate, and of facilitating the management of any adverse environmental effects associated with them*”.⁷⁹

⁷⁹ Policy 6.4(5) of the Operative RCP.

6.5 Proposed Regional Plan zones/overlays

6.5.1 Marsden Point Port Zone

The proposed expansion footprint (including the reclamation and dredging areas) is located within the 'Marsden Point Port Zone in the PRP (see **Figure 71** below).



Figure 71: Proposed Regional Plan (Decision Version) planning map excerpt (Marsden Point Port Zone)

There are two policies in the PRP that explain the purpose/intent of the Marsden Point Port Zone being:

D.5.8 Coastal Commercial Zone and Marsden Point Port Zone

Recognise that the purpose of the Coastal Commercial Zone and Marsden Point Port Zone is to enable the development and operation of existing and authorised maritime-related commercial enterprises or industrial activities located within these zones.

D.5.9 Coastal Commercial Zone and Marsden Point Port Zone

Development in the Coastal Commercial Zone and the Marsden Point Port Zone will generally be appropriate provided it is:

- 1) consistent with:
 - a) existing development in the Coastal Commercial Zone or the Marsden Point Port Zone, and
 - b) existing development on adjacent land above mean high water springs, and
 - c) development anticipated on the land above mean high water springs by the relevant district plan, or
- 2) associated with regionally significant infrastructure in the Marsden Point Port Zone. Development that is inconsistent with 1) or 2) will not necessarily be inappropriate.

6.5.2 Significant Marine Mammal and Seabird Area

The entire expansion footprint is located within the Significant Marine Mammal and Seabird Area of the PRP. This area applies to the entire Northland CMA. There are no specific objectives, policies or rules relating to this area.

6.5.3 Significant Bird Area

A small part of the existing dredge footprint is located within the Significant Bird Area of the PRP. This area is shown on the WSP design drawings in **Appendix 3** and in **Figure 72** below. Like the Significant Marine Mammal and Seabird Area, there are no specific objectives, policies or rules relating to this area.



Figure 72: Plan excerpt showing PRP SBAs relative to proposed dredging areas (Source: WSP)

Significant Ecological Area

The proposal has been carefully designed in a way that it does not extend into any Significant Ecological Area notated in the PRP, except for the avifauna roost area which has been determined by the relevant avifauna and coastal processes experts to result in positive effects for the SEA and associated ecology.

6.6 National Policy Statement for Freshwater Management (NPSFM)

6.6.1 General

Section 1.5 addresses the application of the NESFM. With respect to the NPSFM, coastal wetlands do not fall within the definition of “natural inland wetland” as they are located in the CMA.⁸⁰

There are no specific NPSFM policies relating to “natural wetlands” in the CMA. The policy focus in respect to wetlands is on “natural inland wetlands” (outside the CMA). Accordingly, while the proposal does not consider that consent under the NESFM is required for works in or near a natural wetland, out of an abundance of caution we include assessment against the NPSFM in the unlikely event it is required.

The fundamental concept that underpins the NPSFM is Te Mana o te Wai.⁸¹ The NPSFM seeks to manage freshwater in a manner that gives effect to Te Mana o te Wai.

6.6.2 Objectives and policies assessment

The single objective of the NPSFM is:

2.1 Objective

(1) The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:

- (a) first, the health and well-being of water bodies and freshwater ecosystems
- (b) second, the health needs of people (such as drinking water)
- (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

Regarding 1(a), a range of technical studies by suitably qualified and experienced experts have determined that the proposal will not adversely affect the health and well-being of the harbour subject to the implementation of appropriate avoidance and/or mitigation measures being advanced as conditions of consent.

⁸⁰ Under 3.2.1 the NPSFM:

natural wetland means a wetland (as defined in the Act) that is not:

(a) a wetland constructed by artificial means (unless it was constructed to offset impacts on, or restore, an existing or former natural wetland); or

(b) a geothermal wetland; or

(c) any area of improved pasture that, at the commencement date, is dominated by (that is more than 50% of) exotic pasture species and is subject to temporary rain derived water pooling

Natural inland wetland means a natural wetland that is not in the coastal marine area.

⁸¹ Defined in Section 1.3 of the NPSFM.

Regarding 1(c), the proposal will have a positive impact on the economic and social wellbeing of people and communities.

The supporting policies that are relevant to the project are as follows:

Policy 1: Freshwater is managed in a way that gives effect to Te Mana o te Wai.

Policy 2: Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for.

Policy 3: Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.

Policy 5: Freshwater is managed through a National Objectives Framework to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.

Policy 14: Information (including monitoring data) about the state of water bodies and freshwater ecosystems, and the challenges to their health and well-being, is regularly reported on and published.

Policy 15: Communities are enabled to provide for their social, economic, and cultural wellbeing in a way that is consistent with this National Policy Statement.

The proposal aligns with these policies by employing a stormwater management system that is proven to achieve the water quality standards specified in the PRP, and from which there will be a negligible impact on water quality in the harbour.

6.7 New Zealand Coastal Policy Statement (NZCPS)

6.7.1 Objectives and policies assessment

The NZCPS contains 7 objectives and 29 policies aimed at achieving sustainable management in the coastal environment, with the majority of these having relevance to the project. The key matters most pertinent to the proposed expansion are:

- Indigenous biodiversity
- Natural character
- Tangata whenua
- Public Open Space
- Coastal hazards
- Development in the coastal environment
- Integrated management

- Ports
- Reclamation
- Biosecurity
- Natural features and landscapes
- Sedimentation
- Discharges in the CMA

The relevant NZCPS objectives and policies are assessed in detail in **Appendix 28**. Please refer to those tables for a comprehensive assessment; summary conclusions for each matter are set out below.

Indigenous biodiversity

Relevant provisions: Objective 1, Policy 11

The proposal has been the subject of detailed, integrated, and appropriately scaled assessments of effects on indigenous biodiversity that recognise the dynamic, complex, and interrelated nature of the environment in this locality. The various assessments have concluded that the overall effects on biological and physical processes, and on the diversity of indigenous coastal flora and fauna, will be minor or less subject to the implementation of measures to avoid or otherwise minimise effects. In addition, coastal water quality has been determined to be good, and unlikely to be affected by additional run-off from the expanded container terminal. Overall, the proposal is considered to align with Objective 1.

The related Policy 11 contains more specific direction to avoid adverse effects on endangered and threatened indigenous flora and fauna, and significant effects on other indigenous biodiversity and related habitat. The various ecological assessments have concluded that the effects in respect to these matters are also minor or less subject to the implementation of measures to avoid and otherwise minimise effects. Accordingly, the proposal aligns with Policy 11.

Natural character

Relevant provisions: Objective 2, Policy 13

The BNZL assessment notes that the port is not located in an Outstanding Natural Character Area, and that there are no ONLAs, HNCAs, ONFs, or ONCAs directly affected by the Northport proposal.

At a more general level, although the character and values of Marsden Point Beach would be appreciably changed by the proposed expansion, this will not alter the natural character values of the wider Marsden Point coastline to a commensurate degree.

The proposal is located in an area where natural character values are compromised by existing activities in the immediate and surrounding environment.

Overall, the BNZL assessment concludes that the proposal is acceptable in natural character terms, and in alignment with Objective 2 and Policy 13.

Tangata whenua

Relevant provisions: Objective 3, Policy 2

The role of tangata whenua has been recognised through meaningful and ongoing engagement with mana whenua. Cultural values and cultural effects assessments have been prepared in respect of the application in order to identify those characteristics that are of special value, and how they may be affected by the proposal. Understanding the relationship of tangata whenua over their lands, rohe and resources and the related effects of the proposal on this relationship continues to be a key focus for Northport as it continues its proactive engagement through to, and post, lodgement.

It is expected that there will be conditions of consent related to cultural issues and effects, and that these will be developed in consultation with mana whenua. It is expected that these conditions will align with many of the matters in Policy 2(a)-(g).

Public Open Space

Relevant provisions: Objective 4, Policies 18 and 19

Objective 4 recognises that there may be exceptional circumstances when maintaining and enhancing walking access to and along the coast is not practicable, and in those circumstances promotes the provision of alternative access.

While some public open space will be lost as a result of the proposal, this is necessary to enable the port to expand and safely operate in order to provide its regionally (and nationally) significant infrastructure function.

The proposal responds to Objective 4 and the supporting Policies 18 and 19 by providing and enhancing public access to the beach at the eastern end of the expanded port. New open space resources are proposed, including a pocket park/reserve area, associated carpark/toilet facilities, a fishing platform, and facilities to enhance water/swimming access.

Coastal hazards

Relevant provisions: Objective 5, Policies 24-27

There is specific recognition in the NZCPS for activities that cannot avoid locating in coastal hazard areas, as is unsurprisingly the case with an existing commercial port. Given the specific circumstances, the proposal aligns with Objective 5 and Policies 24-27.

Development in the coastal environment

Relevant provisions: Objective 6, Policy 6

When considered overall, the proposed port expansion aligns well with these provisions because, in addition to the positive economic and social effects and the obvious functional need to be located in the CMA, the expansion is designed to meet the reasonably foreseeable needs of future generations, is located in an area where natural character values are already influenced by existing

activities in the immediate and surrounding environment (indeed, it integrates with, and will operate indistinguishably from, the existing port), incorporates mitigation measures in relation to public access and open space, and includes shared use of facilities in the CMA where practicable (i.e. the proposed fishing pontoon and other amenities on the eastern revetment).

Integrated management

Relevant provisions: Policy 4

To achieve the integrated management of natural and physical resources and continuity overall, the various consents required from the respective councils are being processed jointly and by the same processing officer. Furthermore, the various technical effects assessments are cognisant of cross boundary activities and effects.

Regarding hapu or iwi interests, a collaborative approach to consulting with the various parties is being pursued in full alignment with this policy.

Ports

Relevant provisions: Policy 9

The proposed expansion directly aligns with, and gains considerable support from, Policy 9 as it is founded on a need to integrate with and assist the national network of ports in New Zealand to provide for the efficient and essential movement of national and international freight. Central to this issue is that providing for the development of the capacity of ports for shipping requires, long lead times for gaining consents, securing funding, design, and construction.

Furthermore, the proposed expansion is predominantly located in the Marsden Point Port Zone, the singular purpose of which is “to enable the development and operation of existing and authorised maritime-related commercial enterprises or industrial activities located within these zones”. In that regard, the PRP identifies the proposal site as the appropriate location for the port as per Policy 9(b).

Reclamation

Relevant provisions: Policy 10

The proposal aligns with Policy 10(1) and (2) for the following reasons:

- 1(a) It is not possible to provide additional berth length without an associated reclamation (freight handling area).
- 1(b) The activity can only occur in the coastal marine area.
- 1(c) Other alternative methods have been considered and are not considered practicable.
- 1(d) The proposed reclamation will provide significant national and regional benefits.
- 2(a) The port deck height and rock armouring of the reclamation will be designed to take into account coastal hazards, including climate change and sea level rise.

- 2(b) The reclamation will have the same appearance as the existing port.
- 2(c) No contaminated materials will be used in the reclamation.
- 2(d) Public access is to be provided within the esplanade reserve and along the eastern edge of the reclamation.
- 2(e) The various technical reports conclude that potential adverse effects of the proposal on the environment can be mitigated.
- 2(f) Consultation with tangata whenua is ongoing with a view to understanding and mitigating effects on cultural landscapes and sites of significance to tangata whenua.
- 2(g) MO modelling has determined that there will not be significant changes in harbour morphology resulting from the proposed reclamation, and that other effects can be mitigated.

The purpose of the reclamation is to enable the efficient operation of Northport, and the overall movement of freight handled by the network of ports servicing the upper North Island.

Biosecurity

Relevant provisions: Policy 12

The proposal includes conditions of consent related to biosecurity. Specifically, a biosecurity measures will be included in the CEMP to manage biosecurity risks associated with construction vessels. Northport will also continue to follow MPI biosecurity requirements for international shipping. This aligns with Policy 12.

Natural features and landscapes

Relevant provisions: Policy 15

The proposed expansion aligns with this policy because:

1. There are no mapped ONFs or ONLAs within the expansion footprint.
2. ONFs and ONLAs in the surrounding environment already co-exist with port and refinery activities, and the proposed expansion will not result in any significant change to the values of these features.

Accordingly, it is an appropriate development in this location within the context of Policy 15.

Sedimentation

Relevant provisions: Policy 22

The proposed construction, deposition and dredging activities will be subject to comprehensive conditions of consent designed to provide real-time monitoring of sedimentation levels, response mechanisms to appropriately manage adverse effects of sedimentation in coastal water and in the

coastal marine area generally, and reporting of outcomes to councils and other bodies and agencies with collaborative responsibilities and duties in the coastal environment.

Discharge of contaminants

Relevant provisions: Policy 23

Discharges to water from the port facility will be managed by the existing pond-based stormwater treatment system for the existing port and/or proprietary devices. The effects of these discharges on water quality are predicted to be minor or less.

Increases in turbidity and sedimentation are expected to be temporary as they relate to dredging and construction of the reclamation. Mitigation measures are proposed to ensure that the handling of dredged material will not result in significant adverse effects on water quality or the seabed, substrate, ecosystems, or habitats.

For the above reasons, the proposal aligns with Policy 23.

6.8 Regional Policy Statement (PRS)

6.8.1 General

The RPS was made operative in 2016. It is required to give effect to the NZCPS, and accordingly the objectives and policies traverse similar matters, albeit tailored to the regional context.

Section 1.3 of the RPS sets out the principles that have been used to guide the development of the RPS. These are:

People

People are at the heart of this Regional Policy Statement. All district and regional plans should have regard to people and their need for a healthy environment, well managed resources, jobs and business opportunities for their wellbeing and long-term economic success.

Economy within the environment

This Regional Policy Statement has been developed giving weight to both long-term economic and environmental considerations. It recognises that a healthy Northland economy needs a healthy environment. This Regional Policy Statement is enabling. It balances improving the economy and using resources wisely with managing and investing in the environment to achieve our future aspirations for improvement in Northland and our wellbeing. It is effects-based and should lead to effects-based implementation.

Partnership

Working with others is efficient, increases the sense of ownership, and provides opportunities for innovation and enduring success. Encouraging and supporting individual, landowner, key stakeholder and community involvement and action is critical to effective resource management in Northland.

Partnership with tangata whenua

In recognition of the partnership principles in the Treaty of Waitangi / Te Tiriti o Waitangi, and the benefits of working in partnership, tangata whenua have a key role in resource management.

Local government's role and responsibility

Local government plays an important role in managing Northland's natural and physical resources and the competing interests and values. It enables the use, development and protection of those resources to meet the needs of people and safeguards the environmental bottom lines, Northland's special places and the things we value. In doing so, it maintains Northland's capacity to generate benefits for future generations.

Affordability

The Regional Policy Statement recognises that some resource use practices will have to change so that natural and physical resources can be managed in a sustainable manner. Where these changes would impose a significant financial burden, or a practical solution is not currently available, a reasonable time is to be allowed for desired environmental results or outcomes to be achieved, taking into account the need for change and the costs and effects of not acting, or not acting quickly. Affordability acknowledges intergenerational equity and fairness.

Adaptive management

Managing Northland's natural and physical resources is a complex task. The environment, resources and systems are dynamic and so is our understanding of them. We have information gaps to fill. Our management regime must therefore be adaptive and be able to respond to change to achieve sustainable resource management.

Effectiveness

Effective resource management in Northland will involve a mixture of advocacy, education, information provision, encouragement, incentives, co-production / partnership, codes of practice, regulation, economic / market-based instruments, process reforms, and other forms of intervention and support. The Regional Policy Statement contains the minimum regulation: to meet legal requirements, community needs and values as derived from evidence and the process for its development. It recognises that solutions must be affordable, fit for purpose and achieve the objectives set out. We have matched our policy instruments to the resource management issues and opportunities identified. In line with affordability, we have avoided unnecessary compliance costs.

These principles permeate through the objectives and policies, which are focussed on providing for the health and economic well-being of people and communities, while managing effects on the environment.

The key matters pertinent to the proposed expansion covered in the RPS are:

- Water quality
- Indigenous biodiversity
- Enabling economic wellbeing
- Regionally significant infrastructure
- Efficient and effective infrastructure

- Tangata whenua
- Natural hazards
- Natural character and landscape
- Occupation of space in the CMA
- Coastal permit duration
- Development in the coastal environment
- Hard protection structures

The objectives and policies are assessed in detail in **Appendix 28**. Summary conclusions for each matter are set out below.

6.8.2 Objectives and policies assessment

Water Quality

Relevant provisions: Objective 3.2, and Policy 4.2.1

The proposal aligns with these provisions for the following reasons:

- The various technical assessments and results from monitoring existing port related discharges demonstrate that operational stormwater will not adversely affect overall water quality in the adjoining harbour.
- Mitigation measures are proposed to minimise those temporary effects associated with turbidity and sedimentation during construction (reclamation and dredging).

Indigenous biodiversity

Relevant provisions: Objective 3.4, Policy 4.4.1

The proposal has been the subject of detailed, integrated, and appropriately scaled assessments of effects on indigenous biodiversity that recognise the dynamic, complex, and interrelated nature of the environment in this locality. The various assessments by qualified and experienced independent experts conclude that the overall effects on biological and physical processes, and on the diversity of indigenous coastal flora and fauna, will be minor or less subject to the implementation of measures to avoid or otherwise minimise effects.

In addition, coastal water quality has been determined to be good, and unlikely to be affected by additional run-off from the expanded container terminal. The proposal aligns with Objective 3.4 and Policy 4.4.1.

Enabling economic well-being

Relevant provisions: Objective 3.5

The proposed expansion will directly improve the economic well-being of Northland and its communities through ensuring a robust port network with sufficient capacity into the future; and indirectly by enabling the operation and expansion of downstream businesses and investment that contribute to the economic wellbeing of people and communities. The proposal therefore aligns with this objective.

Regionally significant infrastructure

Relevant provisions: Objective 3.7, Policy 5.3.1, 5.3.2, and 5.3.3,

This suite of provisions relating to regionally significant infrastructure highlights the elevated importance of such infrastructure to the economic well-being of the region. This is a central theme of the RPS.

Northport is expressly identified as regionally significant infrastructure in the RPS. The proposed expansion of the Port will enhance Northland's economic and social well-being in the manner contemplated by Objective 3.7 and the supporting policies.

Efficient and effective infrastructure

Relevant provisions: Objective 3.8, Policy 5.2.1, 5.2.2, 5.2.3

The proposal aligns with Objective 3.8 and the supplementary provisions for the following reasons:

- (1) It optimises the use of the existing port and avoids the need for a new port.
- (2) It will enable flexibility to adapt to changing market and political conditions to meet the reasonably foreseeable needs of the community.
- (3) It will enable the port to continue to lead and facilitate regional economic development and community wellbeing.

These provisions are reinforced by the regionally significant infrastructure provisions (Objective 3.7 supported by Policies 5.3.1, 5.3.2, and 5.3.3) and the economic wellbeing Objective 3.5.

Tangata whenua

Relevant provisions: Objective 3.12, Policy 8.1.1, 8.1.2

These provisions give effect to Objective 3 and Policy 2 of the NZCPS.

The role of tangata whenua in decision-making has been recognised in the Northland and Whangarei contexts through regional and district plan provisions, including iwi management plans, and through meaningful and ongoing engagement with mana whenua on this proposal.

Understanding the relationship of tangata whenua over their lands, rohe and resources and the related effects of the proposal on this relationship continues to be a key focus for Northport.

Natural hazards

Relevant provisions: Objective 3.13, Policy 7.1.1, 7.1.3, 7.1.4, 7.1.5, 7.1.6

These provisions give effect to Objective 5, Policies 24-27 of the NZCPS.

As specifically recognised in Policy 7.1.5, Northport (as with all commercial ports) has a functional need to be located in the coastal environment. As such, it is subject to coastal hazards, noting that the natural hazard risk to the port itself is lessened by the location of the Port inside the harbour, as opposed to more exposed coastal locations.

Natural character and landscape

Relevant provisions: Objective 3.14, Objective 3.15, Policy 4.6.1, 4.4.2, 4.7.1 4.7.3

Objectives 3.14, 3.15 and Policies 4.6.1, 4.4.2, 4.7.1 4.7.3 give effect to Objective 2 and Policies 13 and 15 of the NZCPS.

The proposal aligns with these provisions for the following reasons:

- The proposal is not located in mapped Outstanding Natural Character and Landscape Areas, and rather is located in an area where natural character values are compromised by existing activities in the immediate and surrounding environment.
- The proposal is acceptable in natural character terms, avoiding effects on outstanding natural features, outstanding natural character, and landscape areas, and otherwise avoiding significant effects in the coastal environment.
- The proposal incorporates avoidance and mitigation measures in relation to indigenous biodiversity in the context of policy 4.4.1, public open space and access, and water quality.
- Additional restoration and enhancement measures that accord with Policy 4.4.2 may be proposed following further consultation with mana whenua and other interest groups.

The BNZL assessment concludes that the proposal is acceptable in natural character terms, avoiding effects on outstanding natural features, outstanding natural character, and landscape areas, and otherwise avoiding significant effects in the coastal environment. It therefore aligns with this objective and policy.

Occupation of space in the CMA

Relevant provision: Policy 4.8.1, 4.8.4

The proposal aligns with Policy 4.8.1 as follows:

- (1) There is a clear functional need for the activity to be in the coastal marine area – it cannot be located anywhere else.

- (2) The design and location of the activity is constrained by the existing port development, and it is not feasible to undertake the activity on dry land.
- (3) The proposed footprint extent is necessary to provide for the intended use.
- (4) Exclusion of the public from the port operations area is necessary to protect the integrity of the structure and for health and safety reasons.

In regard to Policy 4.8.4, there are considerable public benefits from the expanded port occupying additional common marine and coastal area as outlined in the ME economic assessment.

Coastal permit duration

Relevant provision: Policy 4.8.3

The proposed 35-year durations sought for the Northland Regional Council consents –other than the coastal permit for reclamation, which is of unlimited duration pursuant to s 123(a) of the RMA - reflects the need for security of tenure given the investment involved, the fact that the activity is Regionally Significant Infrastructure, and Northport's prior compliance history and adoption of good management practices (all factors to be considered under this policy). It also reflects the long-term perspective required for port development, and the need for flexibility and the ability to react quickly to changing market requirements.

Development in the coastal environment

Relevant provision: Policy 5.1.2

Policy 5.1.2 gives effect to Objective 6 and Policy 6 of the NZCPS. It seeks to enable people and communities to provide for their well-being through appropriate development. The purpose of the proposed expansion is to improve the economic well-being of Northland and its communities. It achieves this by:

- (1) Consolidating the existing port development consistent with Policy 5.1.2(a).
- (2) Retaining public access to the residual beach area and the eastern side of the reclamation and improving public amenities as per the pocket park concept, consistent with Policy 5.1.2(b)(i).
- (3) Minimising effects on the functioning of coastal processes and ecosystems consistent with Policy 5.1.2(b)(ii).
- (4) Compatibility with existing development in the surrounding environment (i.e. existing port and CINZL facility) consistent with Policy 5.1.2(c).
- (5) The ability to service the expanded port area with adequate infrastructure consistent with Policy 5.1.2(d).

Hard protection structures

Relevant provision: Policy 7.2.2

The reclamation rock revetment is the best practicable option for protecting the reclamation against natural hazards. There are no viable non-structural measures.

6.9 Proposed Regional Plan

6.9.1 General

The PRP (Appeals Version) has been prepared to give effect to the RPS and accordingly the objectives and policies traverse similar matters. Core pillars of the PRP are the avoidance of adverse effects on biodiversity and natural character/features/landscapes, providing for economic development, and enabling regionally significant infrastructure.

Key matters covered in the PRP are as follows:

- Water quality
- Indigenous biodiversity
- Enabling economic well-being
- Regionally significant infrastructure
- Use and development in the CMA
- Tangata whenua
- Natural hazards
- Natural character, natural features and landscapes
- Air quality
- Social, cultural, and economic benefits
- Climate change
- Biosecurity
- Resource consent duration
- Marsden Point Port Zone
- Reclamation
- Dredging and deposition
- Underwater noise

The objectives and policies are assessed in detail in **Appendix 28**. Summary conclusions for each matter are set out below.

6.9.2 Objectives and policies assessment

Water quality

Relevant provisions: Objective F.1.2, Policy D.4.1, D.4.2, D.4.4, D.4.27

These provisions give effect to Objective 3.2, and Policy 4.2.1 of the RPS. Like the RPS provisions, they seek to manage discharges in order to maintain overall water quality.

Based on the various technical assessments, and results of monitoring existing port related discharges, the proposal is consistent with all the matters listed in Objective F.1.2. Similarly, operational stormwater will not adversely affect overall water quality in the adjoining harbour, consistent with Policy D.4.1.

The proposed treatment methods, being utilisation of the existing canal and pond system and/or proprietary devices are considered to be the best practicable option in accordance with Policy D.4.2.

Construction will be undertaken in accordance with good management practices, including detailed and specific 'real time' management triggers for turbidity, there will be no significant adverse effects, and all effects will be appropriately avoided, remedied, or mitigated, consistent with Policy D.4.27.

For the above reasons, the proposal aligns with the objectives and policies of the PRP relating to water quality.

Indigenous biodiversity

Relevant provisions: Objective F.1.3, Policy D.2.18

Objective F.1.3 is satisfied because the various technical assessments prepared by suitably qualified and experienced experts indicate that ecological integrity will be safeguarded, and the matters listed in the objective achieved.

In accordance with Policy D.2.18, the proposal has been carefully scoped, located, and designed to avoid areas of significant indigenous vegetation and significant habitats of indigenous fauna. Many years of studies and careful consideration of alternative sites and methods have been undertaken.

The proposal has been the subject of detailed, integrated, and appropriately scaled assessments of effects on indigenous biodiversity that recognise the dynamic, complex, and interrelated nature of the environment in this locality. The various assessments have balanced desktop analysis, technical modelling, and survey work, and have concluded that the overall effects on biological and physical processes, and on the diversity of indigenous coastal flora and fauna, will be minor or less.

The proposed effects management measures for avifauna, marine mammals, and other marine ecology accord with D.2.18(6), including the construction of roosting habitat to maintain/enhance connections within areas of biodiversity (therefore maintaining ecological processes and integrity) and measures to avoid transitory adverse effects associated with construction during sensitive times (i.e., during avifauna nesting and when marine mammals are known to be near works areas).

Regarding marine pests, biosecurity measures contained in the CEMP and adherence to MPI guidelines for international ships will minimise the potential for new marine pests being introduced into Northland, as will compliance with relevant regional plan rules, and the Northland Regional Pest and Marine Pathway Management Plan.

The proposal aligns with Objective F.1.3 and Policy D.2.18.

Enabling economic wellbeing

Relevant provisions: Objective F.1.5

Objective F.1.5 is a replica of Objective 3.5 of the RPS. By providing future employment opportunities, enabling a range of associated and ancillary business opportunities, and representing a strategic part of New Zealand's network of coastal ports, the proposal will improve the economic and social well-being of Northland and its communities and therefore aligns with this objective.

Regionally significant infrastructure

Relevant provisions: Objective F.1.6, D.2.5, D.2.7, D.2.8, D.2.9, D.2.11

Objective F.1.6 is a similarly worded objective to Objective 3.7 of the RPS, where Northport is identified as regionally significant infrastructure.

The proposed expansion of the Port will enhance Northland's economic and social well-being in the manner contemplated by Objective F.1.6 (see ME report in **Appendix 22**).

The effects of proposal align with the matters listed in Policy D.2.7(1) and (2) and have been assessed as being no more than minor (noting that further consultation is required in respect to the policies in Section D.1 'Tangata Whenua').

Regarding Policy D.2.8 the various technical studies prepared by suitably qualified and experienced experts have confirmed that the effects associated with construction will be minor or less (and not significant) and/or transitory, and that the effects of the Port after the proposed upgrading will be similar to those of the existing Port. Accordingly, the proposal aligns with Policy D.2.8.

Policy D.2.9 specifically contemplates circumstances where the adverse effects of regionally significant infrastructure will be greater than those contemplated by Policies D.2.7 and D.2.8 (including the effects referred to in the cross-referenced policies in D.2.7) and sets out a range of matters (1)-(9) to have regard and give weight to in such circumstances. Many of these matters should be carefully regarded, and heavily weighted, as they are central to the proposal. For instance, the proposal; has a range of social and economic benefits to the region; has a clear and

demonstrated functional need to be located within the CMA and integrated with the current operating port therefore achieving consolidated development and efficient use of existing infrastructure resources; has been the subject of extensive studies into alternative sites and methods, and careful design, all of which have avoided or mitigated a range of adverse effects.

The various technical studies carried out in support of the AEE establish that the adverse effects of the proposal are consistent with those envisaged in Policies D.2.6 and D.2.7.

Policy D.2.11 is not relevant because it relates to reverse sensitivity effects on regionally significant infrastructure.

For the reasons outlined above, the proposal aligns with Objective F.1.6 and Policies D.2.5, D.2.7, D.2.8, D.2.9, and D.2.11.

Use and development in the CMA

Relevant provisions: Objective F.1.8

The proposal aligns with this objective for the following reasons:

- It makes efficient use of space in the CMA by expanding the existing facility, which is appropriately zoned within the Marine 5 Management Area and adjacent to port- and heavy industry-zoned land, as opposed to constructing a new port elsewhere.
- The various technical studies have concluded that the scale and design is compatible with the location and has effects that fall within appropriate limits.
- The design recognises the need to maintain and enhance public open space and recreational opportunities through the proposed pocket park development and associated amenities.

Tangata whenua

Relevant provisions: Objective F.1.9, Policy D.1.1, D.1.2, D.1.3, D.1.4, D.1.5

Objective F.1.9 is a replica of Objective 3.12 of the RPS.

The role of tangata whenua has been recognised through meaningful and ongoing engagement with mana whenua. Understanding the relationship of tangata whenua over their lands, rohe and resources and the related effects of the proposal on this relationship continues to be a key focus for Northport.

Consistent with Policy D.1.1 and D.1.2, Northport has carried out meaningful engagement with mana whenua, including providing early drafts of independent expert reports and facilitating review and feedback on those reports. Consultation will continue post lodgement, as is best practise.

A draft cultural effects assessment has been provided by Patuharakeke. That draft CEA identifies that the proposal will not directly impact on any individual archaeological sites or wāhi tapu. Northport continues to meaningfully engage in order to interpret and respond to matters raised, such as effects associated with the proposal, including on the broader cultural landscape.

In addition to direct engagement with mana whenua prior to lodgement of its application, regarding Policy D.1.3, the applicant has requested public notification under s 95A of the RMA, providing another avenue for participation in the process.

Regarding Policy D.1.4, ongoing consultation with mana whenua is expected to result in measures to mitigate and otherwise address cultural effects and issues, consistent with the intent of this policy.

Regarding Policy D.1.5, no specific sites or areas of cultural significance have been identified to date, and none are mapped in the PRP.

In summary, the Assessment of Environmental Effects has addressed all the matters listed in Policies D.1.2 - D.1.4 and aligns with them.

Natural hazards

Relevant provisions: Objective F.1.10, Policy D.6.1, D.6.2,

This objective is a replica of Objective 3.13 of the RPS, except for the addition of F.1.10(8).

The proposal aligns with these provisions for the following reasons:

- The proposal has a functional need to be located in a coastal hazard area.
- The reclamation rock revetment is the best practicable option for protecting the reclamation against natural hazards.
- The proposal is located and designed in alignment with these provisions.

Natural character, natural features, and landscapes

Relevant provisions: Objective F.1.12, Policy D.2.17

These provisions give effect to Objective 3.14, Objective 3.15, and Policies 4.6.1, 4.4.2, 4.7.1 4.7.3 in the RPS.

The proposal aligns with these provisions for the following reasons:

- There are no outstanding natural character areas or seascapes within the development footprint.
- The assessment of effects on natural character by BNZL concludes that the proposal is appropriate in this location. This is consistent with Objective F.1.12(a), (b) and (d).
- In regard to Objective F.1.12(2), there are no known historic heritage values associated with the area located within the proposed expansion footprint.
- In regard to Objective F.1.12(d), while there are no mapped places of significance to tangata whenua within the proposed expansion footprint, Northport continues to consult with tangata whenua to understand the impacts of the port on the values important to them.

- Regarding Policy D.2.17, the proposed expansion footprint is not located within an outstanding natural character area, outstanding natural feature, or an outstanding natural seascape.
- Adverse effects on natural character are not assessed as being significant (see BNZL report in **Appendix 15**), and the proposed expansion effects of the proposed expansion on natural character are appropriate in the context of the existing port, oil terminal and surrounding heavy industrial activities and zoning.

Air quality

Relevant provisions: Objective F.1.13, Policy D.3.1, D.3.2, D.3.4, D.3.6

The proposal is a permitted activity under the air quality rules of the PRP.

Social, cultural, and economic benefits

Relevant provisions: Policy D.2.2

The application clearly outlines the significant cultural and economic benefits associated with the proposal, including promoting employment opportunities and supply chains for regional businesses. The benefits to Māori, and opportunities for enhancing Māori development in Northland, continue to be understood through ongoing consultation.

Climate change

Relevant provisions: Policy D.2.3

This policy is focussed on ensuring that the development is designed cognisant of the impacts of climate change. This will be a key factor in the final design of the expanded port as envisaged by these provisions.

Biosecurity

Relevant provisions: Policy D.2.13

The proposal aligns with this policy through proposed conditions of consent related to biosecurity including implementation of biosecurity measures for construction vessels outlined in the CEMP. Northport will also continue to follow MPI biosecurity requirements for international shipping.

Resource consent duration

Relevant provisions: Policy D.2.14

This policy gives effect to Policy 4.8.3 of the RPS.

The proposed 35-year durations sought for the Northland Regional Council consents – other than the coastal permit for reclamation, which is of unlimited duration pursuant to s 123(a) of the RMA - reflects the need for security of tenure given the investment involved, the fact that the activity is Regionally Significant Infrastructure, and Northport's prior compliance history and adoption of

good management practices (all factors to be considered under this policy). It also reflects the long-term perspective required for port development, and the need for flexibility and the ability to react quickly to changing market requirements.

Precautionary approach to managing effects on indigenous biodiversity

Relevant provisions: Policy D.2.20

The proposal has been carefully designed and located in order to avoid significant areas of indigenous biodiversity. Further, the applicant has invested heavily and over a period of years in commissioning a broad suite of independent expert studies to thoroughly understand the existing values, and the effects associated with its proposal. The effects of the proposal are therefore well understood, and conditions of consent are proposed to manage those effects. A decision maker should be satisfied that, to the appropriate extent, the applicant has adopted a precautionary approach in accordance with Policy D.2.20.

Marsden Point Port Zone

Relevant provisions: Policies D.5.8, D.5.9

These policies give effect to Policy 9 of the NZCPS.

The proposed port expansion is directly consistent with the purpose of the Marsden Point Port Zone. The proposal is located immediately adjacent to the existing port, and therefore represents consolidated, efficient, and appropriately zoned development of regionally significant infrastructure which will result in benefits to the economic and social well-being of the Northland region.

The proposed port expansion is appropriate in the Marsden Point Port Zone for the following reasons:

- It is an expansion of an existing port 1(a); and
- It is consistent with existing port activities and the CINZ facility 1(b).
- It is consistent with what is anticipated in the adjoining Port Zone 1(c).
- It is associated with regionally significant infrastructure (2).

The proposal directly aligns with, and is therefore enabled by, Policy D.5.9.

Reclamation

Relevant provisions: Policies D.5.20, D.5.21, D.5.22

These policies give effect to Policy 10 of the NZCPS.

The proposed reclamation aligns with the criteria in Policy D.5.20.

In regard to Policy D.5.21, the reclamation is designed and located to interact seamlessly with the existing port facility. As such, it represents consolidation of development in a manner that most efficiently utilises existing physical resources including port handling, road, and rail infrastructure. Overall, the proposal will provide for the efficient operation of Northport in full alignment with this policy.

The proposed construction of roosting habitat to maintain/enhance connections within areas of biodiversity is consistent with Policy D.5.22(3).

Dredging and deposition

Relevant provisions: Policies D.5.24, D.5.25,

The various technical assessments prepared by suitably qualified and experienced experts accompanying these applications have not identified long term erosion within the CMA, or any damage to authorised structures. It is acknowledged that some accretion is likely to occur over time around the CINZL jetties. Northport holds resource consents to undertake maintenance dredging around those jetties, and it may be necessary for such dredging to occur in order to maintain the necessary access depth for vessels. Northport intends to continue direct discussions with CINZL on this issue post-lodgement.

Underwater noise

Relevant provisions: Policy D.5.27

The approach to managing the effects of underwater noise outlined in the AEE is consistent with Policy D.5.27.

6.10 Operative Regional Coastal Plan (2004)

6.10.1 General

The RCP is in the process of being replaced by the PRP. Many of the rules are now beyond challenge and therefore operative under Section 86F of the RMA. However, some provisions of the RCP remain operative due to outstanding appeals to the PRP, although it is appropriate that only limited weight be afforded to them given the very advanced stage of the PRP.

The RCP covers the following matters:

- Marine Management Areas
- Natural
- character Natural features and landscapes
- Protection of significant vegetation and habitats of significant flora and fauna
- Public access

- Recognition of and provision for Maori and their cultural traditions
- Water quality
- Air quality
- Natural hazard management
- Recreation
- Structures
- Reclamation and impoundment
- Discharges to water
- Discharges to air
- Taking, use, damming and diversion of coastal water
- Dredging and dredging spoil disposal
- Marine 2 (Conservation) Management Area
- Marine 5 (Port Facilities) Management Area

The objectives and policies are assessed in detail in **Appendix 28**. Summary conclusions for each matter are set out below.

6.10.2 Objectives and policies assessment

Marine Management Areas

Relevant provisions: Objective 6.3, Policies 6.4(2), 6.4(5), 6.4(7)

The proposal aligns with these provisions for the following reasons:

- The proposal is located within the Marine 5 (Port Facilities) Management Area. The proposal is specifically anticipated in this zone.
- Interpreting Chapter 6, and in particular the policy framework for the Marine 5 (Port Facilities) Management Area, the RCP specifically directs port-related development to concentrate in that area. The proposal is consistent with this directive requirement of the Operative Plan.
- As some effects extend into the Marine 2 ‘Conservation’ zone, as contemplated by this policy, the relevant objectives and policies of this zone have also been taken into account.

Natural character

Relevant provisions: Objective 7.3, Policies 7.4(1), 7.4(2), 7.4(3), 7.4(4), 7.4(5), 7.4(6), 7.4(7)

The proposal aligns with Objective 7.3 and the associated policies for the following reasons:

- The proposal has been carefully scoped and designed to ensure there are no outstanding natural character areas or seascapes within the development footprint. Furthermore, the assessment of effects on natural character by BNZL (consistent with policies 7.4(5) and (6)), concludes that the proposal is appropriate in this location. This is consistent with Objective 7.3.
- Regarding Policies 7.4(1), (2) and (4), while the area within the proposed expansion footprint and surrounds displays a degree of natural character, existing amenity values include the existing heavy industrial zoning and operations in the area, including the commercial navigation channel, Northport and the CINZL facility. Based on the BNZL assessment, the effects of the proposed expansion on natural character are appropriate in this context.
- Policy 7.4(4) also emphasises the importance of providing for the economic, social, and cultural well-being of people by providing for consolidated development within the Marine 5 Zone.

Natural features and landscapes

Relevant provisions: Objective 8.3, Policies 8.4(1), 8.4(2), 8.4(3), 8.4(4)

The proposal aligns with Objective 8.3 and the associated policies for the following reasons:

- There are no outstanding natural features or outstanding natural landscapes within the project footprint.
- The proposal will not adversely affect nearby ONLAs and ONFs at Whangarei Heads.

Protection of significant vegetation and habitats of significant flora and fauna

Relevant provisions: Objectives 9.1.3(A) and 9.2.3 Policies 9.1.4(1), 9.1.4(3), 9.1.4(4), 9.1.4(5), 9.1.4(6), 9.1.4(7), 9.1.4(8), 9.2.4(1), 9.2.4(2), 9.2.4(3), 9.2.4(4)

No significant indigenous vegetation (including mangroves) is located within the project footprint in the coastal marine area, and no such areas have been identified and mapped in the RCP. The proposal therefore aligns with Objective 9.1.3(A) and the associated Policies 9.1.4(1)-(5).

Policies 9.1.4(6) and (8) are more directed at public bodies and is of limited relevance to resource consent applications.

Regarding Policy 9.1.4(7), the proposal will include biosecurity measures for construction vessels outlined in the CEMP, the primary purpose being to avoid the spread of unwanted exotic species. Ongoing port operations will continue to comply with the requirements of MPI for international shipping, relevant regional plan rules, and the Northland Regional Pest and Marine Pathway Management Plan.

For the above reasons, the proposal aligns with the intent of Objective 9.2.3 and the supporting policies for the following reasons:

- The proposal footprint has been carefully scoped and designed to avoid protected significant habitats of indigenous fauna identified in the RCP.
- It is recognised that the proposal will result in the displacement of roosting habitat for two at risk avifauna species. The effects of this displacement have been carefully considered by marine ecology and avifauna experts, and the creation and ongoing maintenance of additional new high tide roosting habitat in a suitable low-disturbance location proposed. This avifauna enhancement aligns with Policy 9.2.4(2). The technical assessments have concluded, the effects on avifauna will be minor or less.
- Regarding Policy 9.2.4(3), technical investigations and assessment carried out by marine ecologists, avifauna, and marine mammal experts have concluded that there would be minor or less than minor adverse effects (and not significant effects). Notwithstanding that, effects management measures are proposed as conditions of consent.
- Consistent with Policy 9.2.4(4), the proposal requires adherence to biosecurity measures for construction vessels outlined in the CEMP, the primary purpose being to avoid the spread of exotic species. Ongoing port operations will continue to comply with the requirements of MPI for international shipping, relevant regional plan rules, and the Northland Regional Pest and Marine Pathway Management Plan.

Public access

Relevant provisions: Objective 10.3(1), Policies 10.4(1), 10.4(3)

The proposal aligns with these provisions for the following reasons:

- Regarding Objective 10.3(1) and Policy 10.4(3), some restrictions on public access are necessary to protect public health and safety, and the security of commercial operations. Accordingly, the proposal aligns with Objective 10.3(1) and Policy 10.4(3).
- Regarding Policy 10.4(1), the proposal incorporates public access to the residual beach area at the eastern end of the proposed reclamation. This, together with improved public amenities, including beach access for swimming, fishing, and other recreation, at the proposed 'pocket park' aligns with Policy 10.4(1).

Recognition of and provision for Maori and their culture and traditions

Relevant provisions: Objective 11.3, Policies 11.4(1), 11.4(3)

The role of tangata whenua has been recognised through meaningful and ongoing engagement. The CVA and CEA submitted with the application provide a summary of cultural perspectives and relationships. Understanding the relationship of tangata whenua over their lands, rohe and resources and the related effects of the proposal on this relationship continues to be a key focus

for Northport. It is expected that mitigation measures will be developed in conjunction with tangata whenua, consistent with the intent of these provisions.

Water quality

Relevant provisions: Objective 13.3(1)

The proposal aligns with Objective 13.3(1) because the technical assessments conclude that discharges from the expanded port operations area via the canal and pond system and/or proprietary devices will not adversely affect water quality within the CMA. This conclusion is reinforced by monitoring results for discharges from the existing Port.

Temporary effects, primarily turbidity and sedimentation, will occur during dredging and construction of the reclamation. Mitigation measures are proposed to ensure that water quality is not compromised by construction activities. These measures are comprehensively detailed in the management plans and will be secured through appropriate resource consent conditions.

Air quality

Relevant provisions: Objectives 14.3(1) and 14.3(2), Policies 14.4(1), 14.4(2), 14.4(3) and 14.4(4)

The air quality rules in the operative regional plans have now been replaced by the new rules in the PRP. These new rules can be considered operative under s86B of the RMA. To the extent that the objectives, policies, and methods (other than rules) remain relevant, these are focussed on maintaining air quality within the CMA and integrating coastal air quality across the administrative boundary line of MHWS. Furthermore, the proposal has been considered in an integrated manner, recognising the fact that it spans both sides of MHWS.

Natural hazard management

Relevant provisions: Objectives 15.3(1) and 15.3(2), Policies 15.4(1), 15.4(2), 15.4(3), 15.4(4), 15.4(5)

The project is consistent with these provisions for the following reasons:

- Technical investigations predict that the effects of the proposal can be avoided, remedied, or mitigated.
- The effects of natural hazards on the expanded port can be avoided through design measures such as hard protection structures around the perimeter of the reclamation.
- While there will be some interference with natural sediment transport processes, the effects will be localised and minimal.
- The rock revetments around the perimeter of the reclamation are considered to be the best practicable option, and the most effective in the long term, consistent with Policy 15.4(3).

Recreation

Relevant provisions: Objective 16.3, Policy 16.4(3)

The proposal aligns with these provisions for the following reasons:

- The proposal avoids adverse effects on recreation users outside the proposed development footprint.
- Within the development footprint, the proposal incorporates appropriate mitigation measures including the provision of a public park, reserve area with associated amenities, and relocation of the existing public deep water fishing platform.
- The proposal has only localised effects on existing recreational activities. As noted above, outside the development footprint it does not unnecessarily compromise existing recreational activities, including fishing, boating, and swimming, consistent with Policy 16.4(3).

Structures

Relevant provisions: Objective 17.3, Policies 17.4(1), 17.4(3), 17.4(4), 17.4(5), 17.4(7), 17.4(8)

The proposed expansion is an appropriate structure given the location of the existing Port, CINZL facility, and the associated Marine 5 Management Area. Adverse effects will be avoided, mitigated, consistent with Objective 17.3. The proposal is generally appropriate and in alignment with Policy 17.4 (3), (5), (7) and (8).

Reclamation and impoundment

Relevant structures: Objective 18.3, Policies 18.4(1), 18.4(2)

It is acknowledged that reclamation of the CMA results in some irreversible effects, which are not able to be fully avoided. Against that, the proposal is necessary in order to provide for the future economic and social needs of Northland; and has been very carefully planned over many years, with a number of alternative sites and methods considered.

Further, the proposal has a functional and operational need to be located in the CMA, there is no practical land-based alternative, and there are considerable efficiency gains in integrating the proposal with existing Northport operations. The residual effects associated with the proposed reclamation will be avoided to the extent practicable, and otherwise mitigated, in accordance with Objective 18.3.

For the same reasons, the proposal aligns with Policies 18.4(1) and (2).

Discharges to water

Relevant provisions: Objective 19.3, Policies 19.4(1), 19.4(2), 19.4(4), 19.4(7), 19.4(9), 19.4(11)

Objective 19.3 expresses a preference for adverse effects of contaminant discharges to coastal waters being avoided, but also contemplates remediation or mitigation when that is not possible.

The effects of contaminant discharges have been avoided to the extent practicable and otherwise mitigated, consistent with this objective.

The proposal aligns with Policy 19.4(1) as it includes a range of measures to maintain water quality, including conditions of consent to minimise sediment discharges during construction, and treatment of stormwater during port operations. Such measures are the best practicable option, consistent with the policy.

Discharges to air

Relevant provisions: Objective 20.3, Policies 20.4(1), 20.4(2), 20.4(3), 20.4(6)

The air quality rules in the RAQP and RCP have now been replaced by the new provisions in the PRP. These new rules can be considered operative under s86B of the RMA. To the extent the objectives and policies remain relevant, the provisions relevant to the proposal are those relating to dust and carbon emissions.

In regard to dust, there are a range of pre- and post-construction management measures identified for dust suppression in order to manage nuisance dust effects to an acceptable level. In regard to carbon emissions, based on the proposed activities at Northport the combustion emissions are considered insignificant, and they are unlikely to result in any noticeable off-site changes in ambient air quality.

Taking, use, damming and diversion of coastal water

Relevant provisions: Objective 21.3, Policy 21.4(2)

A range of management measures are proposed to avoid and/or mitigate the adverse effects associated with construction of the reclamation, in alignment with Objective 21.3.

Regarding Policy 21.4(2), there is no need to apply a precautionary approach to the temporary damming component of the reclamation as the effects are well understood and are mitigated to the extent that they are not adverse.

Dredging and dredging spoil disposal

Relevant provisions: Objective 22.3, Policies 22.4(1), 22.4(3), 22.4(4), 22.4(7)

The proposal aligns with these provisions for the following reasons:

- As expressly provided for in Chapter 22, capital and maintenance dredging is required for the Port expansion.
- The dredging has been carefully designed to be located within the Marine 5 Management Area.
- In accordance with Objective 22.3 and the associated Policies 22.4(3) and (4) which specifically provide for dredging associated with the expansion of ports, conditions of consent are proposed to avoid and/or mitigate the effects of the proposed dredging, particularly in respect to sediment deposition and water quality.

- The proposal has been carefully designed in order that dredge spoil is to be used in the reclamation or disposed at a land-based location. This will ensure that effects within the CMA are minimised and is consistent with Policy 22.4(4) and (7).

Marine 2 (Conservation) Management Area

Relevant provisions: Objective 26.3, Policies 26.4(1) 26.4(2), 26.4(3), 26.4(4)

The proposed Port expansion has been carefully located and designed to occur entirely within the Marine 5 Management Area. Notwithstanding, due to the dynamic nature of coastal processes and the mobile nature of some marine species, it is recognised that there is potential for some adverse effects on marine ecology to extend into the Marine 2 (Conservation) Management Area. These effects have been carefully considered by the relevant experts and determined to be minor or less subject to careful management in accordance with their recommendations. The approach taken to managing the potential adverse effects on marine ecology as a whole aligns with Objective 26.3.

Marine 5 (Port Facilities) Management Area

Relevant provisions: Objective 29.3, Policies 29.4(1), 29.4(2), 29.4(3), 29.4(4)

The proposal aligns with Objective 29.3 and the associated policies. It is consistent with activities anticipated in the Marine 5 Management Area, and the potential effects are being avoided and/or mitigated.

6.11 Operative Air Quality Plan (2003)

Relevant provisions: Objective 6.6(1), Objective 6.6(2), Objective 6.6(3), and policies 6.7(1), 6.7(2), 6.7(3), 6.7(4), 6.7(5), 6.7(6), 6.7(7) and 6.7(10)

The relevant air quality objectives and policies in the OAQP cover the same matters as the air quality provisions in the RCP. While the rules have now been replaced by those in the PRP, the objectives, policies, and methods (other than rules) remain relevant.

In regard to dust, there are a range of pre- and post-construction management measures identified for dust suppression in order to manage nuisance dust effects to an acceptable level. In regard to carbon emissions, based on the proposed activities at Northport the combustion emissions are considered insignificant, and they are unlikely to result in any noticeable off-site changes in ambient air quality.

Regarding Method 6.18 of the OAQP relating to new industrial emissions in the Marsden Point Airshed, no further assessment is required under Appendix 7 of the OAQP as no air discharge permit is being sought.

6.12 Regional Water and Soil Plan (2004)

Relevant provisions: Objective 7.4(1), Objective 12.5(2), Objective 12.5(4), Policies 7.5(1), 7.5(4), 12.6(2), 12.6(3), 12.6(4).

There are two key chapters in the RWSP that relate to the proposed earthworks associated with the proposal (above MHWS). These are:

- Chapter 7 'Water Quality Management'
- Chapter 12 'Land Management'

Chapter 7 contains one objective and seven policies. Those that are relevant to the proposal are Objective 1 and Policies 1 and 4. Chapter 12 contains four objectives and twelve policies. Those relevant to the proposal are Objectives 2 and 4, and Policies 2, 3 and 4.

The relevant provisions in both chapters seek to avoid adverse effects on water quality resulting from sediment laden stormwater run-off (most relevantly in this case to the adjoining CMA).

The proposal will align with the relevant objectives and policies by implementing best practice sediment control in accordance with the CEMP certified and implemented as a consent condition.

6.13 Operative Whangarei District Plan

6.13.1 General

The objectives and policies for each of the chapters relevant to the proposal are assessed in detail in **Appendix 28**. Summary conclusions for each chapter are set out below.

6.13.2 Objectives and policies assessment

Port Zone (PORTZ)

The proposed expansion aligns with the PORTZ provisions for the following reasons:

- It is regionally significant infrastructure that will make a significant contribution to the economic and social well-being of the District and Region.
- Adverse effects on the environment are being appropriately managed.
- Public access to and along the coast is incorporated in the design as far as practicable.
- Meaningful consultation has been undertaken with mana whenua and remains ongoing. Mitigation is being developed in conjunction with mana whenua.
- The provisions for the expanded port align with the provisions in the PORTZ.

District Growth and Development (DGD)

The proposed expansion aligns with the DGD provisions for the following reasons:

- The proposal is designed to avoid conflicts between incompatible land use activities.
- There are no SNAs within the expansion footprint.
- The proposal is capable of being serviced by the necessary reticulated infrastructure.
- Meaningful consultation has been undertaken with mana whenua and remains ongoing. Mitigation is being developed in conjunction with mana whenua.
- The proposal includes conditions of consent requiring intersection upgrades should specified traffic volumes be exceeded, therefore integrating land use and transport planning.
- Natural hazards will be avoided or otherwise mitigated to the extent practicable for a development of this nature.
- The proposal is regionally significant infrastructure that will make a significant contribution to the economic and social well-being of the District and Region.

Natural Open Space Zone (NOSZ)

The proposed expansion is not fully aligned with the NOSZ provisions, but responds to the provisions as follows:

- The open space values in the locality are influenced to a large extent by the existing Northport and CINZL facilities.
- The proposed mitigation minimises the effects on the NOSZ in this location to the greatest extent practicable, including by creating landscape-designed new open space resources, with a focus on recreational users, in the immediate vicinity.

Transport (TRA)

The proposed expansion aligns with the TRA provisions for the following reasons:

- The transport assessment completed for the proposal concludes that there is sufficient capacity within the network to accommodate additional traffic from the expanded port, and any effects of additional port traffic can be managed by upgrading key SH15 intersections when/if capacity is exceeded.

Three Waters Management (TWM)

The proposed expansion aligns with the TWM provisions for the following reasons:

- The expanded port will remain connected to the reticulated wastewater and water supply network.

- Stormwater will be managed on-site via the existing canal and pond system in operation for the existing Port, potentially augmented by proprietary devices.

Lighting (LIGHT)

The proposed expansion aligns with the LIGHT provisions for the following reasons:

- Artificial lighting will be provided in accordance with these objectives and LIGHT-P2.
- Artificial lighting is required for health and safety reasons given the 24/7 nature of Port operations.
- The effects of artificial lighting on the amenity and character of the surrounding environment concludes that the effects of artificial lighting can be managed through conditions of consent and are otherwise appropriate given the context of the surrounding environment.
- The amenity and character of the zone and surrounding environment can be maintained through appropriate conditions of consent.

Signs (SI)

The proposed expansion aligns with the SI provisions as no specific additional signage is proposed beyond essential signage for health and safety, and navigation purposes.

Riparian and Coastal Margins (Chapter 11)

The proposed expansion aligns with the Chapter 11 provisions for the following reasons:

- The proposed expansion is not located within a mapped natural character, landscape, or significant ecological area in the RPS, PRP, or the WDP.
- The proposal is located in an area where natural character values are compromised by existing activities in the immediate and surrounding environment.
- The landscape and natural character assessment concludes that the proposal is acceptable in natural character terms.
- Public access to the eastern side of the reclamation residual eastern beach area has been incorporated in the overall design, and a public park/reserve area and associated amenities will be developed at the eastern end of the expanded port to enhance the use of the space.
- Meaningful consultation has been undertaken with mana whenua and remains ongoing. It is expected that measures to address and, where necessary manage or mitigate, cultural effects and issues will be developed in conjunction with mana whenua.
- The proposal involves a range of measures to avoid and/or mitigate adverse effects on water quality.

- The proposal includes specific measures to avoid adverse effects on NZ dotterel and VOC, including beach renourishment to construct a bird roost area on the western side of the existing Port.

Waterbodies (WB)

The proposed expansion aligns with the WB provisions for the following reasons:

- The proposed eastern expansion is not located within a mapped natural character or landscape area in the RPS, PRP, or the WDP.
- The proposal will not alter the natural character values of the wider Marsden Point coastline to a commensurate degree.
- The effects of activities on the harbour are not dissimilar to those associated with the existing Port operation, and other maritime operations in this location, and are overall minor or less in this context.
- Effects on natural character, cultural and ecological values will be mitigated to the greatest extent practical.
- Potential effects on water quality will be mitigated through best practice stormwater treatment and disposal.

Indigenous Vegetation and Habitat (Chapter 17)

The proposed expansion aligns with the Chapter 17 provisions for the following reasons:

- The loss of biodiversity on the eastern beach area will be mitigated (particularly for variable oystercatcher).
- None of the dune vegetation within the proposed Port footprint has been identified as significant, or habitat for indigenous fauna.
- The proposal does not affect any mapped areas of indigenous vegetation using the Schedule 17A criteria.
- Potential effects on tangata whenua and associated mitigation will be determined through ongoing consultation.

Natural Hazards (Chapter 19)

The proposed expansion aligns with the Chapter 19 provisions for the following reasons:

- Adverse effects related to natural hazards will be avoided as far as practicable and otherwise mitigated through the implementation of a wide range of design related measures and proposed conditions.

- The reclamation will be designed to take into account the effects of climate change.

Local Authority Cross Boundary Issues (Chapter 27)

The proposed expansion aligns with the Chapter 27 provisions for the following reasons:

- It is recognised that the potential effects of the proposal fall within the jurisdiction of both the NRC and the WDC. Where appropriate, the effects have been considered and addressed in a holistic manner notwithstanding the different jurisdiction, and an integrated approach to mitigation has been employed in accordance with this objective.

Coastal Area (CA.1)

The proposed expansion aligns with the CA.1 provisions for the following reasons:

- There are no natural character features or areas within the expansion footprint identified in either the district or regional plans.
- There are no significant adverse effects on natural character, natural features, and natural landscapes in the vicinity of the port.
- The proposal maintains access to and along the coast to the greatest extent practicable, whilst providing for the safe and efficient operation of the port.
- The proposal includes enhancement and rehabilitation measures to mitigate potential adverse effects as encouraged by these provisions.
- Northport is regionally significant infrastructure that has a clear functional and operational need to be located in the Coastal Area.
- The proposal incorporates measures that are specifically designed to protect the values and attributes of indigenous biodiversity in the vicinity of the port.
- The proposed development is appropriate in this location.

Landscapes and Features (LAN.1)

The proposed expansion aligns with the LAN.1 provisions for the following reasons:

- The proposal does not directly affect an ONF or ONLA mapped within the Operative District Plan, and ONFs and ONLs in the vicinity will not be adversely affected by the proposed expansion.

Tangata Whenua (Chapter 7)

The proposed expansion aligns with the Chapter 7 provisions for the following reasons:

- Both a CVA and CEA have been prepared in respect of the proposal.
- The impacts of the proposal on tangata whenua continue to be interpreted and understood through ongoing consultation and engagement.

- There will be conditions of consent related to mitigation of cultural effects, with these developed in consultation with mana whenua.

Noise and Vibration (NAV)

The proposed expansion aligns with the NAV provisions for the following reasons:

- Port noise will be managed in accordance with conditions developed under the NZS 6809:1999, which is considered best practice for the management of port noise.

6.14 Strategic plans

6.14.1 Whangarei District Growth Strategy (2021)

The Whangarei District Growth Strategy (2021) (WDGS) sets out the vision for how the District will grow and develop over the next 30 years. It sets out the actions which will help ensure that planning, infrastructure investments, and decision making are coordinated.

The WDGS contains nine “strategic drivers” described as the key issues that the District will face over the next 30 years. Driver 8 “Projects to support prosperity” identifies the expansion of Northport inter alia stating that it “has the potential to transform the economy and deliver new jobs and training opportunities”. More specifically the document states:

The long-term expansion of Northport will play an important role in meeting future freight needs of New Zealand. The role of Northport is also crucial to support the needs of businesses across Northland.

The port is a key piece of infrastructure. Any decision around expansion or moving some Ports of Auckland’s activities to Northport will have impacts on the wider freight network. Therefore, we are advocating that these major decisions are not made in isolation. The Upper North Island Strategic Alliance Group (UNISA) are advocating that any future decision should be focused on freight logistics rather than the future Port location.

Regardless of any future decision made by Central Government on any potential relocation of the Ports of Auckland, through Northport’s Vision for Growth, total freight capacity is going to expand over the next 30-40 years. The future growth vision is focused towards building a larger footprint allowing for new opportunities to expand its freight volumes.

The value of Northport for the Whangārei and the Northland economy are the opportunities it brings about for new industries, new business and employment for our people. Northport have been, and will continue to be, an important contributor to expanding on the economic and social opportunities for our District.

Continued port expansion will have medium to long-term planning and implementation timeframes. It is important that we recognise these opportunities in our Growth Strategy as well as in place-specific planning for Marsden Point/Ruakākā and Port Nikau.

The WDGS is a document prepared under the consultative principles and procedures of the Local Government Act 2002.

6.14.2 Regional Land Transport Plan for Northland (2021-27)

The Regional Land Transport Plan 2021-2027 (RLTP) is prepared by the Regional Transport Committee under the provisions of the Regional Land Transport Amendment Act 2003. Like the WDGS, the RLTP is a document prepared under the consultative principles and procedures of the Local Government Act 2002.

The plan contains strategic elements, a proposed programme of works, and financial forecasting. The RLTP is, in effect, a programme of works, through which Northland Regional Council, Far North District Council, Whangārei District Council, Kaipara District Council and Waka Kotahi NZ Transport Agency jointly bid for funding assistance from the National Land Transport Fund.

The RLTP is cognisant of the importance of Northport to the regional economy (and potentially the national economy). It refers to the potential expansion of the port and the need to be cognisant of the inter-relationship the port, roading, and rail networks have in providing efficient, reliable connections to support productive economic activity in Northland. It also recognises that expansion of the port will have flow on effects for the roading and rail networks, and strongly supports the development of a rail line connecting Northport to the Auckland Northland rail line.

6.15 Section 89A RMA

Section 89A of the RMA requires that the local authority must send a copy of the application to Maritime New Zealand. Any subsequent recommendations from Maritime New Zealand will be taken into account by the local authority in the consideration of the application.

6.16 Section 105 RMA

6.16.1 Section 105 – General

The proposal includes an application for a reclamation, and stormwater discharge permits for discharges during construction and from the port operations area on the reclamation and new wharves. Therefore, Section 105 of the RMA is relevant.

Section 105 outlines additional matters than must be considered by consent authorities for reclamations and discharge permits in addition to the matters in section 104(1).

6.16.2 Section 105(1) – Discharges to the CMA

Construction

During construction of the reclamation, there will be discharges to the Whangarei Harbour. This will largely involve the discharge of decanted dredge material from the reclamation footprint.

The expert assessments are that the effects of the discharges will be acceptable subject to adherence to best practice construction management (and specifically sediment control).

Best practice methodology will be employed to minimise effects on people and the environment, particularly given works are in close proximity to high value ecological areas.

Once a contractor is appointed, the contractor will confirm the proposed methodology for construction and will develop detailed procedures for management of construction related effects, including discharges to water.

Operation

Port operations on the completed reclamation will generate new (stormwater) discharges to the CMA. Stormwater falling on these areas will be collected and treated in the Northport can and pond-based system and/or proprietary devices prior to discharge. The pond-based system has a proven track record of achieving the coastal water quality standards in the Proposed Regional Plan. Proprietary devices can be configured to achieve the same standards.

The existing pond-based method, potentially augmented by proprietary devices depending on the final design, is the most appropriate in the circumstances.

6.16.3 Section 105(2) – Reclamation

Due to port operational and health and safety requirements, including the need to ‘future proof’ port operations – including to provide for rail access – it is not practicable for any part of the area to be set aside as an esplanade reserve or esplanade strip.

Accordingly, it is not proposed that any condition is necessary pursuant to s 108(2)(g) requiring an esplanade reserve or esplanade strip be set aside or created.

6.17 Section 107 RMA

The NRC cannot grant a discharge permit if the discharge is likely to result in certain effects specified being:

- (c) the production of any conspicuous oil or grease films, scums, or foams, or floatable or suspended materials:
- (d) any conspicuous change in the colour or visual clarity:
- (e) any emission of objectionable odour:
- (f) the rendering of fresh water unsuitable for consumption by farm animals:
- (g) any significant adverse effects on aquatic life.

The technical assessments indicate that these effects are not expected to occur. Section 107(2) also states that a consent authority may grant a discharge permit which gives rise to these effects if it is satisfied –

- (a) That exceptional circumstances justify the granting of the permit; or

- (b) That the discharge is of a temporary nature; or
- (c) That the discharge is associated with necessary maintenance work— and that it is consistent with the purpose of this Act to do so.

The assessments in this AEE and in the technical reports demonstrate that the discharges pass the tests within Section 107(2)(b) because:

- The discharges will be short term and any effects will occur at limited times, though not necessarily consistently, over the duration of construction
- Measures will be put in place to manage and minimise discharges during construction, which will avoid significant adverse effects on aquatic life.
- There will be no ongoing adverse effects once construction has been completed.

In summary, the project is assessed as meeting the tests outlined in section 107 of the RMA.

6.18 Part 2 RMA

6.18.1 General

As outlined above, the applicable planning framework (including the recent Proposed Regional Plan and Whangarei District Plan) has been prepared having regard to Part 2 and has coherent sets of objectives and policies designed to achieve clear environmental outcomes. To the extent that it provides high level context, the proposal is addressed against Part 2 below.

6.18.2 Section 5 - Purpose

The proposal will enable people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety, by facilitating value added economic and employment benefits.

Mitigation measures are being developed to assist with cultural wellbeing.

Regarding the matters in Section 5(2)(a), (b), and (c):

- As outlined above, the effects of the project have been carefully assessed. In summary, the proposal appropriately avoids, remedies, or mitigates effects and will sustain the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations.
- The proposal will help to meet the predicted demand for port services in Northland and in the upper North Island generally. It will also support the growth of value added industrial and commercial activities in Northland, with associated employment benefits.
- The proposal safeguards the life supporting capacity of air, water, soil, and ecosystems, including by:
 - Avoiding and mitigating discharges to air during the construction and operation phases.

- Avoiding or minimising sediment and other discharges to the CMA during construction.
- Ensuring that stormwater discharges from operations areas are treated to maintain coastal water quality standards.
- Avoiding certain adverse effects on the harbour ecosystem, and otherwise mitigating effects.
- Managing nuisance effects (such as noise) on people during the construction and operational phases of the project.

6.18.3 Section 6 – Matters of National Importance

The proposal recognises and provides for the matters in Section 6 of the RMA. Specifically:

- The proposal is an appropriate use and development of the coastal environment in this locality, noting that it is located within a port zone in an area already containing an existing port and the CINZL facility. While there are some adverse effects on natural character, these effects have been assessed as not being significant in the context of the existing modified environment and there are no identified natural character areas affected by the proposal (Section 6(a)).
- There are no outstanding natural features or landscapes affected by the proposal (Section 6(b)).
- The proposal achieves the planning framework requiring the avoidance of effects on areas of significant indigenous vegetation/significant habitats of indigenous fauna (Section 6(c)).
- While the reclamation will result in the loss of inter-tidal and subtidal habitat in the CMA, including habitat frequented by endangered bird species, the effects on avifauna will be minor or less subject to careful management. Accordingly, the proposal recognises and provides for the protection of indigenous biodiversity (Section 6(c)).
- The proposal recognises and provides for public access to the CMA to the greatest extent practicable (Section 6(d)).
- The proposal recognises and provides for the relationship of iwi with their ancestral lands, water, and other taonga through early and ongoing engagement (Section 6(e)).
- The proposal avoids adverse effects on historic heritage, including scheduled heritage sites (Section 6(f)).
- The proposal incorporates design elements to manage the risk of natural hazards to the greatest extent practicable (Section 6(g)).

6.18.4 Section 7 – Other matters

The proposal has had particular regard to the matters in section 7 of the RMA. In particular:

- The kaitiakitanga of Mana Whenua has been recognised through engagement at all stages of the project development and this will continue through construction and operation (Section 7(a)).
- The ethic of stewardship has been recognised through the engagement with, and participation of, community groups who have a specific interest in the exercise of stewardship over particular resources Section 7(aa)).
- The proposal will enable the efficient use and development of the existing port (a physical resource), thereby avoiding new ports in other areas of the CMA (Section 7(b)).
- The proposal incorporates design elements to maintain residential amenity values to the extent practicable including:
 - Implementation of a noise management plan to manage port noise and sensitive receivers.
 - Measures to minimise light spill.
 - Retention of public access where practicable (Section 7(c)).
- The proposal recognises the intrinsic values of ecosystems and seeks to maintain the quality of the surrounding marine environment by incorporating management measures to avoid discharges of contaminants and sediment to water, and dust discharges to air (Sections 7(d) and (f)).
- The proposal has been designed to respond to the effects of climate change. Specifically, the port will be designed to accommodate sea level rise (Section 7(i)).

6.18.5 Section 8 – Treaty of Waitangi

Northport has formed a relationship with mana whenua in respect to the existing and expanded port. It continues to work with mana whenua in the formulation of cultural mitigation measures consistent with the principles of the Treaty.

7. Engagement with mana whenua

7.1 General approach

The general approach to engagement with mana whenua has been to engage early with a view to understanding issues and attempting to address them prior to commissioning technical assessments and finalising the proposal.

Engagement has been ongoing over the 5-year period from initial engagement to the lodgement of the consent application. It has generally followed the approach set out in the Patuharakeke CVA (see **Figure 73** below).⁸²

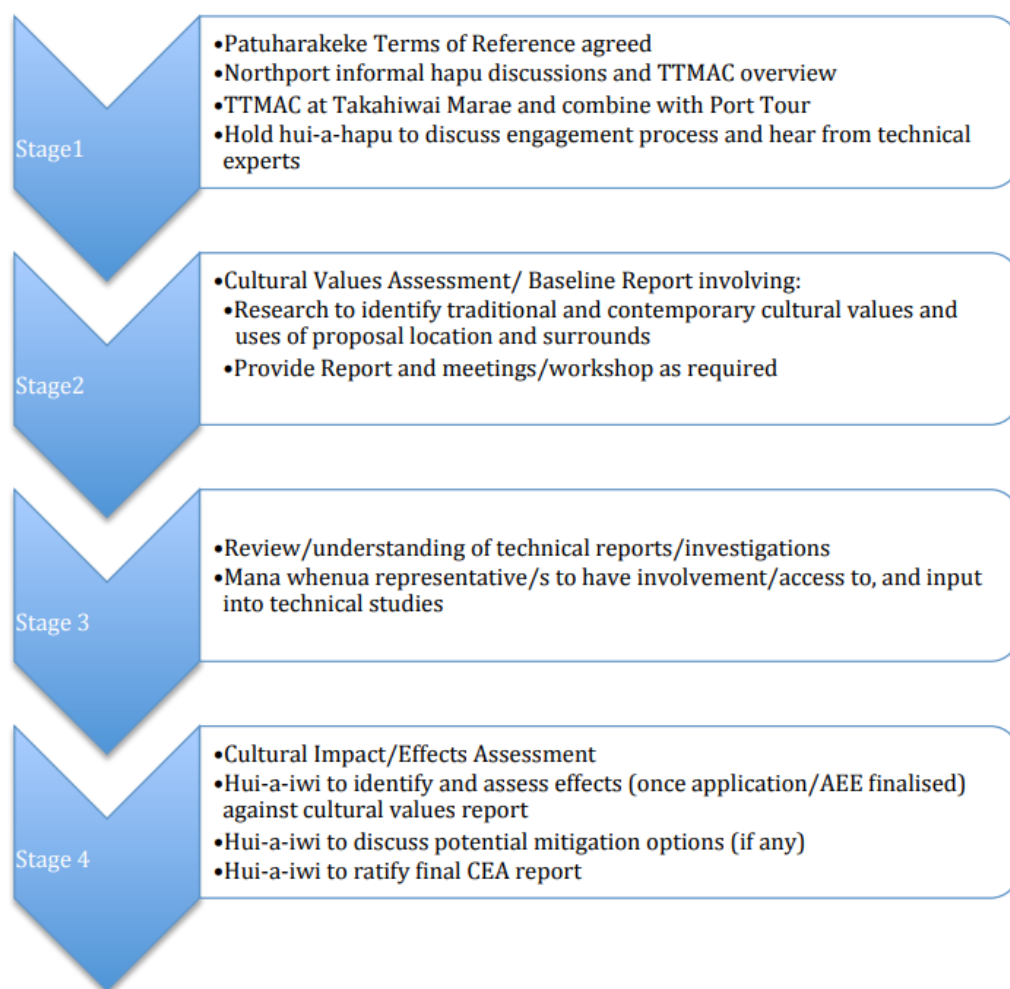


Figure 73: Mana whenua engagement process

⁸² “TTMAC” in Figure 73 means Te Taitokerau Māori and Council Working Party.

7.1.1 Mana whenua identification

Northport had a pre-existing relationship with mana whenua through the Community Liaison Group (CLG) set up in accordance with the conditions for the existing Port.

To assist with engagement with mana whenua in respect to the proposed expansion, and to ensure they were engaging with the correct groups, Northport funded a facilitator to identify and coordinate relevant groups, and to facilitate meetings/hui.

The mana whenua groups known to have an interest in the project area, and therefore identified for consultation, were:

- Patuharakeke
- Te Parawhau
- Ngātiwai

Initially Ngātiwai deferred their support to Patuharakeke with regard to engagement with Northport. It has recently come to the attention of Northport that Ngātiwai will now take an active role in engaging directly with Northport. Engagement with Ngātiwai is ongoing.

7.1.2 Relationship agreement

On 19 June 2021 Northport signed a relationship agreement with Patuharakeke. The agreement is a vehicle for ongoing consultation over all matters concerning Northport, and not just the proposed expansion.

7.1.3 Hui

Mana whenua engagement for the project began with a hui on the Takahiwai marae in October 2017.

A technical hui open to all mana whenua was held at Barge Park on 15th May 2021. This hui was attended by all the Northport technical experts who presented summaries of their initial draft reports and answered questions from the floor. Representatives from Patuharakeke and Te Parawhau were also present.

There has been multiple hui with representatives of all three mana whenua groups since that time.

7.1.4 Sharing of technical reports and information

Following the technical hui in May 2021 all the draft technical reports were made available to mana whenua. They were then reviewed by the Council appointed experts and feedback shared with mana whenua.

One of the issues raised during initial consultation was in respect to viewshafts from places of importance to Patuharakeke. Northport subsequently engaged Buildmedia to prepare additional

visual representations (renders) of the expanded port from locations identified by Patuharakeke, and these were subsequently forwarded to Patuharakeke for review.

In September 2022, upon receiving the final technical reports, Northport provided a summary document to mana whenua updating them on the content and conclusions of the finalised technical assessments supporting the AEE.

7.1.5 Cultural values assessment – Patuharakeke

In April 2020 a Cultural Values Assessment (CVA) was received from Patuharakeke (see **Appendix 24**). The CVA identifies the cultural relationships to the proposal site and implications for the practice of kaitiakitanga. This is a fundamental part of the engagement process outlined in **Figure 73** above.

7.1.6 Cultural effects assessment – Patuharakeke

In October 2021 a Cultural Effects Assessment (CEA) was received from Patuharakeke (see **Appendix 24**). The CEA is summarised in Section 5.2.5 of the AEE. It raises a range of issues, some of which have been addressed through environmental avoidance and/or mitigation measures included with the application. Again, the provision of a CEA was identified as a key part of the engagement process. Discussions with mana whenua (including Patuharakeke) are continuing and are expected to culminate in additional cultural mitigation measures. Again, this was signalled as a part of the engagement process outlined in **Figure 73**.

7.1.7 Draft manawhenua cultural report – Te Parawhau

In November 2021 a draft Manawhenua Cultural Report was received from Te Parawhau Hapu Iwi. The report author has requested that the partially completed report not be provided as part of the application. It is expected that engagement with Te Parawhau will continue post-lodgement of the consent application.

7.1.8 Ongoing consultation, engagement and understanding

In October 2021 Northport engaged a specialist consultant to provide further assistance in the continuing engagement with mana whenua. Discussions with mana whenua are now focused on potential mitigation measures to address cultural concerns.

8. Public Consultation

8.1 Consultation

8.1.1 General approach

The general approach to public consultation has been to understand who is likely to be affected by the proposal, and then to actively engage with them in a manner that is genuine, transparent, and open, and where there is sufficient time for parties to consider the consultation material and respond.

Northport chose to follow the standard resource consent process over potential fast track and Covid-19 legislative processes because it gives the public a better opportunity to be heard. Consultation has been an important part of the development of the project, and the proposal has developed iteratively in response to public feedback.

Northport's overarching view is that the outcome of the process needs to be one where the port can continue to operate as part of the community, and as a responsible business. Public involvement in the project development is a fundamental part of achieving that.

The following groups were identified for targeted consultation:

- Mana whenua (covered separately in Section 7 of this report)
- WDC Consents Manager
- NRC Consents Manager
- WDC and NRC reporting officers and independent consultants
- WDC Parks Division
- Department of Conservation
- Channel Infrastructure NZ
- Marsden Maritime Holdings
- Whangarei Heads and Albany Road communities
- Northport key stakeholders
- Ruakaka Economic Development Group (REDG)
- Northland Inc.
- Ruakaka Ratepayers Association
- Whangarei Heads Ratepayers Association
- Waka Kotahi

- Kiwirail
- Ingrid Visser (marine mammal expert)
- General public

Website

In 2017 Northport launched the *Vision4Growth* website. This website included a video outlining Northport's vision for the growth. The website was subsequently updated in October 2020, and rebranded *visionforgrowth*.

The comments section on the website provided people with the opportunity to make comments, suggestions, or ask questions. It provided a platform for Northport to engage with the community.

The website also extended an invitation to persons and groups to tour the port.

The website has been progressively updated as the project has evolved. Technical reports have been added to the website for public viewing as they become available.

8.1.2 Port tours

Port tours have been conducted since 2018. Attendees have included key stakeholders and members of the general public.

8.1.3 Public consultation

General public

Consultation with the public has been ongoing since 2017. This consultation has included:

- Website consultation (as previously identified).
- A public letter drop was conducted in December 2017, including an information brochure delivered to local residents' mailboxes.
- Northport purchased a van and had it sign written with the project branding, together with pamphlets and other material for use in public meetings/discussions.
- Northport attended the Dargaville field days 1-3 March 2018, providing information and receiving feedback from interested parties.
- Northport attended the A & P show in Whangarei on 5 December 2020 and held a public drop-in at the Marsden Cove boat ramp on 15 December 2020, providing information and receiving feedback from interested parties.
- More specific consultation has been carried out with the key community groups at Albany Road (Marsden Bay) and Reotahi (Whangarei Heads). Further details are set out below.

- Northport engaged *Buildmedia* to prepare visual representations (renders) of the expanded port relative to the existing environment. These representations are now included in the BNZL report (**Appendix 15**).

Marsden Bay

Northport has engaged in written correspondence with members of the Marsden Bay community via both email and face-to-face meetings, including two meetings at Albany Road attended by Northport representatives. Northport has also carried out several mailouts and letter drops to update this community on progress with the project.

Some of the feedback received from this community influenced decisions over the design of the proposal, including the location of the tug facility.

Whangarei Heads

Northport held two community drop-in information days at the Parua Bay Hall and McLeod Bay Community Centre (Whangarei Heads). Attendees on behalf of Northport included the Port CEO, board chairman, internal project manager, and a planning consultant.

8.1.4 Central and local government agencies and representatives

There have been multiple discussions with government agencies since the project inception. These include:

- Ministry of Business, Innovation and Employment
- Ministry of Transport
- Department of Conservation
- Central government representatives
- Local government representatives
- Kiwirail
- Waka Kotahi
- WDC and NRC Consents Managers
- Whangarei District Council processing planners
- Whangarei District Council Parks Division
- Councillors and senior managers at the NRC and WDC.

Department of Conservation

Consultation with the Department of Conservation included a meeting between technical advisors from the department and Northport, with an emphasis on understanding the effects on indigenous

biodiversity. Some guidance was also sought from the Department on potential environmental enhancement projects in the surrounding environment.

WDC and NRC Consents Managers

Northport representatives met with the WDC and NRC Consents Managers at the inception of the project. These meetings culminated in a decision by the Council to jointly process the applications for resource consent. Independent consultants were subsequently engaged to process the consents on behalf of the respective councils.

WDC and NRC joint processing planners

Northport has regularly kept the WDC/NRC joint processing planners updated on progress towards lodgement of the consent application. Initial draft technical reports were forwarded to the Councils, and they subsequently engaged their own experts to review those reports and provide feedback. That feedback resulted in amendments to the proposal and additional technical assessment to address the matters raised.

WDC Parks Division

Northport representatives met with the WDC Parks Division in early 2021. The Parks Division are a key stakeholder due to the proposed cancellation of the esplanade reserve behind the expanded port. A representative of the Parks Division subsequently attended a port tour in June 2021.

In July 2022 Northport advised the Parks Division that they were preparing a draft concept design which would incorporate vehicle access to a park/reserve area at the eastern extent of the expanded port, and other amenities including a fishing pontoon, swimming steps, carpark, and a public toilet.

In early September 2022 the draft pocket park design was forwarded to the Parks Division for comment. A subsequent site visit was carried out in late September.

Consultation with the Parks Division in respect to the reserve stopping process and potential mitigation remains ongoing. Northport remains open to alternative scenarios to improve public access and recreation facilities in the vicinity of the port and in the surrounding area.

Kiwirail

Consultation with Kiwirail has centred around providing for a potential rail connection into the expanded container port, and in respect to progress on the proposed spur line to Marsden Point. Kiwirail has shared initial design considerations for the spur line with Northport to assist with the concept design for the expanded port.

Waka Kotahi

Northport has a relationship agreement with Waka Kotahi in respect to the general management of SH15. In relation to the proposed expansion, consultation with Waka Kotahi has centred on the

potential impacts on the safety and efficiency of SH15. WSP also engaged with Waka Kotahi in the development of the Traffic Impact Assessment. This has culminated in proposed conditions of consent relating to intersection capacity.

8.1.5 Media articles

There have been several related media articles since the project inception, including in the New Zealand Herald, Northern Advocate, Bream Bay News, Stuff and Newshub.

8.1.6 Media advertising

Northport advertised the project launch in both the Northern Advocate and the Bream Bay News in October 2020.

8.1.7 Other

Bream Bay Coastal Care Trust

Northport has discussed the project with the Bream Bay Coastal Care Trust on several occasions. The Trust has also completed a port tour.

Ruakaka Economic Development Group (REDG)

Northport regularly attends REDG meetings. The project has been presented to this group and they have been provided with regular updates since the project launch.

Northport key stakeholders

Northport has provided its stakeholders with email updates in respect of the project. Key stakeholders include Marsden Maritime Holdings Ltd, and various industry partners.

Channel Infrastructure New Zealand

CINZL has been kept up to date with the proposal since its inception through to lodgement. The most recent communication was in late September 2022 prior to lodgement.

Ingrid Visser

In 2020 Northport representatives met with Ingrid Visser to discuss the potential impacts of the proposal on marine mammals, and to consider any advice she had on minimising impacts of the expanded port facility on marine mammals. Northport has maintained open communication and dialogue with Ms Visser since this time.

8.1.8 Applicants for customary marine title

Northport has notified all applicants for customary marine title as required under the MACA Act. A copy of correspondence sent to the MACA applicants is attached in **Appendix 8**. Two responses have been received at the time of preparing this AEE. One, from Te Whanau Whero (CIV-2017-405-420), confirmed that the activity is outside the area covered by the claim, and the other, Ngapuhi, Ngati Wai, Haki Pereki and Ngawhetu Sadler Whanau Trust (represented by TeKiripute Sadler) (MAC-01-01-60), was generally in support of the project.

ATTACHMENT B: DECISION

**Decisions on applications for resource consents made under the
Resource Management Act 1991 by Northport Limited**

To (in summary):

**An expansion of the existing Northport facility (construct, operate
and maintain in conjunction with the existing Northport
facility) – including reclamation and dredging.**

**Consent, pursuant to section 104B, 105, and 107 (and 104D) of the Resource
Management Act 1991, is REFUSED for all of the consent sought. The full decision on
the regional and district applications sought and reasons are set out below.**

File Number:	Northland Regional Council: APP.005055.38.01 and Whangārei District Council: LU2200107
Applicant:	Northport Limited (Northport)
Site address and legal description:	Ralph Trimmer Drive and Coastal Marine Area, Marsden Point, Whangārei
Location co- ordinates:	At or about location co-ordinates 1734782E 6033287N
Hearing Panel:	Greg Hill (Chair) Jade Wikaira Hugh Leersnyder
Parties present at the hearing:	<u>Applicant:</u> <i>See Appendix 1</i> <u>Submitters</u> <i>See Appendix 1</i> <u>For the Council:</u> <i>See Appendix 1</i>

Hearing Dates:	9 – 16 and 30 -31 October 2023, 13 November 2023, 20 November 2023 (interim Reply) and 23 May 2024 (final Reply)
Hearing Adjourned:	<p>The hearing was adjourned on the 20 November 2023. This was at the request of the Applicant (and agreed to by the Hearing Panel) to allow a further opportunity for iwi/hapū submitters to consider and provide feedback on the updated draft cultural conditions; and for Northport and iwi/hapū submitters to engage further around the cultural concerns raised and alternative responses to those concerns.</p> <p>The hearing was reconvened on the 23 May 2024 having received correspondence from the Applicant that no agreement on the proposal had been agreed between it and iwi/hapū submitters.</p>
Hearing Closed:	4 June 2024

Summary of the Decision

1. **We have refused consent to this proposal.** This is due to the proposed reclamation in its current form. The reasons for this are the significant adverse effects on cultural values of tāngata whenua and on the loss of recreational values and public access to and along the coastal marine area (CMA). In regard to these two matters, the proposal is not consistent with a number of the relevant objectives and policies of the statutory planning documents, and does not meet Part 2 of the Resource Management Act (RMA).
2. We find that the adverse effects of the reclamation's scale and extent, which results in the severance of the physical relationship to this cultural landscape, the beach, the dunes and the takutai moana, are significant and irreversible. Tāngata whenua identified these effects to be the most profound that the proposal would have on them. It is the magnitude of these effects and the site context as a place of significance to tāngata whenua which makes them significantly adverse. The effects are not mitigated by the Applicant's proposed conditions such that those effects are not more than minor as set out in a number of the policies of the Proposed Regional Plan – Appeals Version (PRP-AV).
3. We accept public access and recreational opportunities will still be provided. However, due to the scale and extent of the reclamation, and the extent of the loss of beach (and its associated values), we do not consider sufficient mitigation or offsetting for that loss has been provided to address the significant residual adverse effects of the loss of recreational values and public access to and along the CMA.
4. Accordingly, granting the consents sought would not recognise or provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga, or sufficiently maintain and enhance public access to and along the CMA. Both of these matters are matters of national importance in the Resource

Management Act (RMA)¹. Nor would it enable tāngata whenua's to fully exercise kaitiakitanga over this area; a section 7 matter of the RMA².

5. Given the applications were lodged as a 'package deal' we have refused all of the applications applied for.
6. We accept that had we granted consent to these applications there would have been a range of significant positive effects. These include a range of economic and social benefits associated with a dedicated container terminal at Whangārei, which would be part of an integral and efficient national network of safe ports.
7. We also find that any adverse effects of all the other matters have been avoided or appropriately mitigated (or offset), and would be consistent with the relevant objectives and policies of the statutory planning documents. These include: economics, coastal processes, marine ecology, marine mammals, avifauna, terrestrial ecology, landscape, natural character, visual amenity, noise, navigation, traffic, stormwater and air quality.
8. Had we granted consent, we would have imposed the suite of conditions proposed by the Applicant provided as part of the Final Reply Submissions³; but not those relating to the cultural and recreation/public access conditions. Furthermore, we would have imposed a 10-year lapse date and not the 20-year period sought by the Applicant.
9. Our reasons for this decision are fully set out in the rest of this decision report.

Introduction

10. These decisions are made on behalf of the Northland Regional Council and the Whangārei District Council ("NRC, WDC or the Councils") by Independent Hearing Commissioners Greg Hill (Chair), Jade Wikaira and Hugh Leersnyder - appointed and acting under delegated authority pursuant to section 34A of the Resource Management Act 1991 ("the RMA").
11. Resource consents for the 'port expansion' were sought from both the NRC and WDC. The hearing was a joint hearing, which heard all of the resource consents sought. While separate decisions have been made with respect to the regional and district consents, this decision report addresses all of the resource consents sought.
12. These decisions are prepared in accordance with section 113 of the RMA.

¹ Sections 6 (e) and (d) respectively of the RMA.

² Section 7 (a) of the RMA.

³ We acknowledge the considerable time and effort that will have gone into developing the suite of proposed consent conditions by the Applicant, Councils, and Submitters throughout the hearing process, including the expert conferencing sessions.

Summary of the proposal

13. Northport submitted applications to the NRC and WDC for resource consents to construct, operate and maintain an expansion to the existing Northport facility at State Highway 15, Marsden Point. In summary, the proposal includes:

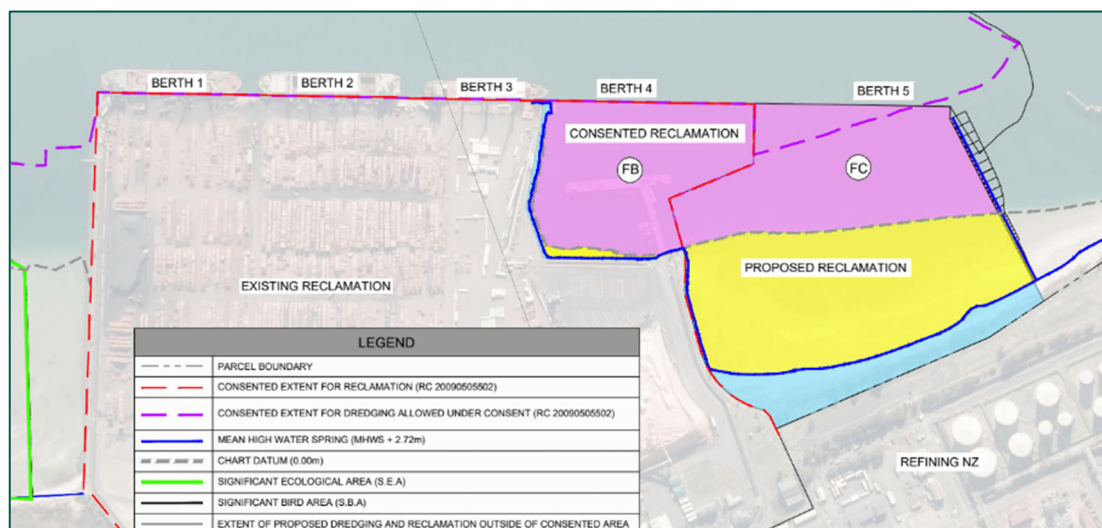
Northland Regional Council:

- Approximately 11.7 hectares of reclamation and associated coastal structures for a 250-metre wharf extension.
- 1.72 million cubic metres of capital dredging and associated disposal and ongoing maintenance dredging.
- Riparian earthworks and associated stormwater diversions and discharges.
- Operational stormwater discharges from use of the reclamation area.
- Creation of an intertidal high tide bird roost.
- Ancillary coastal structures to the reclamation area for tug berths and a public pontoon.
- Port related activities on the proposed reclamation and wharves, and on parts of the proposed development above MHWS.

Whangārei District Council:

- Apply the Port Zone permitted activity standards for Building and Major Structure Height to, and enable port operations within, the proposed reclamation area.
 - Apply the Port Noise Standards (NZS 6809:1999) rather than the District Plan Noise standards to port operations on the proposed reclamation area, and across the existing Port.
 - Undertake earthworks and vegetation clearance in the Coastal Area and erection of public toilets within the coastal setback.
 - Change/cancel noise and landscape conditions on existing resource consents for consistency with the proposed activity.
 - Port related activities on the proposed reclamation and wharves, and on parts of the proposed development above MHWS.
14. The proposal, as set out in the application, seeks to enable the expansion of Northport's existing facilities to increase freight storage and handling capacity; and specifically, to support Northport's transition into a high-density container terminal.
15. A detailed description of the proposal was set out in Section 3 of the Assessment of Environmental Effects (AEE) titled "*Application for resource consents for the expansion of Northport*", prepared by Reyburn and Bryant, dated 6 October 2022 and the 29 appendices consisting of accompanying plans and technical assessments prepared in support of the application. The Councils' section 42A report also addressed this in some detail as did the legal submissions and evidence. We do not repeat this in detail but provide an overview in the following paragraphs.

16. A major part of the proposal is the construction (mainly by reclamation) of berth five and a container terminal. The existing Northport facility consists of three berths (Berths 1 – 3), with a fourth berth (Berth 4) consented but not yet constructed. The proposed expansion seeks to construct a fifth berth (Berth 5) to adjoin Berth 4, which involves:
- Reclaiming approximately 11.7ha of Coastal Marine Area to form land for the proposed berth and container terminal;
 - Extending the existing wharf for a further 250m along the northern face of the reclamation; and
 - Undertaking bulk earthworks within an area of approximately 2ha above mean high water springs (MHWS), including over the existing Esplanade Reserve.
17. The plan below shows the existing Northport facilities (Berths 1 – 3), the consented but not yet constructed Berth 4, and the proposed Berth⁴.



18. A range of other works and associated activities were also sought to be consented. These include the following (in summary):
- Dredging is proposed to increase the area and depth of the existing swing basin (enabling vessels to manoeuvre and dock at Berths 1 – 4), to extend the existing swing basin to serve proposed Berth 5 and to deepen the berthing and associated manoeuvring area of the tug berth facility,
 - The existing swing basin will be deepened to -14.5m below CD at the western end and up to -16m below CD at the eastern end. Approximately 1.72 million m³ of material is proposed to be dredged and used to construct the reclamation.

⁴ From the Section 42A report.

- Operation of the Container Terminal – over the longer-term Ship to Shore Gantry cranes are proposed across the port area (with a height of approximately 83m when in use, and approximately 117m when not in use⁵).
 - The proposed maximum heights of buildings and major structures on the container terminal are as follows, and match the heights permitted on the existing port area in the District Plan:
 - 20m - Building height.
 - 60m - Public utilities, light towers, silos, aerials, tanks.
 - 30m - Containers.
 - 85m - Operational height for cranes.
 - 20m - Storage/stockpiles.
 - The existing canal and pond-based stormwater collection and treatment system is proposed to be retained and utilised to capture and treat runoff from both the existing site and the proposed expansion area.
19. Northport has also sought to change how operational port noise is managed for activities undertaken on Berths 1 – 4, and for future activities undertaken on proposed Berth 5. The proposal is to manage noise in accordance with the New Zealand Standards for Port Noise (NZS Port Noise) rather than the noise provisions of the Whangārei District Plan.
 20. A new tug berthing facility for tugs, work boats, and pilot vessels is proposed to replace the existing tug wharf at the eastern end of the reclamation. A replacement water taxi berth and public fishing pontoon is also proposed in the same area as the new tug berthing facility.
 21. Access to the pontoon will be incorporated with a new public ‘pocket’ park with carparking and toilets. These are described in the application and are to mitigate loss of the existing Marsden Bay beach and esplanade reserve area.
 22. A high-tide seabird roosting sandbank, located in the inter-tidal area to the west of the existing port facility, is proposed to avoid the loss of high tide bird roosting habitat in Marsden Bay due to the port expansion.
 23. The proposal also includes amending existing consent conditions for landscaping and noise controls on the existing port. Some of the consents sought apply to the existing port area and operations as well as the proposed reclamation area. Some existing consents are sought to be surrendered and replaced by the consents sought by this proposal. They include those relating to noise, stormwater and RC36355.1 (Berth 1 and 2) and Decision Number 1 (Berth 3 and 4) (no known consent reference number).

⁵ Mobile harbour cranes will be used in the short to medium term.

Background and rationale for the project

24. Northport had investigated a range of alternative options for expanding its capacity since the completion of the existing port facilities (i.e. Berth 3) in 2007, in particular its ability to construct a dedicated container terminal. Options were evaluated for the expansion of the port and are set out in the AEE – the ‘Issues and Options’ report forming Appendix 2 to the AEE (section 9 “Alternative Options - 9.1 – Options Evaluation since 2010 and 9.2 Alternative considered). It was also set out in the evidence of Mr Moore, Mr Blomfield, Mr Khanna, and Ms Stanway. It was also addressed in the Applicant’s Opening Legal Submissions⁶ and referenced in the Interim and Final Reply Submissions.
25. Northport advised that numerous economic studies had been conducted on the future of the upper North Island supply chain and the implications for Ports of Auckland, the Port of Tauranga and Northport. In 2012 the Upper North Island Strategic Alliance (UNISA) completed a technical study of the supply and demand for ports and port-related infrastructure in the upper North Island.
26. The UNISA report concluded that there was strong growth predicted in the three upper North Island ports over the next 30 years, and that establishing a new port was likely to be significantly less cost-effective than incremental growth at each port. A subsequent report commissioned by the Government in 2018 entitled the Upper North Island Supply Chain Strategy (UNISCS) recommended a transition of Ports of Auckland Ltd (POAL) freight to Northport.
27. In order to accommodate the changes in freight tasks and to realise the benefits of the opportunities for the regional economy, the applications state that Northport needs to expand into a facility capable of efficiently handling additional freight streams. Northport commissioned Market Economics to undertake a technical assessment of the economic effects of the port expansion. Their assessment was based on the technical study undertaken by UNISA in 2012. Market Economics concluded that Northport would need to invest in infrastructure upgrades, including wharf extensions and port area reclamation, regardless of whether POAL freight is redirected to Northport. We address the economic evidence below.
28. In summary, Northport set out that the ongoing national supply-chain pressures, long-lead times in the development of port infrastructure, and growing demand from shipping companies indicated that it is an appropriate time for Northport to seek approvals to expand its facilities to address the above issues and to deliver a purpose-built, modern, and efficient container terminal.
29. In addition, Northport asserted that the port expansion would also be a catalyst to provide better infrastructure and services for Northland, as well as providing for regional economic growth by facilitating new industries and jobs for Northland.

⁶Paragraphs 7.27-7.28 of the Applicant’s opening legal submissions.

Notification

30. The applications were publicly notified on the 2 November 2022 with the submission period closing on the 15 December 2022. A total of 243⁷ submissions were received, of which 176 were in support, 10 were neutral or not stated and 57 in opposition.

Procedural Matters

Late Submissions

31. The following submissions were received late:

Sub	Name	Date received
<i>Late Submissions Received by Both Councils</i>		
176	Channel Infrastructure NZ Limited	15 December 2022 (6.23pm)
175	Waimarie Kingi (Te Parawhau Hapū Iwi Trust)	15 December 2022 (5.09pm)
177	North Sawn Lumber Ltd (Garth Morten Mortensen)	15 December 2022 (5.28pm)
178	Susan Dawnette Steedman	16 December 2022
179	Marsden Cove Canals Management Limited	19 December 2022
<i>Late Submissions Received by Whangārei District Council only</i>		
101	Swire Shipping Pte Ltd, including Pacifica Shipping (Alistair Skingley)	16 December 2022
121	Peter John Fitzgerald	16 December 2022

32. Pursuant to section 37 of the RMA, the Hearing Panel accepted all of the late submissions. The reasons being that they were not substantially late, did not affect the evaluation of the application or the hearing; and the Applicant agreed to us accepting them.

Withdrawal of Expert Evidence

33. Marsden Cove Limited (MCL) and Marsden Cove Canals Management Limited (MCCML) each filed a submission on the above resource consent application. Those submissions (dated 15 and 19 December 2022) “supported in part” the application, but raised issues about the potential for increased risk of sedimentation at the access channel to the Marsden Cove Marina.

⁷ One submission was subsequently withdrawn.

34. In a letter from TR Brooks (MCL) and GL Hopper (MCCML)⁸ advised that they and Northport had engaged in constructive discussions about the application, and how to manage any potential effects on MCL. As a result, Northport and MCL have agreed on measures to address the matters raised by MCL. Based on this agreement, MCL's position was that it now supported the application.
35. On the above basis, MCL withdrew its expert evidence previously filed. This included – Mr Lamason (Planning), Mr Hegley (Noise), Mr West (Marine ecology), and Mr Davis (Coastal Processes). Accordingly, we have not considered their evidence, including their opinions and views expressed in any JWSs.
36. Seafuels Limited ("Seafuels") filed a submission on the above resource consent application. That submission (dated 14 December 2022) opposed the application, and sought that resource consent not be granted until certain navigation safety concerns outlined by Seafuels were addressed, including to demonstrate that no adverse impacts would result on navigation, safety or functionality of vessels using the adjacent Channel Infrastructure Jetty.
37. Seafuels advised that Hearing Panel⁹ that since filing that submission, it and Northport had engaged in constructive discussions about the application, and how to manage any potential effects on Seafuels. As a result, Northport and Seafuels agreed on measures to address the matters raised by Seafuels in its submission. Based on this agreement, Seafuels' position was that it no longer opposed the application.
38. On the above basis, Seafuels withdrew its expert evidence previously filed. This included the expert evidence Mr Arbuthnot (Planning). We have not considered this expert evidence.

Site Description and Surrounding Environment

39. The description of the site and the surrounding environment was fully set out in the application documents, the section 42A report and the evidence before us. We agree with those descriptions having been to the site and surrounding area and having read and heard all of the evidence. Accordingly, we do not repeat it here in any detail.
40. The port is located at the entrance to the Whangārei Harbour at Marsden Point, Ruakākā, approximately 2.5km to the east of One Tree Point, 4km north of Ruakākā, and 1km south of Reotahi (across the Harbour).

⁸ Dated 9 October 2023.

⁹ Letter from Mr Mills, Director – dated 6 October 2023.

41. Northport currently has three berths available for handling dry cargo vessels, with a total length of 570m. An additional 270m of linear berth (Berth 4) is consented but not yet constructed. The overall Northport footprint is made up of multiple titles with much of the port located on reclaimed (crown owned) leased land.
42. The existing port facility is adjoined by the Channel Infrastructure New Zealand Limited's (CINZ) site to the south-east and the industrial-zoned Marsden Maritime Holdings (MMH) land holdings to the south-west.

Activity Status and Bundling

43. We have addressed activity status early in this decision. This is because there were differing opinions among the planners as to the activity status (discretionary or non-complying) of the consents sought under the District Plan.
44. The issue of bundling the applications sought was also discussed; should all of the consents sought (regional and district) be bundled together, with the appropriate activity status applying to all consents sought, or should the regional consents not be bundled with the district consent application, as it was, according to some planners, the land use consent in relation to the Natural Open Space Zone of the WDP-OP (NOSZ) that triggered the non-complying status.
45. Prior to the first planners' expert conferencing session it appeared there was a consensus (certainly amongst the Applicant and the Council planners) that the entire proposal (regional and district consents) was a discretionary activity. However, the planning Joint Witness Statement (JWS) recorded that a number of the planners¹⁰ considered that that part proposal on land zoned NOSZ in the Whangārei District Plan (the pocket park) was a non-complying activity. On the basis of bundling, it was their view that overall that the land use consents sought was a non-complying activity.
46. If the applications were a non-complying activity, then section 104D (often referred to as the 'gateway test') is relevant. It states that a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either:
 - 1(a) the adverse effects of the activity on the environment will be minor; or
 - 1(b) the application is for an activity that will not be contrary to the objectives and policies of:
 - (i) the relevant plan, or
 - (ii) the relevant proposed plan, or
 - (iii) both the relevant plan and the relevant proposed plan.
47. For the reasons set out below, we find the proposal would satisfy section 104D (1) (b).

¹⁰ Ms Sharp, Ms Kirk and Ms Niblock (noting that Ms Niblock decided at the hearing she was not giving expert evidence on behalf of the Infrastructure Team of the WDC – but corporate evidence).

48. The Applicant's planners, Dr Mitchell and Mr Hood, had a contrary view. It was their opinion that the entire application (regional and district) was discretionary. In their rebuttal evidence, Dr Mitchell (in some detail) and Mr Hood set out why, in their opinions, the applications were discretionary. Notwithstanding Dr Mitchell's opinion, he helpfully set out in section 3 – "District Plan Activity Status" an evaluation of the WDP-OP's activities and how that Plan should be interpreted. He also provided a section 104D assessment and stated¹¹:

"I conclude that even if the activities proposed within the Natural Open Space Zone were to be considered as non-complying, the gateway test in section 104D(1)(b) can readily be met, and therefore has no bearing on the evaluation of the proposal which is to be undertaken under section 104."

49. The Applicant's opening legal submissions set out why in their view the proposal was a discretionary activity. However, Mr Littlejohn requested that if the Hearing Panel found that the proposal was a discretionary activity, that it nonetheless undertake a section 104D evaluation. Further, relying on Dr Mitchell's rebuttal evidence, that the Hearing Panel finds that the proposal met the section 104D 'gateway test', and then assess the proposal on its merits (essentially as if it were a discretionary activity).
50. The Applicant addressed this topic again in its Interim Reply Statement as section 5. Among other things the Interim Reply stated¹²:

"Properly interpreted in a sensible and pragmatic manner, the rules in the District Plan Natural Open Space Zone relating to "Industrial Activities" or "Commercial Activities" (or any other activity) do not render the Proposal a non-complying activity. Adopting the interpretation proposed by DOC and WDC would be a triumph of legalistic sophistry over substance. It would result in precisely the type of "anomalous" or absurd outcome that the Court warned against in Auckland Council v Teddy and Friends Ltd. Instead, the application is for "Port Activities", and the fact that a small part of the application extends into the Natural Open Space Zone leads only to the outcome that the application (for that area) is innominate and therefore should be treated as a discretionary activity pursuant to s87B of the RMA."

51. Ms Sharp, in the addendum section 42A report maintained her view that the land use consents were a non-complying, for the reasons set out in the JWS. However, she provided an assessment of the 'gateway tests' and set out¹³:

"In accordance with s104D(a), Ms Sharp considers that the effects arm of the 'Gateway Test' is not met in this instance, as significant residual adverse recreation and landscape effects are generated by the proposal."

¹¹ Paragraph 3.35 of Dr Mitchell's rebuttal evidence.

¹² Paragraph 5.3 of the Applicant's interim reply submissions.

¹³ Paragraphs 48 and 49 of the addendum section 42A report.

With regard to the s104D(b) policy arm and further to the assessment provided within the Section 12.2.3 of the s42A Report, overall and on balance, Ms Sharp concludes that whilst several aspects of the proposal do not sit comfortably with the policy direction of the WDP-OP¹⁴, she does not consider that the proposal is contrary to the objectives and policies of the WDP-OP overall”. [and provided her reasoning for this].

52. Having considered this matter, it is our finding that the proposal, overall, is a discretionary activity and not non-complying. We agree with the Applicant’s position set out in the Opening and Interim Reply submissions and the evidence of Mr Hood and Dr Mitchell.
53. However, for the avoidance of doubt and an abundance of caution, we have undertaken a section 104D evaluation. In doing so, we agree with Applicant’s planners and Ms Sharp’s opinions that the proposal would satisfy section 104D of the RMA – namely section 104D 1(b); but only if the entire proposal is bundled (regional and district). We address this matter below.
54. Mr Doesburg, Counsel for NRC, addressed “bundling” in his legal submissions - *whether the district and regional activities relating to the Applicant’s resource consent applications should be “bundled” together as an overall non-complying activity*¹⁵. He addressed this in some detail (paragraph 3 to 9), but in brief the issue is essentially the extent of overlap of the effects of the activities and if there are consequential and flow on effects.
55. Mr Doesburg submitted¹⁶:

“Here the degree of overlap between activities and plans is questionable – it is difficult to see the overlap between the district plan consenting requirements from the activity in the NOSZ and the regional plan consenting requirements. The assessment of reclamation, maintenance dredging, deposition, stormwater discharge and the use of structures is not interrelated with that activity. In particular:

- (a) the relocation of a toilet, earthworks and the creation of a public park/reserve area are not fundamental to the main activity (being the port expansion) and they do not have “consequential and flow on effects” for one another. Without these activities, the port expansion could feasibly continue; and*
- (b) the area within the NOSZ is a very small part of the project overall. Applying non-complying activity status to the entire proposal based on a very small part of it would unreasonably inhibit the project.”*

¹⁴ *Namely those relating to Tāngata Whenua, the use of public esplanade reserve (NOSZ land) for port activities.*

¹⁵ Paragraph 2(a) of NRC’s legal submissions.

¹⁶ Paragraph 9 of NRC’s legal submissions.

56. The Applicant agreed with Mr Doesburg's submissions, setting out in the Interim Reply submissions that *"even if the Panel finds that certain limited activities require consent as a non-complying activity under the District Plan, with reference to the legal submissions on behalf of NRC it is not appropriate in this context to bundle the district and regional activities to make the application overall non-complying activity"*¹⁷.
57. We agree to a certain extent with Counsel. However, notwithstanding this we find that the entire 'project' is interlinked (a 'package deal'), and for the purposes of the gateway test cannot not be unbundled as suggested. We accept that while the *"area within the NOSZ is a very small part of the project overall"*, it is the port expansion proposal (mainly the reclamation) that necessitates the earthworks (and development) within the NOSZ; and due to this we find the values of the NOSZ will be lost due to the extent the earthworks, roading and use of the land within (overlap and consequential and flow on effects).
58. The issues, objective and policy of the NOSZ are:

"The Natural Open Space Zone (NOSZ) identifies areas of open space land primarily managed for the conservation and protection of natural resources. The land is generally in Council or Department of Conservation ownership. Examples of such land include: bush reserves, headlands, natural wetlands and parts of the coastline. The Natural Open Space Zone provides for the natural, ecological, landscape, cultural and heritage values of these open spaces.

The Natural Open Space Zone often has high ecological/biodiversity values and it is therefore appropriate to limit the scale and intensity of activities and development to ensure there are minimal adverse effects and as little modification to the environment as possible."

Objective NOSZ-O1 Natural Environment:

"Protect and enhance the natural, ecological, landscape, cultural and heritage values of the Natural Open Space Zone"

Policies

59. NOSZ-P1 Open Spaces

"To identify and protect open spaces that are managed primarily for conservation and have high natural, ecological, landscape, cultural and heritage values.

NOSZ-P5 Manage Activities To avoid adverse effects on amenity and character of the Natural Open Space Zone by managing activities to ensure that they support ongoing conservation."

¹⁷ Paragraph 5.6 of the Applicant's interim reply submissions.

60. It is our finding that the proposal, in relation to this zone, is contrary to the relevant objectives and policies of the NOSZ – the natural, ecological, landscape, cultural and heritage values within the land zoned would not be protected and enhanced. Those values would be lost and replaced with access roading and a pocket park. Ms Sharp accepted this in response to our questions saying the proposal would “*struggle*” in relation to this zone.
61. This, in our view, would result in the (overall) land use consents being contrary to the relevant objectives and policies of the WDC-OP. All of the planners (Applicant’s and Submitters’) considered that the effects would be more than minor (104D (1) (a)). On this basis, if the project were ‘unbundled’ it is unlikely that the land use consents would meet either of the gateway tests.
62. However, when the project is evaluated as a whole (which we address in the rest of this decision), we find that the proposal would not, overall, be contrary to the relevant objectives and policies of the regional and district plans. The reasons for this, in general, are:
- Ports and port development are specifically recognised with directive and enabling provisions (zoning and plan provisions) in the Regional Policy Statement and regional and district plans. That is, the port and port-related development are not only contemplated at this location, but are specifically directed;
 - Development of Northport at this particular location, including by dredging and reclamation, is specifically provided for in the zone provisions;
 - The proposal would enable the continued efficient and effective operation and expansion of the port operation, identified as “Regionally Significant Infrastructure”; and
 - The proposal is not contrary to the consultation and involvement in decision-making ‘thread’ of the Tāngata Whenua policies (as agreed by all of the planners in their JWS), noting the pre-lodgement consultation undertaken and commissioning of cultural assessments.
63. On this basis, and as set out above, it is our finding that the gateway test is satisfied. However, as we stated at the outset, it is our finding that set proposal is, overall, a discretionary activity.

Relevant statutory provisions considered

64. As set out above we have addressed section 104D – non complying activity of the RMA.
65. As a discretionary activity, the proposal can be assessed on its merits and a decision made pursuant to section 104B, and in relation to discharges sections 105 – Matters relevant to certain applications and 107 – Restriction on the grant of certain discharge permits, of the RMA. In this respect, and as required, we have considered the applications in terms of the matters set out in section 104, (and 105 and 107 of the RMA), which requires us to, subject to Part 2, have regard to:
- (a) any actual and potential effects on the environment of allowing the activity; and

- (ab) any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity; and
 - (b) any relevant provisions of—
 - (i) a national environmental standard:
 - (ii) other regulations:
 - (iii) a national policy statement:
 - (iv) a New Zealand coastal policy statement:
 - (v) a regional policy statement or proposed regional policy statement:
 - (vi) a plan or proposed plan; and
 - (c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.
66. With respect to section 104, despite its considerations being “subject to Part 2”, the Court of Appeal in the RJ Davidson case stated, among other things¹⁸:
- "Having regard to the foregoing discussion we agree with Cull J's conclusion that it would be inconsistent with the scheme of the Act to allow regional or district plans to be "rendered ineffective" by general recourse to pt 2 in deciding resource consent applications, providing the plans have been properly prepared in accordance with pt 2. We do not consider however that King Salmon prevents recourse to pt 2 in the case of applications for resource consent. Its implications in this context are rather that genuine consideration and application of relevant plan considerations may leave little room for pt 2 to influence the outcome."*
67. In our view that judgment says (in summary) that notwithstanding the Supreme Court's *King Salmon* decision, decision makers must consider Part 2 when making decisions on resource consents. However, where the relevant plan provisions have clearly given effect to Part 2, there may be no need to give further consideration to Part 2 as it would not add anything to the evaluative exercise.
68. In relation to this proposal, we have been able to rely on the provisions of the operative and proposed regional documents, and in particular the PRP- AV¹⁹ and the Whangārei District Plan (operative in part) to determine these applications without recourse to Part 2.

¹⁸ *RJ Davidson Family Trust v Marlborough District Council* [2018] NZCA 316, paragraph 83.

¹⁹ The PRP- AV is effectively operative with respect to these resource consents as there are no outstanding appeals in relation to these applications. On this basis we have had little regard to the operative regional plan and operative regional coastal plan.

69. We were ‘fortunate’ in that both the regional and district planning documents were essentially new (‘freshly minted’), and in our view had given effect to the higher-order planning documents including the New Zealand Coastal Policy Statement (NZCPS), the National Policy Statement for Indigenous Biodiversity (NPS- IB)²⁰ and the Regional Policy Statement (RPS).
70. In respect of the PRP- AV, we agree with the following statement from the planners JWS²¹.
- “Phil Mitchell and Brett Hood also agree with Blair Masefield’s position²² as a matter of principle, but with the addition of the following context. Because all appeals have been resolved, the rules of the legacy regional plans no longer have any effect (s86F of the RMA). Furthermore, while the objectives and policies of the legacy plans are theoretically relevant, they should be given minimal, if any, weight.”*
71. While we have stated we did not need to have recourse to Part 2, we do address it, notably section 6 (d) - in relation to public access to and along the CMA, 6(e) regarding the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga, and section 7(a) regarding kaitiakitanga.

Relevant standards, policy statements and plan provisions considered

72. In accordance with section 104(1)(b)(i)-(vi) of the RMA, we have had regard to the relevant plan provisions of the following documents:
- New Zealand Coastal Policy Statement 2010 (NZCPS);
 - National Policy Statement for Indigenous Biodiversity 2023 (NPS-IB);
 - Regional Policy Statement for Northland (RPS);
 - Operative Regional Coastal Plan for Northland (RCP);
 - Regional Plan for Northland;
 - Proposed Regional Plan for Northland – Appeals Version (PRP- AV); and
 - Whangārei District Plan – Operative in Part (WDP-OP).

²⁰ We address the National Policy Statement for Indigenous Biodiversity 2023 separately below.

²¹ JWS dated 28 September 2023.

²² Which was – “Because the Proposed Plan is not fully operative, the existing “legacy” plans are still operative and their objectives and policies are relevant considerations under section 104(1)(b)(vi).”

Summary of evidence

73. We received a vast amount of expert and non-expert (including corporate and lay) evidence. Because of this, we see little point in providing a separate summary of all of it here. We have provided (in Appendix 1) a list of all of those who prepared expert and lay evidence (including the area of expertise), and we address the expert and lay evidence in the separate topics listed below.
74. We summarise the statements of evidence of Northport's corporate evidence here. Mr Jagger, Northport – Board Chair²³ and Mr Moore, Northport - CEO gave a corporate overview which provides useful context to the proposal. We also address Mr Blomfield's evidence - Northport – Terminal Facilities Manager regarding consultation, design, and project management; also, as it provides useful context.
75. Mr Jagger's evidence addressed the "national discussion" around the future of Ports of Auckland (to clarify for the record Northport's position within that discussion); he outlined Northport's track record of investment in, and growth at, Northport; provided an overview of the rationale behind Northport's Vision for Growth and its objective for the future.
76. With respect to its objective for the future, Mr Jagger stated²⁴:
- "I believe strongly that, first and foremost, this Project presents New Zealand with a rare opportunity to develop, and enhance the resilience of, its national supply chain infrastructure.*
- It also represents a necessary and positive step in the development of infrastructure that the Northport Board believes will become essential to the effective economic development of the Upper North Island.*
- The Board believes that the Project will deliver significant social and economic benefits not only for Northland, but also for North Auckland."*
77. Mr Moore's evidence set out that Northport is New Zealand's northernmost deep-water port. It has three berths available for handling dry cargo vessels, with a total linear berth length of 570 m. The Northport facility totals 49.1 ha of land, including over 40 ha that is paved and used for cargo operations. Of the existing 49.1 ha footprint, 33.6 ha is reclaimed land.
78. He set out that Northport operates 24 hours a day, seven days a week to meet the trade demands of Northland and the wider Auckland region. It handles domestic freight and international imports and exports. Logs, woodchip and processed timber for export have comprised the bulk of cargo handled by the port. Other export items include kiwifruit, cement and manufactured goods.

²³ He is also Chairman of Marsden Maritime Holdings Limited, a 50 percent shareholder of Northport, and North Tugz, a joint venture with Ports of Auckland Ltd of which Northport is a 50 percent shareholder.

²⁴ Paragraphs 35 – 37 of Mr Jagger's evidence.

79. Imports are also an important part of Northport's business and include fertiliser, gypsum, coal, steel, project cargo, and animal feed supplements.
80. Northport is a key partner with NRC and its harbourmaster due to the functions Northport carries out, which assist the safety of all marine craft navigating the harbour. These functions include responsibility for aids to navigation within the commercial channels, dynamic under-keel clearance system (DUKC), hydrographic survey, Whangārei Harbour radio and local port service (LPS) for commercial operations.
81. The cruise industry has been actively engaged with Northport to include Whangārei as a new cruise destination, the Hundertwasser Art Centre being Whangārei's point of difference. Northport will berth vessels at the facility and enable disembarking/embarking directly to the shore, instead of vessels anchoring in Bream Bay and shuttling passengers by tender.
82. He also set out that *"Northport holds a very important role in Northland's regional economy, supporting import and export activity. This role has expanded and diversified significantly since Northport began operating in 2002. Beyond its local and regional importance, and due to its integration into the NZ port network, Northport is significant nationally for its commercial, transportation and infrastructure functions"*²⁵.
83. Mr Blomfield's evidence summarised Northport's operations in the context of this proposal, including its previous dredging and reclamation experience, record of environmental compliance, and the operational constraints faced by Northport. He also discussed the design considerations, including a summary of the consideration of alternatives²⁶ (as did Mr Khanna's and Ms Stanway's evidence), and briefly explained the methodology, programme and procurement process for construction of the Project;
84. Mr Blomfield also set out the engagement with stakeholders around the design specifications, including seeking expert advice as required; management of the communication strategy, including the Vision for Growth website; engagement and management of experts; representation of Northport throughout the community consultation and engagement process.
85. In relation to the expert evidence, we directed expert conferencing. Expert conferencing sessions were held and Joint Witness Statements (JWS) filed on the following topics:
- Coastal Processes;
 - Marine Ecology;
 - Avi-Fauna;
 - Terrestrial noise;
 - Transport;

²⁵ Paragraph 22 of Mr Moore's evidence.

²⁶ Which we have addressed above, and address further in the Cultural section of this decision.

- Landscape;
- Recreation (x2);
- Navigation;
- Stormwater and Groundwater; and
- Planning (x2).

86. We have, where appropriate, relied on the findings set out in the JWSs²⁷.

87. We record that we excused a number of the Applicant's expert witnesses (and their section 42A counterparts) from appearing at the hearing. This was on the basis that having read the applications, the Section 42A report, the Joint Witness Statements from the expert conferencing sessions and the expert evidence of the applicant and submitters and there being no issues in contention between the relevant experts, and/or the Hearing Panel had no questions for those witnesses.

- Mahim Khanna – Terminal Design;
- Jan Stanway – Structural;
- Ross Sneddon – Peer review Marine ecology;
- Craig Fitzgerald – Terrestrial noise;
- Andrew Curtis – Air Quality.
- David Fox – turbidity methodology, and
- Matthew Pine – underwater acoustics.

Principal issues in contention

88. The entire proposal was in contention as a number of submitters sought, for a variety of reasons, that the applications be refused consent. The section 42A authors (and their technical advisors) also raised issues that were not fully resolved through the hearing process. However, the main issues related to:

- Whether there was sufficient information to be able to make a decision, mainly in relation to questions about the validation and calibration of the hydrodynamic modelling, and reliance on its outputs by a number of the marine related experts in relation to the scale of effects and the lack of assessment of the effects of the proposal through a cultural lens.
- The adverse effects on:
 - Marine ecology including marine mammals;

²⁷ We wish to thank the experts of attending, participating and in many cases narrowing and/or resolving (but not in all cases) the issues between them. These were clearly set out in the JWSs. We are also very grateful for the expert facilitation of the expert conferencing sessions by Ms Oliver.

- Avi-fauna;
 - Terrestrial ecology;
 - Tāngata Whenua/cultural;
 - Recreational/amenity/public access due to the loss of the beach from the proposed reclamation;
 - Landscape, natural character and visual amenity;
 - Noise – mainly from people living across the harbour (Reotahi);
 - Navigation; and
 - Transportation - impact on the roading network.
- Whether the effects of operational stormwater discharges had been appropriately addressed;
 - The appropriate lapse period for the consents; and
 - If a duration period was required for the reclamation consent.
89. The following issues were initially in contention, but following discussions/negotiations with the Applicant and/or expert conferencing, the following matters were resolved such that they were no longer in contention:
- All matters relating to the Marsden Cove Limited (MCL) and Marsden Cove Canal Management limited (MCCML), including sedimentation and noise related issues²⁸;
 - All matters relating to CINZ²⁹ and Seafuels Limited (including navigation and safety)³⁰;
 - The use of the Port Noise Standard, terrestrial noise effects and the appropriate conditions to be imposed if the applications were granted consent, as agreed by the noise experts (noting some submitters opposed the application based on noise effects)³¹; and
 - The traffic effects of the proposal. The conditions to be imposed to address the adverse effects arising from the increased traffic from the expanded port were agreed between the Applicant, Waka Kotahi and WDC.
90. Notwithstanding that these issues were not in contention; we address noise and traffic below.

²⁸ The expert evidence was withdrawn – letter dated 9 October 2023 from TR Brook (Marsden Cove Limited) and GL Hopper (Marsden Cove Canal Management limited) with the submitter now supporting the proposal.

²⁹ CINZ did not present any expert evidence.

³⁰ The expert evidence from Seafuels was withdrawn – letter dated 6 October 2023 from W Mills.

³¹ While the noise experts agreed, there remained contention about this and the appropriate management of noise from a number of the residents (mainly Reotahi) who lived near the port.

Reasons for refusing consent and findings on the principal issues in contention

Overview of the relevant statutory Objectives and Policies for this proposal

91. We have set out an overview of the statutory policy position, mainly those in the ‘newly minted’ PRP- AV and the WDC-OP. We do this as it sets the context for how we have evaluated the applications determined to **refuse** the consents sought in respect of those matters.
92. As we indicated earlier³², there is specific and directive plan and policy support for the development and expansion of the port. However, there are also plan and policy provisions that address the appropriateness of the specific proposal sought (e.g. the implications for the area zoned NOSZ (as addressed earlier) and the effects of the proposal as we set out below.

Appropriateness of the Port, its operation and expansion in this location

93. We accept that both the regional and district statutory planning documents support the existence of and development of the port in this location. In a regional context, the RPS³³ and proposed PRP-AV provide direct support for the proposal in terms of a port development. However, as we address later in this decision, that support is not unqualified.
94. In the RPS, Northport, including the adjoining land used for the movement and storage of cargo is identified as “Regionally Significant Infrastructure”. In this regard PRP-AV sets out the following:

"Objective F.1.6 - Regionally Significant Infrastructure - Recognise the national, regional and local benefits of Regionally Significant Infrastructure and renewable energy generation and enable their effective development, operation, maintenance, repair, upgrading and removal.

Policy D.2.5 - Benefits of Regionally Significant Infrastructure Particular regard must be had to the national, regional and locally significant social, economic, and cultural benefits of Regionally Significant Infrastructure.

D.2.9 - Appropriateness of Regionally Significant Infrastructure proposals (except the National Grid)."

95. The PRP- AV also sets out port related zoning and plan provisions. The proposal (coastal marine area (CMA) component) sits entirely within the Marsden Point Port Zone (“MPPZ”). The purpose of that zone is to:

D.5.8 - Coastal Commercial Zone and Marsden Point Port Zone Purpose:

"Recognise that the purpose of the Coastal Commercial Zone and Marsden Point Port Zone is to enable the development and operation of existing and authorised maritime-related commercial enterprises or industrial activities located within these zones.

³² Discussion in relation to non-complying activities.

³³ Refer in particular Policies 5.2.1-5.2.2 relating to infrastructure; and 5.3.2-5.3.3 relating to Regionally Significant Infrastructure.

D.5.9 Coastal Commercial Zone and Marsden Point Port Zone

Development in the Coastal Commercial Zone and the Marsden Point Port Zone will generally be appropriate provided it is:

- 1) *consistent with:*
 - a) *existing development in the Coastal Commercial Zone or the Marsden Point Port Zone, and*
 - b) *existing development on adjacent land above mean high water springs, and*
 - c) *development anticipated on the land above mean high water springs by the relevant district plan, or*
- 2) *associated with Regionally Significant Infrastructure in the Marsden Point Port Zone. Development that is inconsistent with (1) or (2) will not necessarily be inappropriate.*

96. The reclamation is a key aspect of this proposal and satisfies this policy:

D.5.20 Reclamation

Reclamation of land in the coastal marine area shall be avoided unless all the following criteria are met:

- 1) *land outside the coastal marine area is not available for the proposed activity;*
- 2) *the activity which requires the reclamation can only occur in or adjacent to the coastal marine area;*
- 3) *there are no practicable alternative methods of providing the activity; and*
- 4) *the reclamation will provide significant regional or national benefit.*

D.5.21 Reclamation

When considering proposed reclamations, have particular regard to the extent to which the reclamation and intended purpose would provide for the efficient operation of infrastructure, including ports, airports, coastal roads, pipelines, electricity transmission, railways and ferry terminals, and of marinas and electricity generation. [underlining is our emphasis]

97. Dredging is also a key aspect of this proposal and satisfies this policy:

"D.5.25 Benefits of dredging, disturbance and deposition activities

Recognise that dredging, disturbance and deposition activities may be necessary:

- 1) *for the continued operation of existing infrastructure, or*
- 2) *for the operation, maintenance, upgrade or development of Regionally Significant Infrastructure, ...* [Underlining is our emphasis].

98. The WDP-OP also specifically provides for the port, and its expansion. The port has a "Special Purpose Zone" - Port Zone (PORTZ). The PORTZ recognises the significance of the Port and its importance to the Whangārei district and the Northland region as regionally significant infrastructure.

99. The purpose of the Port Zone, as set out in the District Plan, is:

- *To enable the ongoing and future growth and development of the Port and any associated operational areas and facilities; and*
- *To provide for operations relating to the transportation of people and freight including within the Port Zone.*
- *To enable appropriate commercial and industrial development adjacent to Marsden Bay Drive, and to otherwise manage non-port related activities so as not to compromise or constrain the primary purpose of the zone.*

100. The relevant 'higher level' enabling objectives and policy are:

Objectives:

- *PORTZ-O1 Regionally Significant Infrastructure - Recognise and provide for the importance of the Port as regionally significant infrastructure and the contribution it makes to the economic and social wellbeing of the District and Region.*
- *PORTZ-O2 Current Operation and Future Development - Recognise the unique characteristics of the Port and provide for: 1. The efficient and effective ongoing operation of port activities within the Port Zone without undue constraints; and 2. The future development and expansion of Port operations and activities within the Port Zone.*

Policy:

- *PORTZ-P1 Regional Significance - To recognise the regional significance of the Port by providing for a wide range of existing and future port operations and port activities within the Port Zone.*

101. As set out in the Interim Reply Submissions³⁴:

"Development of Northport at this particular location, including by dredging and reclamation, has very clearly been considered and is specifically provided for in the zone provisions. Directive enabling support is provided by the MPPZ zoning. Relevantly, the MPPZ zone is limited to one location in all of Northland – being the area immediately around the existing Northport facility. This singular location includes all of the seaward area within which the Proposal is located."

and

"Put simply, the enabling direction contained in the Proposed Regional Plan framework is so specific that it genuinely is a case of "if not here, then where"? Or, as expressed by Dr Mitchell in response to questions from the Panel, the significant directives in the policy documents for development of port facilities in the manner and location proposed mean that it is not a matter of where or how port-related development should proceed, but when."

³⁴ Paragraphs 2.6 and 2.8 of the interim reply submissions.

102. Furthermore, the Applicant's submission to us that the specific, directive enabling purpose and provisions of the MPPZ could effectively be frustrated by any of the 'avoidance' provisions of that same plan, stating³⁵.

*"Such interpretation is in our view strained, and would, if adopted, lead to the inescapable position that development within the MPPZ, and consistent with its purpose, could be frustrated by the sometimes broad 'avoid' requirements"*³⁶. In this respect the following example was offered *"For instance, Ms Kirk for the Director-General of Conservation appeared to be suggesting that avoidance of effects is required in the Significant Marine Mammal and Seabird Area (SMMSA) overlay of the Proposed Regional Plan which applies not only to the entire Whangārei Harbour, but to the entire coast of the Northland region."*

103. The zoning in the regional and district plan, and their related provisions, are fundamental to the consideration of the proposal. This is because it is this location where the port and its expansion has been determined as being appropriate by the regional and district planning documents. In this respect we accept that this *"genuinely is a case of "if not here, then where?"*³⁷ and *"Put another way, the plan framework explicitly identifies and provides strong directive enabling support for port-related development at this precise location out of all of Northland's coastline"*³⁸.
104. While the zonings and the 'supporting and enabling' plan provisions establish that this is the appropriate location for the port and its expansion, there is a range of other planning provisions regarding the effects of any proposal, which we address in some detail below. Furthermore, the activity status of the resource consents within the MPPZ range from controlled (maintenance dredging; additions or alterations to structures), restricted discretionary (structures; deposition of material for beneficial purposes); with reclamation, capital dredging and stormwater discharges being fully discretionary.
105. In this respect we note the submission from Mr Matheson, counsel for Patuharakeke Te Iwi Trust Board ("PTITB"). While he considered directive enabling policies were more "general" in nature than submitted by the Applicant, he set out that notwithstanding those more enabling provisions, that reclamation and capital dredging, were fully discretionary (and not controlled or restricted discretionary activity); the same activity status as reclamations, and dredging in the other zones/areas in the PRP-AV (C.1.6.5 – Reclamation, C.1.5.13 – Dredging).
106. We address the other relevant objectives and policies of the planning documents under the various headings below.

³⁵ Footnote 18 of the interim reply submissions.

³⁶ Paragraph 2.11 of the interim reply submissions.

³⁷ Paragraph 2.10 of the interim reply submissions.

³⁸ Paragraph 2.10 of the interim reply submissions.

‘Need’ for the Project

107. Before addressing the effects of the proposal and the related objectives and policies, we address the issue of “need” for the proposal. This was raised and addressed through the hearing process.
108. The issue of ‘the need’ for the project now, and into the future, was raised mainly by Mr Masfield³⁹, and other submitters. This was largely in terms of the interpretation and application of Policy 4.8.1 (*Demonstrate the need to occupy space in the common marine and coastal area*) of the RPS. That policy sits in the section titled “*Efficient use of coastal water space*” and directs decision-makers to only consider allowing the occupation of space where:
- (a) There is a functional need;
 - (b) It is not feasible to locate the structure on land;
 - (c) It is not feasible to use an existing authorised structure; and
 - (d) The area occupied is necessary to provide for or undertake the intended use.
109. Mr Masfield queried whether the interpretation of (d) above required Applicant to demonstrate that there was demand for the activity. The Applicant argued (as set out below) that there is no legal requirement to demonstrate demand or necessity for its proposal, and that Policy 4.8.1(1)(d) is about ensuring the occupation area sought is only what is needed for the proposal⁴⁰.
110. Mr Doesburg set out in his legal submissions that⁴¹:
- “There is some uncertainty with Policy 4.8.1 (which is not resolved by recourse to its heading or the section it sits within). In addition to the cases referred to by Northport, we are reminded of the comment in the early NZ Rail decision that financial viability of a development is more properly a matter for the boardroom than the courtroom. In my submission, the best interpretation of Policy 4.8.1 is not that it requires applicants to prove demand for a proposal, but rather that it is concerned that only the minimum area of coastal space is occupied for a proposal.”*
111. The Applicant’s legal submissions addressed this matter in Opening and the Reply submissions (“Necessity” for the Proposal). The Applicant’s legal Counsel also agreed with Mr Doesburg.
112. The final Reply Submissions, legal counsel stated⁴²:

³⁹ At 11.1.16 and 12.1.1.9 of the section 42A report.

⁴⁰ Paragraph 7.26 of the Applicant’s opening legal submissions.

⁴¹ Paragraph 21 of NRC’s legal submissions.

⁴² Paragraph 15.5 of the interim closing submissions.

“‘Necessity’ or ‘need’ for the Proposal: there is no policy nor legal requirement to demonstrate demand or that the Proposal is a “necessity”. Counsel for NRC agrees. The s42A Report Addendum concedes that the interpretation of the policy framework previously advanced by the s42A author regarding demand/need was incorrect. Notwithstanding that there is no requirement to demonstrate that the Proposal is needed, Northport has provided comprehensive evidence on future demand and demonstrating that the proposed footprint is required to handle predicted container volumes. No opposing evidence seriously called this into question. That evidence confirms that Northport will require further wharf extensions and reclamation as early as 2032. If Northport waits for demand to be manifest before seeking RMA approvals, it will be too late. “

113. We agree with the Applicant’s legal submissions on this matter. We accept that ‘need’ per se is not relevant. However, the issues raised by Mr Littlejohn (and Messrs Akehurst, Jagger and Moore) about the timing of the need to invest in growth (2 modelled scenarios, show Northport may outgrow even the expanded port, including Berth 4, as early as 2032) and efficiency are relevant. This has, in our view, implications on the appropriate lapse date for the regional consents. We address this below.

Positive effects

114. We find there would have been significant positive effects from the proposal had consent been granted. It would have facilitated, in our view, a range of economic and social benefits associated with a dedicated container terminal at Whangārei, which would be part of an integral and efficient national network of safe ports.
115. We accept that the Multi-Regional Input Output assessment undertaken by Market Economics (Mr Akehurst), noting again that there was no real contrary evidence questioning its findings. It showed that:
- *The annual value of Northport’s direct role (as a business) in the Northland economy could range from \$22 million value added under a Business as Usual (“BAU”) scenario to \$34 million under a North Auckland Imports (“NAI”) scenario, by 2050. The value added at this level could sustain the equivalent of 320 to 480 jobs annually.*
 - *The annual value of the economic activity facilitated by the Port (which includes the trade tasks it handles) in the Northland economy could range from approximately \$1.097 billion value added under a BAU scenario, to \$1.194 billion value added under the NAI scenario by 2050. In terms of jobs, this is equivalent to sustaining between 14,800 and 16,100 jobs for a year, each year. (ii) Overall, the Proposal will generate considerable positive economic effects for the local, regional, and national economies. It will enable the expansion of a highly valuable physical resource (i.e. the port), enabling the community to provide for its social, cultural, and economic wellbeing.*

116. We accept that there would also be efficiency improvements which would assist in securing Northport's ongoing future operation by providing container terminal handling capability, along with the key benefits Northport provides to the region - including direct value added (estimated to be up to \$34 million as set out above) and the wider economic activity facilitated by the port (estimated at up to \$1.194 billion)⁴³.
117. We also accept the evidence of Ms Mercer, Chief Executive of Marsden Maritime Holdings Ltd (MMH). She addressed the symbiotic relationship between the proposed port expansion and the master planned development proposed by the He Ara Huringa Business Park and Tech Hub. Ms Mercer described the port-related aspects of the MMH proposal, such as bulk storage, packing and unpacking of containers, freight forwarding, distribution hubs, cool stores, warehousing, workshops and engineering, which would be enabled by the port expansion. She stated that the Northport expansion will *"support Northland unlocking its potential and thereby improving the socio-economic well-being across the region"*⁴⁴.
118. We also heard from many ancillary and supporting businesses about the importance of the continued and expanded operations to the region, the district, and their businesses. These included from the cruise Industry, transport companies (trucking and shipping), logistics and technologies companies, forestry, as well as the Northland Chamber of Commerce and Northland Inc. All of these submitters set out the positive impact an expanded port operation would have not only on their own business, but the local, regional and national economy.
119. The Applicant suggested that the following would also have positive effects and/or provide significant environmental enhancement or other initiatives proposed, including⁴⁵:
- *Harbour restoration and other initiatives will be enabled through the Kaitiaki Group and associated Kaitiaki fund to be established through conditions of consent associated with Northport's cultural mitigation proposal.*
 - *The Integrated Marine Planning or "Sea Change" initiative provided for by conditions, which aims to facilitate integration of the full spectrum of interests towards enhancing the wellbeing of the marine environment.*
 - *Roosting habitat for variable oystercatcher and NZ dotterel will be provided through the proposed high-tide bird roost.*
 - *The pocket park, cycleway/walkway, and water taxi facility will create a range of land and sea-based recreation opportunities (including fishing, swimming, observing port operations from a safe location, and socialising).*
 - *The contribution to protect indigenous duneland vegetation in the Ruakākā area required by conditions.*

⁴³ Table 1 and paragraph 47 of Mr Akehurst's evidence.

⁴⁴ Paragraph 24 and verbal submission of Marsden Maritime Holding -12 October 2023.

⁴⁵ Paragraph 16.2 of the interim reply submissions.

120. While we accept these initiatives of themselves may well have positive effects or environmental enhancement, they have been provided to assist in, or addressing the adverse effects of the proposal. To 'list' these under the headings of positive effects is not correct in our view, and would be 'double counting' these as they (mostly) are required to avoid, remedy or mitigate (or offset) the adverse effects of the proposal.
121. That said, we accept there would be important and significant positive effects from granting the consents sought; significant economic and social benefits; not just to Northport but the Northland and New Zealand economy by providing for an expanded and efficient port providing access for a range of products, and improving the efficiency and resilience of the national port network.

Economics

122. Mr Akehurst provided an Economic Impact Assessment (EIA) as part of the application as well as expert evidence. We have partially addressed this above under the Positive Effects section.
123. The Northland Regional and Whangārei District Councils appointed Mr Clough of NZIER to provide a peer review of the Market Economics Report (Mr Akehurst) into the potential economic effects of Northport's expansion. While the two economists differed on the scale of the impact and the preferred model to use for assessing the economic impact of the proposal, there is broad agreement between them that the proposal will likely generate positive economic effects. On this basis we conclude there is little in contention between the economists about the potential economic benefits.
124. As Mr Akehurst set out that the EIA established four potential 'future scenarios' to highlight realistic potential trade tasks that could be handled by Northport in the long term. These future scenarios included: Business-as-usual (BAU); North Auckland Imports (NAI); Upper North Island Ports Constrained (UNIPC); and North Auckland Growth (NAG). In broad terms, he stated that the UNIPC scenario represents a high trade task future, NAG represents a low trade task future and NAI a mid-scenario.
125. Mr Akehurst said that the economic impact assessment reveals⁴⁶:

- "(a) Northport has an important regional role as part of the national port network. In terms of its economic role, the Port currently facilitates approximately \$438 million in value added and the equivalent of 6,300 jobs in the Northland economy.*
- b) Northport's role is likely to change significantly in the future, mainly as a result of changing trade patterns due to constraints in the Upper North Island port network. There is uncertainty about the future, but all four of the modelled future scenarios (including BAU) show Northport's role expanding over the coming three decades.*

⁴⁶ Paragraph 15 of Mr Akehurst's evidence.

(c) *The change in operational activities (the Port as a business), as a result of the proposed expansion, and any subsequent change in supply chain effects, are relatively small compared to the facilitated effects due to changing trade patterns facilitated by the proposed expansion of the Port.*"

126. Mr Akehurst opined that all of the future scenarios modelled indicate that Northport will need to invest in infrastructure upgrades, which include wharf extensions and port area reclamation. He further set out that *"in two out of the four scenarios modelled (NAI and the UNIPC), Northport may outgrow even the expanded port (i.e. including Berth 4 yet to be constructed) as early as 2032. This is based on expected demand for container handling, driven mostly by demands from outside of the region" – "and that in three of the other forecast scenarios (NAI, UNIPC and the NAG) (and depending on actual and forecast trade demands), the proposed expansion could be required by 2036"*⁴⁷.
127. While we accept, as does Mr Akehurst, that the economic projections have been based on the best available information and these assumptions will contain uncertainties, we accept that the full potential of Northport cannot be achieved (along with the social and economic benefits to people and communities) unless at least some port expansion is enabled. As stated by Mr Akehurst – *"Northport might require additional berth capacity as early as 2032 to develop its container capacity to respond to changing economic needs"*⁴⁸.
128. Given the economist's view about the need and timing of any expansion, and even accepting the uncertainty of any modelling, it is difficult, in our view, to justify a 20-year lapse date (was 35 years as notified). This was a significant issue in contention between a number of parties, including the Applicant, NRC and PTITB. We address this matter later in this decision.
129. Notwithstanding the above, Ms Chetham giving cultural evidence on behalf of PTITB, did not think the Applicant had made a strong economic case for the port expansion due to the lack of adequacy of the assessment of alternatives and lack of full Multi Criteria Analysis including cultural considerations (including economics). We address the cultural values and effects from this proposal later in this decision.
130. As set out in the Cultural Effects Assessment (CEA)⁴⁹, insufficient analysis and evidence had been provided to determine the economic effects (whether positive or adverse) of the proposal on Patuharakeke and its taonga. It stated⁵⁰:

"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

⁴⁷ Paragraph 18 of Mr Akehurst's evidence.

⁴⁸ Paragraph 19 of Mr Akehurst's evidence.

⁴⁹ Provided as part of the section 92 response.

⁵⁰ Page 46 of the CEA.

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.”

131. The Applicant addressed cultural economic impacts in its Interim Reply submissions⁵¹:

“As set out in opening legal submissions⁵² and evidence⁵³ for Northport, and by many submitters supporting the Proposal, there are very significant positive economic benefits to the Whangārei district and Northland region in connection with the Proposal. These benefits have been quantified in the range of \$22-34 million per year in direct value added; and \$1.097-1.194 billion per year in facilitated value added.⁵⁴ These economic contributions will assist the community to provide for its social, cultural and economic wellbeing for years to come.”

While Northport has not attempted to quantify economic impacts between Māori and non-Māori, this is not a failing of the application. Indeed, this would be a very challenging exercise to achieve.”

132. Policy D.2.2 of the PRP-AV states:

Social, cultural and economic benefits of activities

Regard must be had to the social, cultural and economic benefits of a proposed activity, recognising significant benefits to local communities, Māori and the region including local employment and enhancing Māori development, particularly in areas of Northland where alternative opportunities are limited.

133. We are satisfied that the Applicant has had regard to the social, cultural and economic benefits of a proposed activity – and that there are likely to significant benefits from the proposed activity as outlined by Mr Akehurst, albeit not necessarily as set out in the CEA.

⁵¹ Paragraphs 4.21 and 4.23 of the Applicant’s interim reply submissions.

⁵² Paragraph 3.5 of the Applicant’s opening legal submissions.

⁵³ Mr Akehurst’s evidence-in-chief.

⁵⁴ Mr Akehurst’s evidence-in-chief, as summarised at para 3.5(i) of the opening legal submissions for Northport. We record here also that Mr Clough confirmed in response to questioning by the Panel on Hearing Day 1 that he doesn’t fundamentally disagree with Mr Akehurst’s assessment.

Coastal Processes (including the hydrodynamic and morphodynamics modelling)

134. An assessment of the effects of the proposed port expansion was prepared for the Applicant by Mr Reinen-Hamill⁵⁵, an experienced coastal engineer. The assessment described the physical coastal setting of Whangārei Harbour as a meso-tidal drowned river valley which is relatively shallow due to extensive intertidal flats. It also described the nature of the port site's sediment, typical suspended solids concentrations, tidal currents and wave climate. The assessment of the existing physical processes was undertaken through analysis of historic information and newly acquired field investigations together with calibrated and verified numerical modelling.
135. The assessment considered both the construction and long-term effects on coastal processes of the proposed dredging (both capital and maintenance), the reclamation for port activities and the construction of a bird roost for avifaunal mitigation. It drew on the results of a suite of numerical modelling exercises which simulate the hydrodynamics, morphodynamics and dredge plume dispersion⁵⁶. This modelling was undertaken by MetOcean Solutions.
136. The Applicant's modelling methodology and results were described by Dr Beamsley in his evidence. The MetOcean reports were informed by a suite of previous studies undertaken in the Whangārei Harbour since 2012 including wave, current and sediment dynamics models initiated by CINZ.
137. Dr Beamsley describes the modelling as⁵⁷:
- *“... Hydrodynamic modelling: we updated the bathymetry with the proposed dredge footprint and ran a full month of hydrodynamics (two spring/neap tide cycles).*
 - *Morphodynamic modelling: we modelled morphological change in the vicinity of the proposed dredge footprint and reclamation over a five-year period.*
 - *Sediment plumes modelling: we modelled sediment plumes which may be generated during the proposed dredging operations.”*
138. The port's site is also proximate to the consented dredging site of the harbour channel. Consent for this work is held by CINZ. The Applicant's assessment has included consideration of the effects with and without the CINZ dredging. It stated⁵⁸:
- “Effects have been considered based on hydrodynamic and morphodynamic modelling carried out by MetOcean Solutions Ltd (MOS, 2022 a and b) without the CINZ channel deepening project being in effect. However, MOS (2018) report on morphological response to capital dredging and land reclamation considered*

⁵⁵ AEE Appendix 10, Vision for Growth Port Development: Coastal Processes Assessment.

⁵⁶ AEE Appendix 9, Hydrodynamic, Morphodynamic, and Dredge Plume modelling reports.

⁵⁷ Paragraph 12 of Dr Beamsley's evidence in chief.

⁵⁸ AEE Appendix 10, Executive Summary, Vision for Growth Port Development: Coastal Processes Assessment.

morphological change both with, and without, the CINZ channel deepening. They concluded there was little difference and did not expect either situation to measurably change morphological change in the vicinity of the NPL project. Therefore, the findings and conclusion will apply whether or not the channel deepening project is realised."

139. Dr Beamsley's opinion for the site's hydrodynamics was that⁵⁹:

"...the results of the modelling showed only a minor effect of proposed layouts on the current field in the nearshore area surrounding the port. Small decreases in current speed near the reclamation area indicates a potential for an increase in sedimentation. Calibration and validation of the hydrodynamic model suggest the model satisfactorily reproduce the range of hydrodynamic conditions in the environs."

140. His opinion for the site's morphodynamics was that⁶⁰:

"The effect of the proposed design on the morphodynamics is expected to be limited to the immediate port environs. Significant differences observed between the existing and design scenarios are mainly attributed to the combination of dredging (deepening), slope changes, and the transport of sand wave features previously characterized in this region. Despite some predicted changes to the sediment transport and bathymetry within Marsden Bay, model results suggest these will not alter the bay morphology."

141. Dr Beamsley's opinion for the site's dredging, sediment plume and deposition footprints was⁶¹:

"The proposed reclamation has a limited impact on general plume dispersion patterns with a slight flow deflection in its vicinity. Predicted deposition fields for the proposed bathymetry (i.e., post-dredging) indicate possible sediment accumulation near the northwest and southeast edges of the new turning basin."

142. Dr Rautenbach reviewed the MetOcean modelling reports on behalf of the Councils. Following initial concerns with respect to the validation of the hydrodynamic modelling he concluded that the MetOcean reports utilise an appropriate numerical modelling approach⁶².

⁵⁹ Paragraph 13 of Dr Beamsley's evidence in chief.

⁶⁰ Paragraph 14 of Dr Beamsley's evidence in chief.

⁶¹ Paragraph 14 of Dr Beamsley's evidence in chief.

⁶² Paragraph 264 of the section 42A report.

143. Mr Reinen-Hamill's view was that the construction effects associated with the forming of the reclamation and the seawall that protects it, and the dredging to locally deepen part of the port area can be managed by implementing effective controls to reduce the release of fine sediment and therefore the likelihood of sedimentation outside the dredged area. With these controls in place Mr Reinen-Hamill's opinion was that:

"Construction effects on physical coastal processes outside the port area for the reclamation and seawalls is considered negligible⁶³."

144. In a similar vein Mr Reinen-Hamill considered the construction effects of the dredging, subject to effective controls, will also be negligible⁶⁴. He recommended that a monitoring regime⁶⁵:

"...should be included in the construction management plan to determine the actual level of plume extent and concentration. Mitigation for the potential risk could include sediment curtains around the dredge vessel or operating during limited periods associated with low tidal flows if required."

145. Mr Reinen-Hamill's opinion was that the resulting changes to the currents and wave climate caused by the eastern reclamation the overall cumulative effect on coastal processes in the vicinity would be "moderate". He considered the effects on coastal processes for the other inner harbour, inlet and Bream Bay areas would be minor⁶⁶.

146. With respect to the proposed bird roost provided for avifauna mitigation (addressed in more detail below) Mr Reinen-Hamill's view was that in the site's⁶⁷:

"...relatively low energy environment and over the long term the inclusion of sand and the ongoing top-ups will have a beneficial effect on coastal processes by increasing the sediment budget within Marsden Bay, offsetting to some degree sea level rise effects and will potentially reduce the overwash and landward retreat of the existing barrier beach."

147. A number of submissions were made with respect to the effects of the proposed port expansion on coastal processes⁶⁸. One submission was in support while 19 submissions were in opposition or support in part. The principal concerns raised by the opposing/partial support submissions were:

- The possible mobilisation of sediment, potentially contaminated, and the effects of its deposition in the surrounding environment including the nearby Marine Reserve, the access to Marsden Cove Marina and adjacent port infrastructure owned by CINZ.

⁶³ Paragraph 39 of Mr Reinen-Hamill's evidence-in-chief.

⁶⁴ Paragraph 41 of Mr Reinen-Hamill's evidence-in-chief.

⁶⁵ Paragraph 42 of Mr Reinen-Hamill's evidence-in-chief.

⁶⁶ Paragraph 11 of Mr Reinen-Hamill's evidence-in-chief.

⁶⁷ Paragraph 12 of Mr Reinen-Hamill's evidence-in-chief.

⁶⁸ Appendix B, s42A Staff Report. Key Issues raised in submissions.

- The potential for changes in water currents to affect accretion and erosion of nearby banks and consequential effects on shellfish populations and swimmer safety.
148. Relief sought, particularly from MCL, Marsden Cove Canals Management Ltd (MCCML) and CINZ, centred on the imposition of monitoring conditions and remediation in the event of impacts on their interests being realised. Agreement was reached between Northport and these parties resulting in additions to the proposed consent conditions⁶⁹.
149. Professor Bryan presented expert evidence on behalf of PTITB in relation to coastal processes and hydrodynamics. She summarised her key concerns being⁷⁰:
- *“The numerical modelling is not well validated or calibrated. Without this validation or calibration, the accuracy of numerical modelling scenarios cannot be sure, and therefore it is not possible to say with any confidence the effects of the proposed reclamation are minor. Other reports rely on numerical modelling, and so the lack of confidence would also influence the conclusions of these other reports.*
 - *A monitoring plan prior to any reclamation, which includes spatially resolved current measurements and suspended sediment measurements (along with the proposed bathymetric surveys), would ensure that the implications to coastal processes in the wider estuary could be assessed (beyond the sandy areas around the entrance).*
 - *Residence times and flushing times are a useful way to understand the effect on wider water quality in the estuary (as highlighted in the NIWA peer-review). Hydrodynamic measurements would need to be collected for more than a spring-neap cycle (preferably a month).*
 - *Suspended sediment measurements tend to be dominated by episodic rare events, and therefore should need a longer monitoring period to establish baselines.”*
150. An Expert Conference session on Coastal Processes and Planning was held on 22 September 2023. The coastal process experts attending were Mr Reinen-Hamill, Professor Bryan, Mr Davis for MCL and MCCML⁷¹ and Dr Treloar for NRC. Mr Reinen-Hamill agreed to provide further information to respond to the model validation questions and the effects of sea level rise raised by Professor Bryan⁷².

⁶⁹ Conditions 108 to 116 and 202 to 205, Draft proposed NRC conditions: Northport Ltd (Updated/ Final Version 16 May 2024.

⁷⁰ Paragraphs 5.1 to 5.4 of Professor Bryan’s Evidence.

⁷¹ Noting that Mr Davis’ evidence was subsequently withdrawn, and we have not considered it in this decision.

⁷² Paragraph 3.1, Joint Witness Statement in relation to: Coastal Processes and Planning.

151. In response to the questions raised by Professor Bryan, both Dr Beamsley and Mr Reinen-Hamill provided further evidence on the calibration of the hydrodynamic and morphodynamic models and the potential effects of sea level rise⁷³. They reiterated that the modelling results are based on their project specific studies but are further complemented with a range of proximate relevant observations and investigations. Mr Reinen-Hamill summarised their position as⁷⁴:

“The modelling results represent observed trends from the physical data and observations that have been carried out for many years, and supported outcomes from earlier modelling studies, so I am confident that the results of the modelling can be applied to provide understanding of the relative changes of the proposed development as well as supporting the assessment of the location, magnitude and scale of effects.”

152. With respect to the potential effects of sea level rise in combination to the effects of the proposed development Mr Reinen-Hamill considered that⁷⁵:

“...the relative effect of the proposal on sea level rise should also be minor; with the exception of the likely trend of a change in the tidal inlet from ebb dominated to flood dominated conditions which could locally increase the rate of sedimentation to the east of the port due to the presence of the reclamation. This potential effect would be identified in the proposed monitoring of the area already included in the consent conditions.”

153. The Councils sought further advice on the questions raised by Professor Bryan. The Councils' advisor on the effects of the proposal on coastal processes, Dr Treloar, provided a further technical memo in which he addressed the following matters:

- The adequacy of the numerical model calibration process that MOS have applied to their model systems and hence the reliability of MOS's modelling results near Marsden Point.
- The likely effects of sea level rise, perhaps by 1m at circa 2100.
- Model suitability to Northport's project.

154. Dr Treloar's opinion was that⁷⁶:

“...MOS's model system is suited to the investigations undertaken by them for Northport's proposed port development. Moreover, in terms of investigating changes in current characteristics, these changes have been determined on a like-for-like basis – that is, the same physically realistic model has been used.

⁷³ Dr Beamsley's and Mr Reinen-Hamill's rebuttal evidence.

⁷⁴ Paragraph 6 of Mr Reinen-Hamill's rebuttal evidence.

⁷⁵ Paragraph 8 of Mr Reinen-Hamill's rebuttal evidence.

⁷⁶ Section 3.3, Dr Treloar, Technical Memo- Turbidity and Coastal Processes.

Hence, any deficiencies would be the same for pre-development and post development calculations.”

155. With respect to sea level rise Dr Treloar’s view was that there would likely be no discernible change in the net sediment transport characteristics of the waterway. He added that, based on his experience with other sites, changes would be very slow and occur over a time-scale of about a century. Dr Treloar’s opinion was that⁷⁷:

“...subject to agreed conditions, the actual and potential adverse effects of the proposal on coastal processes will be adequately managed.”

156. One of the issues in contention was whether there was sufficient information to be able to make a decision, mainly in relation to questions about the validation and calibration of the hydrodynamic modelling, and reliance on its outputs by a number of the marine related experts in relation to the scale of effects. For the reasons we have set out above, we are satisfied that the matters raised in relation to the potential effects of the proposal on coastal processes have been appropriately addressed, and formed a sound basis on which a number of the experts for the Applicant based their expert opinion. Furthermore, we find we have sufficient and reliable information to make our decision.

Marine ecology⁷⁸

157. The topic of marine ecology was in contention between the marine scientists. While some specific issues were raised (we address these below) the most significant issues appeared to be whether:

- An appropriate assessment method had been used;
- Sufficient data had been provided to assess ecological effects;
- The systems against which ecological effects were assessed are appropriate; and
- Any major types of effect have been missed.

158. In this respect expert conferencing was held between the marine expert and the planning experts. All the marine ecology experts agreed that appropriate assessment methods had been used in the proposal. They also all agreed that data collection and presentation of results were appropriate and the characterisation of the biodiversity values of the harbour were appropriately addressed. They also agreed that the three scales used in the application - (footprint, outer harbour ecological zone (OHEZ), whole harbour) were appropriate descriptors.

159. In terms of the effects on intertidal sediment habitats and macrofauna - Policy D.2.18, subsection 5(a) of the PRP- AV states:

Manage the adverse effects of activities on indigenous biodiversity by:

⁷⁷ Section 3.3, Dr Treloar, Technical Memo- Turbidity and Coastal Processes.

⁷⁸ Note: Marine Mammals and Avifauna is addressed separately below.

5) *assessing the potential adverse effects of the activity on identified values of indigenous biodiversity, including by:*

a) *taking a system-wide approach to large areas of indigenous biodiversity such as whole estuaries or widespread bird and marine mammal habitats, recognising that the scale of the effect of an activity is proportional to the size and sensitivity of the area of indigenous biodiversity, [underling is our emphasis].*

160. Importantly, in our view this policy directs that a system-wide approach is taken for assessing effects on indigenous biodiversity. We note that despite the clear direction in the policy the experts disagreed on the appropriate assessment scale. While all of the experts agreed that effects on intertidal sediment habitats and macrofauna would be moderate, Dr Kelly and Dr Lohrer disagreed about the appropriate scale to use. Dr Kelly considers the appropriate scale is the harbour scale, whereas, Dr Lohrer considered that the scale should be OHEZ. Mr Sneddon (Applicant's peer review) and Dr Bulmer⁷⁹ agreed with Dr Lohrer.

161. Dr Lohrer considered that the effects were at the upper range of moderate at the OHEZ scale. Dr Kelly opined that effects were at the lower range of moderate at the harbour scale. Dr Kelly stated⁸⁰:

"...I consider my conclusion of a moderate effect at the harbour scale to be more conservative than Dr Lohrer's one of a moderate effect at the OHEZ, given the harbour is substantially larger."

162. Notwithstanding the above, both Drs Kelly and Lohrer agreed that the overall difference between the experts was relatively small. However, we record that in terms of Policy D.2.18, subsection 5(a) of the PRP- AV, we agree with Dr Kelly.

Cumulative Effects

163. There was a difference in opinion between the experts regarding "cumulative effects" and whether they had been appropriately assessed. Drs Lohrer and Bulmar opined that the cumulative effects had not been addressed appropriately; Dr Kelly disagreed. This was addressed in the experts' evidence and the JWS.

164. Dr Lohrer considered that; the individual effect recorded in the section 42A report⁸¹, suspended sediment concentration, and deposited sediments had been considered individually but not cumulatively. He also considered that effects on food webs were not considered cumulatively.

⁷⁹ Dr Bulmer noted that there was some disagreement amongst the modelling experts, and that his conclusion was dependent on the Applicant's modelling results not differing appreciably from those provided in the Application.

⁸⁰ Paragraph 140 of Dr Kelly's Evidence-In-Chief.

⁸¹ Section 42A report - Appendix C3, section 5.1.2 conclusion table on pages 7-8.

165. Drs Lohrer and Bulmer considered that cumulative impacts of climate change related effects were not adequately considered. These include increased inundation time of intertidal habitats and altered hydrodynamics (sea level rise), increased frequency and severity of storms (and thus sediment loading), increased atmospheric and sea surface temperatures, and decreased ocean pH.
166. Dr Kelly disagreed with both Drs Lohrer and Bulmer. He considered the cumulative effects had been appropriately addressed setting out the reasons for this in this evidence-in-chief⁸² and rebuttal (in relation to Dr Bulmer). With respect to climate change, Dr Kelly set out that the effects of climate change are a global issue that would have a fundamental impact on New Zealand's marine environment, and that the effects of this proposal would be dwarfed by those broader scale impacts.
167. He stated⁸³:
- "More broadly, available information shows that effects of climate change are already significant and that they will continue to increase (Intergovernmental Panel on Climate Change, 2023). Against that background, any cumulative effects of the proposed port development will be negligible."*
168. We note that the Applicant's legal counsel (in their opening legal submissions) set out a summary of the approach adopted by Northport's expert team, including Dr Kelly, towards considering/assessing cumulative effects⁸⁴. We agree with those legal submissions.
169. Having heard the evidence, it is our view that Dr Kelly, and the other Northport witnesses, have properly assessed cumulative effects, including by the appropriate recognition of the "existing environment"⁸⁵.

Kaimoana shellfish

170. The issue of kaimoana shellfish was also a matter in contention between the experts. Dr Kelly and Mr Sneddon considered the effects on kaimoana shellfish to be low at the harbour scale. They considered that the disruption to propagule dispersal by the proposal would be very small compared to the disruption from existing structures. Drs Lohrer and Bulmer considered that the effects to be moderate at the OHEZ scale.

⁸² Paragraphs 87 – 100 and 142 of Dr Kelly's evidence-in-chief, and Paragraphs 4-9 of his rebuttal evidence.

⁸³ Paragraph 9 of Dr Kelly's rebuttal evidence.

⁸⁴ Paragraphs 6.23 - 6.27 of the Applicant's opening legal submissions.

⁸⁵ We have not set out the disagreement between some of the marine experts on the 'existing environment'; suffice to say the Applicant's legal counsel, planning experts and NRC's planning expert made it clear to us what the 'existing environment' is in the context of this proposal – and we agree. We note that we find Dr Kelly had understood and undertaken his expert assessment in terms of what agree is the 'existing environment'.

171. As set out by Dr Kelly, the key shellfish likely to be, or that will potentially be affected by the proposed activities are cockles (tuangi), pipi, and possibly scallops (tipa). Cockles are a ubiquitous feature of intertidal sites throughout much of the harbour, whereas the distributions of pipi and scallops are patchier. Green-lipped mussels (kuku) may also be present in the OHEZ, but have not been observed in surveys within the areas where the proposed activities will occur.
172. Drs Lohrer and Bulmer considered that there would be adverse effects on kaimoana shellfish arising from the proposed activities disrupting ecological connectivity. Dr Kelly addressed this in this evidence-in-chief in relation to the concerns raised by Dr Lohrer⁸⁶ and paragraph 7 of his rebuttal evidence in relation to matter raised by Dr Bulmer.
173. While we do not repeat all of Dr Kelly's evidence, we do quote the following⁸⁷:
- "The rationale from my conclusion is largely provided in Paragraphs 87 to 100 above, and I do not repeat that. I also note that sediment plumes and deposition associated with the dredging are predicted to be largely confined to subtidal channels. Based on that, there appears to be little potential for sediment plumes to adversely affect intertidal pipi and cockle beds."*
174. Attached to the Addendum section 42A report was Dr Lohrer's technical memo – Marine Ecology. Section 3.1 was – "Suitable mitigation for significant marine ecological effects". He set out in that section:
- "Potential mitigation should be focused on shellfish enhancement, as shellfish have positive effects on biodiversity, food webs, water clarity and cultural/amenity values.*
- For scallops, juvenile scallops could be collected as wild caught spat (in spat collectors) and re-distributed to enhance beds and former beds in the subtidal zone for pipi (and also Atrina zelandica horse mussels), juveniles will most likely need to be reared from gametes to spat in a recirculating aquaculture system and re-seeded to beds (such as Mair/Marsden Bank) during windows of opportunity that optimise survivorship and growth.*
- I support the proposed Shellfish Repopulation Plan conditions in the set attached to the 42A Addendum."*
175. Dr Lohrer's technical memo also addressed and sought conditions seeking Ecological assurance monitoring for shellfish and seagrass, as well as seeking a closed dredging season⁸⁸. Mr Masfield addressed these issues in the Addendum section 42A report⁸⁹. Mr Masfield recommended conditions of consent including: a shellfish repopulation plan, ecological assurance monitoring and a closed dredge season.

⁸⁶Paragraphs 87 – 100 and 142 of Dr Kelly's evidence-in-chief.

⁸⁷ Paragraph 142 of Dr Kelly's evidence-in-chief.

⁸⁸ Sections 3.2 – 3.4 of Dr Lohrer's technical memorandum – 16 November 2023.

⁸⁹ Section 2.7 Marine Ecology Effects in the Addendum section 42A report.

176. Northport's Legal Counsel addressed these matters in some detail in their Interim and Final Reply Submissions. We address these below.
177. It is the Applicant's position, particularly relying on the evidence of Dr Kelly and Mr Reinen-Hamill, that it does not agree with the suggestion that conditions requiring a shellfish repopulation plan be included. The Reply set out⁹⁰:

"The issue of declining harvestable shellfish populations at Te Poupuwhenua / Marsden Point is not new. It has been observed anecdotally for some time. The evidence acknowledges that there has been a major decline in shellfish in recent years, including Mair/Marsden Bank pipi. Despite many attempts to understand the cause of this decline, there is no clear understanding of the cause(s) – although it is worth recording that, given the timing, the cause(s) is clearly independent of the Proposal. Notwithstanding this, given the significance of Mair and Marsden Banks, including to the local community/iwi/hapū, Northport's experts⁹¹ have carefully considered potential adverse effects on these features. More specifically, Dr Lohrer has raised issues around ecological connectivity and sediment issues potentially impacting larval transport of shellfish. These concerns are directly rebutted by Dr Kelly.

While Northport fully agrees with comments such as that from Dr Lohrer that he "would like to see a bolstering of the pipi population" in the harbour, it must be remembered that the effects of Northport's Proposal on shellfish, outside the immediate footprint, have been assessed to be low, and that wider, existing, environmental concerns are not something that Northport is, or can be, solely or primarily responsible for through this consent process or otherwise."

178. For the reasons set out above, we agree with the Applicant.
179. In terms of additional marine ecology assurance monitoring, it was the Applicant's position that Dr Kelly had designed a comprehensive marine ecology assurance monitoring scheme, which would be secured through conditions proposed by Northport. On this basis, additional requirements for assurance monitoring are not justified. We agree.
180. In terms of a "closed dredging season", the Interim Reply Submissions pointed out the lack of evidentiary basis for, and potentially onerous implications of, a condition prohibiting capital dredging between 1 October and 31 January in any given year.
181. Notwithstanding this, the Applicant's position as recorded in the Final Reply Submissions is⁹²:

"While not resiling from that position [in the paragraph above], Northport has agreed to:

- (a) a new condition which restricts the consent holder from undertaking capital dredging between 1 October and 31 January in two successive years; and*

⁹⁰ Paragraphs 4.19 and 4.20 of the final reply submissions.

⁹¹ Including in particular Mr Reinen-Hamill and Dr Kelly.

⁹² Paragraph 4.27 of the final reply submissions.

(b) a new condition which prohibits maintenance dredging between 1 October and 31 January, “unless necessary to do so as a result of unforeseen events or there is no practicable alternative timing”. This is a pragmatic step, reflecting Northport’s intent to schedule maintenance dredging outside that ecologically important time period, but acknowledging the practical importance of maintaining a safe and effective channel/turning basin.

182. We are satisfied that the marine ecological effects (addressed above) have been appropriately assessed and addressed, and any adverse effects identified and mitigated to the extent necessary by the consent conditions recommended by the Applicant had we granted consent; and that the proposal is consistent with the relevant objectives and policies of the statutory planning documents.

Marine Mammals

183. Dr Clement, a marine scientist specialising in marine mammals, presented expert evidence on the potential effects of the proposed works on marine mammals⁹³. She considered the level of the proposed activities but also the spatial scales relevant to the marine mammal species involved. The assessment included collation of available information on marine mammal that use the Whangārei Harbour and the wider area of interest. This was complemented with an underwater acoustic programme consisting of the deployment four acoustic monitors in the vicinity of the proposed works.
184. Of the 27 cetacean (whales, dolphins and porpoises) and two pinniped (seals and sea lions) species reported by Dr Clement to have been recorded along the north-eastern coastline of the North Island she considers several marine mammal species may be present within the area of interest. This includes bottlenose dolphins, common dolphins, orca, Bryde’s whales, NZ fur seals, leopard seals, southern right whales and humpback whales.
185. It was Dr Clement’s view that, based on current knowledge, the proposal area is not ecologically more significant in terms of feeding, resting or breeding habitats for any marine mammal species relative to other regions along the north-eastern coastline.
186. She described increasing underwater noise as a principal effect from the proposed construction activities on marine mammals as they rely heavily on underwater sounds for communication, orientation, predator avoidance and foraging. She describes the levels of underwater noise generated by reclamation and construction of rock walls as generally expected to be several orders of magnitude less to those from pile-driving and dredging activities. In Dr Clement’s view the strongest response to underwater noise by these general construction activities could be temporary avoidance by marine mammals of the Whangārei Harbour entrance while the activities are occurring, but more likely, directed movement away from the immediate vicinity of the works until the activities have stopped.

⁹³ AEE Appendix 14, Potential effects of the proposed Northport reclamation on marine mammals in the Whangareia Harbour region.

187. Other effects considered by Dr Clement included pile driving noise, dredging noise, vessel strike, operational loss and possible entanglement (e.g. from lost ropes, support buoys, nets, bags and plastics), ecological effects of habitat and prey species and cumulative effects. A key conclusion was that the underwater noise from pile driving is the main factor that could adversely affect marine mammals in the vicinity of the works. With the potential for temporary hearing impairment near the piling source for several endangered marine mammal species she considered that a range of mitigation measures were required to meet the best practicable option for managing the underwater noise.
188. Nine submitters opposed the application citing concerns over the effects on marine mammals during both the construction and operational phases of the proposed port expansion. In particular these are:
- Insufficient assessment of the risk on marine mammals from shipping traffic and ship strike.
 - Protection of the habitat of Tohorā is necessary as a taonga of the Whangārei Harbour.
 - Inadequate assessment of taonga species (including marine mammals) and the relationship of Tāngata Whenua with those species.
 - The proposal will have a negative impact on marine mammals from the loss of habitat and limited entrance to the harbour.
 - Underwater noise can cause effects on marine mammal behaviour, acoustics/changes in communication and physiological injury – particular concerns raised regarding impacts on seals.
189. The Council's expert on marine mammals, Ms McConnell, reviewed the Applicant's assessment of effects of the proposal on marine mammals. She was in agreement with Dr Clement's assessment of the existing environment and the species which frequent the area of interest⁹⁴.
190. Ms McConnell has also assessed the applicant's proposed methodology to mitigate the effects of both the construction and operational phases of the port's expansion. She concluded that⁹⁵:
- "Subject to conditions, the actual and potential effects on threatened marine mammal species can be avoided as required by the NZCPS."*
191. Expert evidence was provided by Dr Brough on behalf of PTITP. It was his opinion that the while the best available information was used by Applicant's and Councils' experts to determine the potential impacts of the project on marine mammals the available information was inadequate. His view was that further information on the occurrence/abundance, habitat use and seasonality of the marine mammals of interest was critical to the effectiveness of any mitigation of the potential effects on marine mammals.

⁹⁴ Paragraph 3.1, section 42A report, Technical Memo- Marine Mammals.

⁹⁵ Paragraph 5.2, Section 42A report, Technical Memo- Marine Mammals.

192. Dr Brough's opinion was that the applicant's assessment was largely focused on the construction phase of the project and that the potential long term and cumulative effects resulting from an increase in port activity, particularly the effects of increased ship traffic had been omitted. His opinion was that⁹⁶:

"While I agree that the ecological effects on marine mammals from the proposed activities are negligible, I feel that there should be some consideration of potential ecological effects of increased shipping due to the expansion of the port."

193. Dr Clement summarised the points of agreement and disagreement with Dr Brough stating⁹⁷:

"Overall, Dr Brough seems to agree with my overall assessment of the potential effects, and the mitigation measures required, but disagrees with my interpretation of the relevant species' occurrence patterns and trends as well as how informative (or not) are the datasets and sources used."

194. Dr Clement further opined that⁹⁸:

"... each resource consent project does not necessarily need to fill in 'all the missing' knowledge gaps for the relevant marine mammal species in order to appropriately assess effects associated with those species. Often it is not possible or practicable to do so. As I have noted in my report and evidence-in-chief, in the absence of adequate population information, the potential risks to marine mammal species associated with various anthropogenic activities can still be assessed and the species adequately protected based on what we do know."

195. We accept the position that an absence of adequate population information does not preclude the ability to adequately assess and protect marine mammals from the effects of the port's expansion. In this respect the Applicant proposes to manage the effects of the proposed construction works on marine mammals through the implementation of a Marine Mammal Management Plan (MMMP). A draft of this plan is included in the application and is to be included as a part of the project's Construction Environmental Management Plan (CEMP) prior to construction.

196. The measures required in the MMMP include⁹⁹:

- Procedures for measuring underwater noise and establishing Marine Mammal Observation Zones.
- Pile driving methods aimed at minimising the effects on marine mammals
- Training and experience for construction staff and marine mammal observers,

⁹⁶ Paragraph 10.1 of Dr Brough's evidence.

⁹⁷ Paragraph 5 of Dr Clement's rebuttal evidence.

⁹⁸ Paragraph 14 of Dr Clement's rebuttal evidence.

⁹⁹ Draft Proposed NRC condition 101, Updated Final version 16 May 2024.

- Reporting and logging of marine mammal sightings and prohibition procedures if marine mammals are sighted.
197. Measures are also proposed through the recommended conditions of consent¹⁰⁰. These also propose the establishment of Marine Mammal Observation Zones in the vicinity of the pile driving prior to commencing any pile driving activities. Suitably trained personnel are to act as observers to searching for marine mammals during daylight hours prior to and during pile driving activities. The sighting of marine mammals within defined areas will trigger the pile driving activity to cease while the marine mammals remain in the specified area.
198. Measures proposed to minimise marine mammal ship strike during the port's operational phase are also included in the recommended conditions of consent¹⁰¹. These include the promotion of the adoption of the Hauraki Gulf Transit Protocol which sets out watch keeping, speed limits and reporting protocols.
199. Overall, we are satisfied that the matters raised in relation to the protection of marine mammals have been addressed and any effects on them would be appropriately avoided or mitigated.

Avifauna

200. We record at the outset that for the reasons that follow, we prefer the evidence of the Applicant's experts (Dr Bull, Mr Hood and Dr Mitchell) and Mr Masefield, to those of the submitters (DoC – Dr Beauchamp and Ms Kirk) and the NRC expert Ms Webb (accepting Ms Webb in some respects agreed with the Applicant's expert Dr Bull). We also agree with the Applicant's legal submissions on this topic, as opposed to those of DoC and Royal Forest & Bird Protection Society (Forest & Bird).
201. Expert conferencing between the avifauna experts and subsequently the planners was held. The JWSs set out the position of the respective experts (which we address below), noting that those positions were essentially maintained during the hearings process.
202. In terms of the avifauna experts' JWS Dr Bull and Ms Webb agreed that the level of impact on foraging habitat within the eastern reclamation footprint for variable oystercatchers is low and New Zealand dotterel is low at a harbour scale. Dr Beauchamp disagreed and contended the appropriate scale for assessment is local for the New Zealand dotterel and variable oyster catchers and the level of impact could be greater.
203. Dr Bull and Ms Webb agreed that the level of impact on roosting habitat within the eastern reclamation footprint for the same species is moderate at a harbour scale. Dr Beauchamp disagreed and contended the appropriate scale for assessment is local for the New Zealand dotterel and variable oyster catchers and the level of impact could be greater.

¹⁰⁰ Draft Proposed NRC conditions 68 to 82 Updated Final version 16 May 2024.

¹⁰¹ Draft Proposed NRC conditions 101 and 102 Updated Final version 16 May 2024.

204. All the avifauna experts agreed that the level of impact of operational lighting and pollution would be low to very low depending on the species. They agreed that the construction phase risks of mortality and injury are very low to the two species (identified as nesting), being variable oystercatcher and kororā. Also, all the avifauna experts agree that the operational risks of mortality and injury are low to very low for the species currently recorded nesting on the wider port site. We agree, and on this basis do not address these matters further, and find that that the relevant plan provisions are satisfied and any effects being no more than minor and appropriately addressed by the Applicant's proposed conditions of consent.
205. All the avifauna experts agreed that there was some at-risk and/or threatened bird species known to use the beach and intertidal area on the eastern side of the port. This was addressed in the expert evidence and the section 42A report. To address this the Applicant proposed a bird roosting area to be constructed on the western side of the port, ahead of construction of the reclamation itself, to provide suitable roosting habitat for various species, including NZ Dotterel and Variable Oystercatcher. This, together with a range of measures to be included in the Construction Environmental Management Plan (CEMP) would, as submitted by the Applicant, ensure that the effects on avifauna will be minor or less than minor. There was contention about whether the created bird roosting area would 'avoid' any adverse effects on the birds. This was the most significant avifauna issue before us and address it below.
206. With respect to the high tide roost all of the avifauna experts agreed that provision of a high tide roost is, in principle, an appropriate impact management measure. Dr Bull supported the proposed bird roost; Dr Beauchamp did not. Ms Webb and Dr Bull agreed that if the proposed bird roost was to be created, then additional conditions were required to ensure, that it was maintained, and that it should remain and not be limited to the 35 years duration of consent. We note that the conditions offered by the Applicant addressed this matter to our satisfaction.
207. However, the main difference between the experts was that both Dr Beauchamp and Ms Webb did not agree with Dr Bull's premise that the installation of a high tide roost before the construction of the proposed reclamation constitutes an avoidance measure. This was on the basis that the relevant 'policy tests', which we address in more detail below, was the avoidance of adverse effects on indigenous biodiversity.
208. It was Dr Bull's evidence¹⁰² that the "moderate" level of effect from permanent habitat loss on New Zealand dotterel and variable oystercatcher was associated with the permanent loss of high tide habitat, the proportion of the local populations utilising the high tide roost area, and the relative scarcity of such habitat in the wider Whangārei Harbour. It was her view that the purpose of the proposed high tide roost creation was to address this effect.

¹⁰² Paragraph 42 of Dr Bull's evidence-in-chief.

209. It was her opinion that constructing a nearby high tide roost prior to the reclamation construction would provide those birds currently roosting there an alternative location to roost. She further noted that the creation of the high tide roost prior to the commencement of the construction works, enables it to be viewed as an avoidance measure in relation to the loss of roosting habitat; but stated this *“would not be the case if it was constructed after the commencement of construction”*¹⁰³.

210. The location of the high tide roost was an issue discussed in the avifauna and planning expert conferencing. As set out in Dr Bulls’ evidence¹⁰⁴:

The rationale for the proposed location was provided in Section 6.7.1 of the avifauna assessment, and included the following:

- (a) Being reasonably close to the area lost;*
- (b) Be independent from the existing shoreline during high tide to provide separation from human and dog disturbance;*
- (c) The avoidance of a cockle bed; and*
- (d) An appropriate offset from the hightide shoreline and coastal wetland.*

211. Dr Beauchamp’s evidence was that the reclamation proposed to the east of Northport will result in the loss of what could be important foraging and roosting habitat for threatened and at-risk avifauna species and that the Applicant’s proposal to create a sandbank to the west of Northport to offset the loss of roost habitat was inappropriate, given¹⁰⁵:

- *It will result in loss of habitat for another at risk wader, the lesser knot.*
- *There is no certainty that any of the displaced New Zealand dotterels and VOCs will use it as a roost.*
- *These effects have not been fully quantified using a system-wide approach, given the absence of data on avifauna behaviour and movement both in Marsden Bay and the wider harbour, and the assertions that birds will move in specific ways and activities will be mitigated is not supported by evidence.*

212. On this basis he opined that the effects on threatened taxa would not been avoided.

213. We also note that Dr Beauchamp raised concerns around the impacts of the proposal on lesser knot, stating that: *“There was no assessments of the impacts on both the placement of the roost site...”*¹⁰⁶. Dr Bull recorded that this was not correct stating¹⁰⁷:

¹⁰³ Paragraph 18 of Dr Bull’s rebuttal evidence.

¹⁰⁴ Paragraph 20 of Dr Bull’s rebuttal evidence.

¹⁰⁵ Paragraphs 26 of Dr Beauchamp’s evidence.

¹⁰⁶ Paragraphs 61-66 of Dr Beauchamp’s evidence.

¹⁰⁷ Paragraph 19 of Dr Bull’s rebuttal evidence.

“Section 6.7 of the avifauna assessment assessed this potential effect, including on lesser knot. This species was considered throughout the entire assessment, using the data collected and assessing the effects in the context of the Whangārei Harbour population estimates provided by Riegen & Sagar (2020)”.

214. Ms Webb provided a Technical Memo – Coastal Avifauna which formed part of the Addendum section 42A report. In section 3.2 “Sandbank roost as an effects management measure”, she stated:

“As stated in the Avifauna Joint Witness Statement (20 September 2023), providing alternative high-tide roost is a suitable effects management measure in principle however, the effectiveness of the proposed sandbank remains uncertain. The applicant has partially addressed this uncertainty through consent conditions.

I concur with Dr Beauchamp’s view that it is unlikely that VOC and NNZD will use the roost after reviewing the distribution data for these species within the harbour.

For these reasons, I don’t support the sandbank renourishment area as a habitat offset and recommend that the applicant seeks an alternative avifauna initiative to manage population effects.”

215. We set out our finding on the scale of the effects and if the high bird roost would avoid the adverse effects as set out by the avifauna experts below. However, before that we need to record that we have placed less weight on Dr Beauchamp’s evidence and that of Ms Kirk’s planning evidence, to those of their counterpart experts. Our reasons are as follows. Dr Beauchamp’s evidence set out his role with DOC, but also stated¹⁰⁸:

“Privately, I have also carried out monitoring of the changes in status of the Port Whangārei wader roost sites and settlement ponds and continue to monitor public access areas at that site. I have also mapped and carried out counts (almost monthly 2012-2023) on the waders using the area of Whangārei Harbour north of Matakohē/Limestone Island and carried out evening and night work on wader and gull use of the Port Whangārei and Portland wharf roosts.”

216. We questioned Dr Beauchamp about this. His response was that the private work he has done is work that DoC did not pay him to do. It was clear to us that Dr Beauchamp has a professional as well as a personal interest in the harbour. This raised questions in our mind about his objectivity as an expert witness¹⁰⁹. We also agree with the Applicant’s Interim Reply Statement quoted below – noting this matter was raised by the Hearing Panel at the hearing in relation to Ms Kirk’s evidence¹¹⁰:

¹⁰⁸ Paragraph 5 of Dr Beauchamp’s evidence.

¹⁰⁹ We do not question Dr Beauchamp’s motives or his enthusiasm, but it raises a question about an expert’s objectivity.

¹¹⁰ Paragraphs 17.4 and 17.5 of the interim reply submissions.

“With regards to the evidence advanced on behalf of the Director-General of Conservation, we submit that there are several matters which go to the weight that this evidence should be afforded.

First, the expert witnesses on behalf of the Director-General of Conservation are employees of DOC and are, therefore, not independent (unlike the expert witnesses for Northport). DOC has a statutory mandate, which flavours the position of its expert witnesses. For example, one of its functions under section 6(b) of the Conservation Act 1987 is to advocate for the conservation of natural and historic resources. Such advocacy is not consistent with the role of a truly independent expert.”

217. Ms Kirk stated in her evidence¹¹¹:

“I have read the evidence in chief of Dr Bull, and I acknowledge her conclusions on adverse effects on avifauna. However, given the concerns raised by Dr Beauchamp regarding Dr Bull’s approach to addressing effects on avifauna, I have relied on the observations and conclusions relating to effects on avifauna as set out in Dr Beauchamp’s evidence in chief instead.” [Underlining is our emphasis].

218. As we have said we have placed less weight on Dr Beauchamp’s evidence and therefore accord less to Ms Kirk’s¹¹². Also, in answering questions from the Hearing Panel Ms Kirk revealed she had not been to the site, and her planning analysis was “desk top”. We acknowledge that the Code of Conduct (which Ms Kirk agreed to) does not require a site visit to be undertaken, nevertheless, this is a matter that we find goes to the weight to be given to the relevant evidence. On this basis we struggle somewhat to understand Ms Kirk’s opinion on the bird roost when she has not been to the site.

219. The planners’ JWSs addressed avifauna effects. In the JWS dated 28 September 2023, they all agreed that¹¹³:

“That the National Policy Statement for Indigenous Biodiversity 2023 came into effect on 4 August 2023 after the applications for this proposal were lodged with the Councils. In considering this application, the Hearing Panel “must have regard to” to consider the NPS IB (section 104(1)(b)(iii)).

Section 1.3(2)(b) of the NPS IB states that “However ... specified highly mobile fauna are covered by this National Policy Statement, whether or not they use areas outside the terrestrial environment (such as the coastal marine area or water bodies) for part of their life cycle (see clause 3.20) .”

The NPS IB defines: “specified highly mobile fauna means the Threatened or At Risk species of highly mobile fauna that are identified in Appendix 2”. Appendix 2 contains reference to the variable oystercatcher, New Zealand dotterel and

¹¹¹ Paragraph 34 of Ms Kirk’s evidence.

¹¹² To be clear, we do not question the DoC witness’s qualifications and experience to be expert witnesses.

¹¹³ Section 3.6.2.1 of the planners JWS.

lesser knot, the three bird species that the expert evidence (including JWSs) in relation to this proposal focusses on.

The RPS, PRP and WDP-OP provisions are consistent with the provisions of the NPS IB. The NPS IB does not introduce any new matters for this application.”

[Underling is our emphasis]

220. We agree with the JWS, and in this respect we do not need to specifically address the NPS further, other than note that – Appendix 2: Specifies highly mobile fauna including the NZ dotterel and variable oystercatcher. We address this later.
221. The planners agreed that the relevant ‘policy tests’ in relation to the avifauna effects were Policy 11 of the NZCPS, and Policy D.2.18 *Managing adverse effects on indigenous biodiversity* of the PRP- AV. It is our view that policy D.2.18 gives effect to the NZCPS (and NPS -IB). However, we also note policy D.2.18 – subpart 5), which addresses the issue of ‘scale’, is also important.
222. Policy 11 of the NZCPS - Indigenous biological diversity (biodiversity) states (as relevant):
- To protect indigenous biological diversity in the coastal environment:*
- (a) *avoid adverse effects of activities on:*
- (i) *indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists;*
 - (ii) *taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened;*
 - (iii) *indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare;*
 - (iv) *habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare;*
 - (v) *areas containing nationally significant examples of indigenous community types; and*
 - (vi) *areas set aside for full or partial protection of indigenous biological diversity under other legislation; ...*
223. Policies D.2.18 and D.2.20 (as relevant) state:
- Manage the adverse effects of activities on indigenous biodiversity by:*
- 1) *in the coastal environment:*
- (a) *avoiding adverse effects on:*
- i. *indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists, and*
 - ii. *the values and characteristics of areas of indigenous vegetation and habitats of indigenous fauna that are assessed as significant using the assessment criteria in Appendix 5 of the Regional Policy Statement, and*

iii. areas set aside for full or partial protection of indigenous biodiversity under other legislation, and

- 5) *assessing the potential adverse effects of the activity on identified values of indigenous biodiversity, including by:*
- (a) taking a system-wide approach to large areas of indigenous biodiversity such as whole estuaries or widespread bird and marine mammal habitats, recognising that the scale of the effect of an activity is proportional to the size and sensitivity of the area of indigenous biodiversity, and*
 - (b) recognising that existing activities may be having existing acceptable effects, and*
 - (c) recognising that minor or transitory effects may not be an adverse effect, and*
 - (d) recognising that where effects may be irreversible, then they are likely to be more than minor, and*
 - (e) recognising that there may be more than minor cumulative effects from minor or transitory effects,*

D.2.20 Precautionary approach to managing effects on significant indigenous biodiversity and the coastal environment

That decision makers adopt a precautionary approach where the adverse effects of proposed activities are uncertain, unknown or little understood, on:

- 1) indigenous biodiversity, including Significant Ecological Areas, Significant Bird Areas and other areas that are assessed as significant under the criteria in Appendix 5 of the Regional Policy Statement; and*
- 2) the coastal environment where the adverse effects are potentially significantly adverse, particularly in relation to coastal resources vulnerable to the effects of climate change.*

224. The issue before us was; would the proposed high tide bird root avoid the adverse effects on indigenous biodiversity? As already stated, some experts (avifauna and planners) considered that it would and others that it would not. We address this, and our findings, below. It also raises the issue of what “avoid” means. On this matter, we received various legal submissions (from the Applicant, NRC, DoC, PTITB and Forest and Bird). We do not set these out in any detail (for brevity purposes) but set out what we find are the key issues in terms of avoiding “material harm” and the directive policies in the NZCPS (Policy 9- Ports and Policy 11 - Indigenous biological diversity (biodiversity) as recently addressed in *Port Otago Limited v Environmental Defence Society Incorporated (Port Otago)*.

225. In summary, there were various submissions on the relevance of the Port Otago decision to the applications, ranging from:

- The Applicant, who submitted that Port Otago is relevant insofar that it confirms there is a consenting pathway for port developments in circumstances where the “avoidance” policies may not be able to be met. However, it submits it is not relevant to the current proposal, given that it strictly avoids all adverse effects as required under the NZCPS.
- The Director-General of Conservation, who submitted that Port Otago is of limited relevance. However, it notes that it is helpful insofar that it (alongside King Salmon) confirms that policies should be read so as not to conflict with each other as far as possible.

- Forest & Bird, who submitted that the orthodox method to interpreting and reconciling competing policies confirmed by the Supreme Court’s decision in King Salmon remains unaffected by the Port Otago decision.
 - PTITB, who submitted that the Panel must apply relevant policies including through undertaking the “structured analysis” or identification of “material harm” directed in Port Otago and consider the question of alternatives.
 - NRC, who submitted that Port Otago is helpful given that it confirms that the avoidance policies and the ports policy of the NZCPS are all directive, and it clarifies that “avoid” in the context of the NZCPS means protection from “material harm” – a concept derived from the Supreme Court’s decision in Trans-Tasman Resources¹¹⁴. In Port Otago, the Supreme Court confirmed that the concepts of mitigation and remedy may serve to meet the “avoid” standard by bringing the level of harm down so that material harm is avoided¹¹⁵.
226. While there is some debate about what amounts to “material harm”, the Supreme Court in Trans-Tasman Resources addressed this in some detail - being¹¹⁶:
- (a) *Decision-makers must either be satisfied that there will be no material harm or alternatively be satisfied that conditions can be imposed that mean:*
- (i) *material harm will be avoided;*
- (ii) *any harm will be mitigated so that the harm is no longer material, or*
- (iii) *any harm will be remedied within a reasonable timeframe so that, taking into account the whole period harm subsists, overall, the harm is not material, and*
- (b) *the assessment of whether there is material harm requires qualitative, temporal, quantitative and spatial aspects to be weighed.*
227. Based on the evidence before us (avifauna and planning) and the legal submissions, it is our finding the high tide bird roost will avoid adverse effects on the birds, such that no material harm will occur. The reasons for this are:
- The evidence of Dr Bull confirms that the proposal’s effects, taking into account the reduction in effects brought about by the bird roost, are low (i.e., not amounting to material harm);
 - Relying on Dr Bull’s evidence, and the reasons above, the birds are likely to use the new roost;
 - That the bird roost, along with the conditions offered by the Applicant, is an appropriate impact management measure to ensure no material harm is caused;

¹¹⁴ *Trans-Tasman Resources Ltd v Taranaki-Whanganui Conservation Board* [2021] NZSC 127.

¹¹⁵ *Port Otago Limited v Environmental Defence Society Incorporated* [2023] NZSC 112 at [65].

¹¹⁶ Paragraph 35 of NRC’s legal submissions.

- The avifauna experts' JWS Dr Bull and Ms Webb agreed that the level of impact on foraging habitat within the eastern reclamation footprint for variable oystercatchers and New Zealand dotterel is low at a harbour scale and that the level of impact on roosting habitat within the eastern reclamation footprint for the same species is moderate at a harbour scale (policy D.2.18 – subpart 5);
- It is also the case, that the NZ dotterel and variable oystercatcher, which are identified highly mobile fauna species (as already set out), are highly mobile fauna species which cover long distances and move between different environments throughout their life cycle;
- That Mr Hood, Dr Mitchell and Mr Masfield's expert planning opinion was that the bird roost, with the recommended consent conditions, would avoid the adverse effects on the on variable oyster catcher and NZ dotterel species; and
- That we disagree with the Director-General of Conservation's contention that the high tide roost is not avoidance or mitigation of effects as it does not prevent the effects from happening and does not occur at the "point of impact"¹¹⁷. In this respect we agree with the legal submissions of the Applicant and NRC.

228. Given our finding above, we do not need to address the competing and directive policies 9 and 11 of the NZCPS. However, given our reasoning above, had we found the adverse effects had not been avoided, and the 'avoid' policy directives were not met, the Port Otago decision confirms that there would still be a consenting pathway for the Proposal.

229. Port Otago clarifies that if the proposal is required for the safe and efficient operation of the ports, and if all other options have been evaluated but the avoidance policies still cannot be met, the proposal may be undertaken (but only to the extent required to provide for the safe and efficient operation of the ports). Had we been required to make this finding – that the proposal is required to provide for the safe and efficient operation of the ports - we would have.

Terrestrial Ecology

230. Dr Flynn, ecologist, provided expert evidence on behalf of the Applicant. She set out that works to expand Northport's footprint within the terrestrial environment included 1.77 ha of earthworks encompassing part of a remnant dune system that extends along the Marsden Point beachfront. She also set out that the vegetation cover comprised mainly native kōwhangatara (spinifex) grassland on the mobile foredune, with a mix of buffalo grass and 2 native pohuehue (interspersed with weedy exotic species and a row of planted pōhutukawa) on the dune crest. Pīngao (a sedge with a threat status of at risk – declining) was also present on the foredune.

231. Dr Flynn stated¹¹⁸:

¹¹⁷ Paragraph 105 of the Director-General of Conservation's legal submissions – 4 October 2023.

¹¹⁸ Paragraph 4.3 of Dr Flynn's evidence.

“Duneland ecosystems (though degraded) are a characteristic feature of the eastern coastline within Waipu ED, and large parts have been identified as significant natural areas in the Department of Conservation’s ‘Protected Natural Areas’ survey programme. The dune remnant within the project footprint is not included within any significant natural area identified by the Department of Conservation, or in any regional or district plans”. [underling is our emphasis]

232. As we have set out earlier Policy D.2.18 of the PRP- AV requires a system-wide approach to evaluating indigenous biodiversity when assessing and managing adverse ecological effects. Dr Flynn assessed adverse effects on indigenous biodiversity as minor (though permanent) relative to the wider duneland ecosystem in Waipu ED, and moderate at the scale of the Marsden Point beachfront.
233. It was her opinion that mitigation of local-scale effects could be achieved by enhancing the indigenous dune ecosystem present along the Marsden Point beachfront, but that the area has poor ecological restoration potential. On this basis she recommended that funds for such work are instead provided to a community organisation to enable restoration of dune ecosystems with better potential elsewhere in Waipu ED. She also recommended requiring a Lizard Management Plan (‘LMP’) as a condition of consent. We note that both of those recommendations were adopted by Northport in its proposed suite of recommended conditions, and we would have imposed them.
234. Ecologists, Ms Webb and Ms Huang for the NRC reviewed the terrestrial ecology assessment prepared for the application and provided a technical memorandum (Appendix C12) that informed the section 42A report. While Ms Webb and Ms Huang considered the appropriate assessment scale to assess the magnitude and level of effect on terrestrial ecology for this project to be the site and its immediate surroundings rather than the Waipu ED, they did agree that a ‘systems-wide’ approach should be used (based on Policy D.2.18).
235. Ms Webb and Ms Huang concurred with Dr Flynn’s assessment that the loss of extent would produce a moderate and low level of effect at the scale of the site and its surroundings, and the Waipu ED, respectively. Furthermore, all experts agreed that in accordance with EIANZ guidelines and the operative WDP - OP, effects management was appropriate to mitigate a localised, moderate level of effect on indigenous vegetation and fauna habitat, and that the proposed management will reduce ecological effects to levels that are no more than minor. Ms Webb and Ms Huang also agreed with Dr Flynn’s assessment that restoration of the remaining area of dune system on Marsden Point beach would be of limited ecological benefit.
236. The Planners’ JWS - 28 September 2023 stated:

“3.6.2.2 Terrestrial ecology – area of agreement between the planning experts

With regard to the terrestrial ecology components of the proposal (i.e. removal of the dune system and esplanade reserve vegetation), the planning experts agree that as per clause 3.10 of the NPS-IB, the NPS-IB applies to mapped terrestrial Significant Natural Areas (SNAs). The planning experts agree that there are no mapped SNAs within the WDP or PRP. Clause 3.16 of the NPS-IB applies to areas outside of mapped SNAs, where significant adverse effects on indigenous biodiversity are anticipated.

The planning experts agree that effects on terrestrial ecology identified by the relevant ecological experts have been determined to be less than significant. Absent any expert disagreement regarding terrestrial ecology, the planning experts agree that there are no planning issues arising from the proposal. “

237. Ms Webb and Ms Huang recommended requiring a duneland restoration and compensation plan as condition of consent, including the coast care group selected, the site selected for restoration and management, and the total “in-kind” dollar amount to be contributed to the fund, and / or its calculation methodology. They considered that this detail was necessary to demonstrate that the offsite restoration and weed management will successfully meet the NPS-IB compensation principles.
238. Dr Flynn disagreed, as do we, that there is a requirement to meet NPS-IB compensation principles. As noted in Dr Flynn’s evidence and the Planners’ JWS above, the NPS-IB only requires application of the mitigation hierarchy for significant adverse effects on biodiversity outside of SNAs. In this case, we accept that effects on indigenous biodiversity are not significant, and management must “*recognise and provide for the maintenance of biodiversity*”. It is our finding that it is unnecessary to impose the conditions sought by the NRC experts, and agree with Dr Flynn and the planning experts, that the effects management measures as provided for in the consent conditions will meet that requirement.
239. Overall, we accept Dr Flynn’s expert evidence (and note that Ms Webb and Ms Huang largely agree with Dr Flynn), and the expert opinion of the planners in their JWS. On this basis the terrestrial ecological effects are appropriately mitigated and satisfy the relevant policies in the statutory planning documents.

Māori Cultural Values and Effects

240. We address the cultural values of this area and the effects arising from the proposal as they were presented to us; and the evaluation of those values and effects against the statutory planning provisions. This is essentially in two parts given the relevant planning provisions: the consultation and engagement process; and the evaluation of the plan provisions and effects from the proposal on Māori cultural values.
241. We address engagement and consultation first. We then address the issues of the cultural values and the effects of the proposal; and whether from a cultural perspective the proposal is consistent with the relevant statutory planning provisions. We also address section 6(e) of the RMA (the relationships of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga is a matter of national importance which must be recognised and provided for) and section 7 (a) of the RMA (kaitiakitanga, to which we must have particular regard).

242. At the outset we acknowledge Patuharakeke as the tāngata whenua of the area Northport operates in and holds mana whenua and ahi kā status over Poupouwhenua/Marsden Point¹¹⁹. The PTITB represents their interests in matters including, among other things, environmental and resource management issues¹²⁰.
243. Ngātiwai claims mana whenua and mana moana from Rākaumangamanga to Mahurangi, across to Aotea, and returning to Rākaumangamanga by way of the many islands and waters of Te Moana Nui a Toi¹²¹.
244. Te Parawhau hapū and whānau are located at the southern boundary of Ngāpuhi and its rohe encompasses the area from Tangiteroria in the west, east to Whangārei and south to Piroa (Brynderwyn range). Both the Whangārei Harbour and the upper Northern Wairoa catchment of the Kaipara Harbour are inclusive of Te Parawhau's rohe¹²².
245. It is important to state that in making our findings on cultural issues, we have relied on the evidence presented to us (as well as legal submissions which included setting out relevant case law and how we are to interpret the 'package' of statutory planning provisions) from the Applicant and iwi/hapū. The cultural evidence on the values and effects of the proposal provided by iwi/hapū, including from PTITB, was uncontested.
246. Northport provided expert cultural evidence from Mr Isaacs. His evidence addressed¹²³:
- (b) *...the cultural engagement undertaken by Northport in relation to the Project, and how this aligns with best practice;*
 - (c) *...the cultural issues raised;*
 - (d) *...Northport's response regarding cultural issues, including the cultural mitigation proposal it is putting forward through conditions of consent).*
247. In this respect Mr Issacs' evidence is, aside from the issues relating to consultation, a response to the cultural issues raised, and the conditions of consent to address them. This is opposed to providing expert cultural evidence in relation to the cultural values and effects of the proposal as set out in the Cultural Values Assessment (CVA)¹²⁴ and the Cultural Effects Assessment (CEA)¹²⁵.

¹¹⁹ Appendix 24 of the Application, page 4.

¹²⁰ Appendix 24 of the Application, page 4.

¹²¹ Section 4.2.4 of the Application for Resource Consent, page 50.

¹²² Section 4.2.3 of the Application for Resource Consent, page 49.

¹²³ Paragraph 16 of Mr Issac's evidence.

¹²⁴ Appendix 24 of the Application – forming part of it AEE.

¹²⁵ Attachment 6 of the Applicants s92 Response Letter.

248. We record here that we accept the cultural evidence of the iwi/hapū for the reasons we set out below. The issue before us is therefore:

- Has the duty to consult tāngata whenua under the RMA been adequately undertaken and in a manner that satisfies the relevant planning provisions (objectives and policies) of the statutory planning documents;
- The extent to which any adverse effects on the cultural values have been appropriately avoided, remedied or mitigated by the proposal and the consent conditions proposed by the Applicant;
- Whether or not the proposal satisfies the relevant planning provisions (objectives and policies) of the statutory planning documents and the RMA; and/or
- Notwithstanding that there may be adverse effects on cultural values that are not avoided, remedied or mitigated, and not all of the objectives and policies are ‘satisfied’, nonetheless consents could still be granted as the proposal would better meet the purpose of the RMA (i.e. promote the sustainable management of natural and physical resources (section 5), than refusing them.

Engagement and Consultation

249. In their evidence for the Applicant Mr Blomfield and Mr Issacs, set out in some detail the engagement and consultation undertaken with iwi/hapū as part of this proposal. Mr Blomfield also set out that Northport is engaging with Te Parawhau hapū representatives to develop a Relationship Agreement between Northport and Te Parawhau¹²⁶. Mr Moore also detailed Northport’s existing relationship with local iwi and hapū, including what he described as the special relationship between Northport and Patuharakeke which is recognised by a Te Whakahononga (Relationship Agreement)¹²⁷.
250. Section D.1 of the PRP - AV D.1 provides direction on how: engagement should be undertaken between an Applicant and tāngata whenua; how Māori cultural values and their effects should be identified; and where practicable how effects can be avoided, remedied or mitigated. This was a matter discussed at the planners’ expert conferencing¹²⁸.
251. All the planners (as we understand it), including Ms Dalton (PTITB’s planner), agreed that the engagement expectations had been met. Submitters’ planners (Ms Kirk, Ms Niblock and Ms Dalton) considered that with the Applicant’s (late) production of recommended cultural conditions, the applications generally satisfied the D 1 provisions of the PRP-AV with the exception of policy D.1.4 (which we address in more detail below).

¹²⁶ He noted that the details of the Relationship Agreement between Northport and Te Parawhau are confidential between the parties.

¹²⁷ Noting the details of the Te Whakahononga / Relationship Agreement between Northport and Patuharakeke Te Iwi Trust Board is confidential between the parties.

¹²⁸ JWS – dated 28 September 2023.

252. As part of the Applicant's Interim Reply and confirmed in its Memorandum of Counsel for Northport Limited¹²⁹, the Applicant sought an adjournment of the hearing. This was to allow a further opportunity for iwi/hapū submitters to consider and provide feedback on the updated draft cultural conditions; and for Northport and iwi/hapū submitters to engage further around the cultural concerns raised and alternative responses to those concerns.

253. As set out in the Applicant's Final Reply Statement¹³⁰:

"Northport considers that the engagement with PTITB over a four-month period was productive¹³¹. While that engagement process was meaningfully undertaken, in a manner which Northport considers is reflective of the established and ongoing relationship between Northport and PTITB, it has not resulted in resolution of the issues as between Northport and PTITB."

254. Mr Matheson, counsel for PTITB, set out in an email to the Council once the engagement with PTITB over the four-month period was concluded, the following¹³²:

"My client does wish to record its appreciation to Northport for the most recent engagement which, although ultimately unsuccessful, demonstrated good faith by Northport and a willingness to listen to my client's concerns."

255. We accept Northport has appropriately engaged and consulted, and satisfied the provisions set out in section D 1 of the PRP- AV.

Cultural context

256. The significance of Rauiri - Poupouwhenua/Marsden Point to Patuharakeke, Ngāti Wai and Te Parawhau and their relationship to it and the potential effects on cultural values are at the core of their concerns with this proposal. This was detailed in the CVA and CEA and provided as part of the Applicant's AEE and section 92 response. The Māori history of the project area and its surrounds were also set out in the CVA under the heading – "Relationship of Tāngata Whenua to the Proposal Site"¹³³. Cultural evidence provided by the iwi/hapū submitters, notably Patuharakeke, also addressed their relationship to Rauiri - Poupouwhenua/Marsden Point, and the potential effects of the proposal on their cultural values.

¹²⁹ Dated 22 November 2023.

¹³⁰ Paragraph 1.3 (a) of the final reply statement.

¹³¹ The detail of the engagement was provided in the monthly reporting memoranda filed on behalf of Northport.

¹³² Email dated 9 April 2024.

¹³³ Section 5, pages 13-31.

257. We set out in some detail below the cultural values, environmental effects (from a cultural perspective) set out in the CEA and CVA, as well as the cultural evidence. This is because the effects on cultural values and the *“relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga* (section 6 (e) of the RMA) emerged as the most significant issue in hearing these applications; and is fundamental to our decision on these applications.

Cultural Values Assessment

258. The CVA lodged as part of the application identified tāngata whenua values through relationships with the site. It identified Patuharakeke’s relationships to the Northport site, the implications for the knowledge and practice of kaitiakitanga by tāngata whenua over their taonga and matters that have potential to affect the principles of the Treaty of Waitangi.
259. Section 4 of the CVA¹³⁴ provided an assessment methodology that included an analysis of historical, traditional and contemporary relationships against the key provisions of Part 2 of the RMA. Section 5¹³⁵ outlined the relationship of tāngata whenua to the proposal site and includes:
- a. *5.1 Tāngata whenua o Whangārei Terenga Paraoa:*
 - i. *This section outlines the strong connections amongst hapu and iwi of Whangārei Terenga Paraoa. Patuharakeke, as hau kainga and ahi kaa in the direct vicinity of the site acknowledge the mana of whanau, hapu and iwi that both by whakapapa and physically and spiritually to the harbour.*
 - ii. *The underpinning theme of mauri as woven through all matters concerning the relationship to the proposal and location.*
 - b. *5.2 The relationship of Patuharakeke and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga;*
 - i. *Ancestral lands – Poupouwhenua is outlined from a hapu view as ancestral land*
 - ii. *Cultural Landscapes, Seascapes and Waahi Tapu – outlines several important markers that form the cultural landscape and seascape that are integral to their histories*
 - iii. *Taniwha and Tupua*
 - iv. *Mahinga Mataitai sites*
 - v. *Other taonga – taonga species including tohora, paraoa; manu – shore birds, wading birds*
 - vi. *Contemporary Cultural Relationships*

¹³⁴ CVA Report, Appendix 24 of the Application, page 11 and Appendix A.

¹³⁵ CVA Report, Appendix 24 of the Application, pages 13-16.

vii. *Relationship through Kaitiakitanga and contemporary kaitiakitanga in Whangārei Terenga Paraoa*

viii. *The Whangārei Harbour Kaitiaki Roopu*

Cultural Effects Assessment

260. The CEA, provided as part of the Applicant's section 92 response, outlined the environmental effects the proposal would have on Patuharakeke's cultural values in terms of ecological effects, marine ecology, avifauna and marine mammals; discharges to air; climate change and coastal processes. We have addressed these effects elsewhere in this decision, relying on the relevant expert evidence. We acknowledge that these were not necessarily viewed through a 'cultural lens' and accept Ms Chetham's and Ms Dalton's evidence that there is a cultural dimension to those effects, which in terms of Patuharakeke's views contributes to their view on the adverse cultural effects from the proposal, which we address below.
261. In addition to the above, the CEA also outlined the effects on cultural landscapes and seascapes and sites of significance to Tāngata Whenua. It stated¹³⁶:

"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.

and

"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."

262. The conclusion in the CEA on environmental effects was that¹³⁷:

"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"

263. The conclusion of cultural effects from the proposal in the CEA, was that¹³⁸:

¹³⁶ CEA, 7.3.2 Takutai Moana, loss, and 7.3.3 Ahurea/Patuharakeketanga.

¹³⁷ CEA, Conclusions – Environmental Effects, page 29.

¹³⁸ CEA, Conclusions – Cultural Effects, pages 37 and 38.

[The potential effects] ... *“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.”*

264. The CEA¹³⁹ also outlined the social effects in terms of hauora/health, noise and transport/traffic effects. It identified that if consent was granted to the expansion of Northport, the potential adverse effects on Patuharakeke’s social wellbeing, including physical and cultural health along with values such as amenity, would be more than minor.
265. The CEA also outlined the economic effects and concluded that insufficient analysis and evidence had been provided to determine the economic effects of this proposal on Patuharakeke and its taonga¹⁴⁰. We have addressed this matter in the Economic section of this decision.

The legal submissions presented by PTITB

266. Mr Matheson provided legal submissions on behalf of PTITB. He set out¹⁴¹:

“At stake in these proceedings is a tāonga to mana whenua and an irreplaceable natural resource highly valued and heavily utilised by the community. It will sever Patuharakeke’s last remaining direct connection to the takutai moana.

The evidence of the cultural witnesses before you is that the adverse effects on the tāonga of Whangārei Terenga Parāoa and its values is material and permanent... The uncontested mana whenua evidence is that the conditions proffered at the 11th hour by the applicant are woefully inadequate at addressing those effects.”

There is no contrary cultural evidence from mana whenua disputing those cultural effects or their magnitude.”

267. At section 3 of his legal submissions, Mr Matheson set out the “legal framework”. He set out, among other things, the provisions of the PRP-AV that in his submission were relevant to this proposal. We agree with those submissions. He then set out that while there was “no right of veto” by tāngata whenua, a rigorous assessment of the proposal was required. He stated¹⁴²:

¹³⁹ CEA, 7.4 Social Effects, pages 38-41.

¹⁴⁰ CEA, 7.5 Economic Effects, pages 42 – 46.

¹⁴¹ Paragraphs 1.1 - 1.3 of Mr Mathson’s legal submissions.

¹⁴² Paragraphs 3.18 and 3.19 of Mr Mathson’s legal submissions.

“At the outset of this part of my legal submissions, I acknowledge the settled law that tāngata whenua do not have a right of veto over resource consent applications in the marine environment,¹⁴³ and the existence of significant adverse effects (cultural or otherwise) is not an absolute bar to the grant of consent.

However, it is trite to say that in law (as in most things) context is everything, and the existence of significant cultural adverse effects alone can, in some circumstances, be sufficient to decline consent¹⁴⁴. That is particularly so where the conditions of consent offered by an applicant are insufficient to appropriately avoid or mitigate the adverse effects to the extent required by the relevant policy framework.”

268. Mr Matheson also set out that much of the Applicant’s case was “understandably focussed on being in the “port zone” with supportive objectives and policies”¹⁴⁵. He went on to address that the activity status for this proposal is (in our finding) discretionary, and therefore any Applicant for consent must satisfy the full gamut of relevant considerations. We have addressed this matter earlier on this decision, and address this further below as it was important to our overall findings on this proposal.

269. He also set out that¹⁴⁶:

“The Courts have provided clear guidance on the approach to considering and weighing cultural evidence:

(a) persons holding mana whenua are best placed to identify the impacts of a proposal on the physical and cultural environment valued by them;¹⁴⁷

(b) there can be more than one tāngata whenua group for a particular area;¹⁴⁸

¹⁴³ *“Maungaharuru-Tangitū Trust v Hawke’s Bay Regional Council [2017] NZRMA 147 (EC), at [126]; and Watercare Services Ltd v Minihinnick [1998] 1 NZLR 294, at 307.”*

¹⁴⁴ *“As was recognised in Aqua King Ltd (Anakoha Bay) v Marlborough District Council EC Christchurch W71/97, 30 June 1997, where consent was declined principally on the basis of unacceptable cultural effects. See also Tauranga Environmental Protection Society Inc. In many other cases, applications have only just “got over the line” through substantial cultural mitigation conditions.”*

¹⁴⁵ Paragraph 3.20 of Mr Mathson’s legal submissions.

¹⁴⁶ Paragraph 3.26 of Mr Mathson’s legal submissions.

¹⁴⁷ *SKP Incorporated v Auckland Council [2018] NZEnvC 081, at [157], which was upheld on appeal, and supported and endorsed by the High Court in Tauranga Environmental Protection Society v Tauranga City Council [2021] NZRMA 492, at [66].*

¹⁴⁸ *Director General of Conservation v Taranaki Regional Council [2018] NZEnvC 203, at [234] and confirmed on appeal in Poutama Kaitiaki Charitable Trust v Taranaki Regional Council [2020] at [109], and [254].*

- (c) *where a particular tāngata whenua group states that a specific outcome is required to meet the Part 2 directions in accordance with tikanga Māori, RMA decision makers must meaningfully respond to those claims¹⁴⁹;*
- (d) *recognising and providing for Māori interests under s 6(e) necessarily involves seeking input from them about how their relationship - as defined by them in tikanga Māori - is affected by a resource management decision¹⁵⁰;*
- (e) *decision makers are entitled to, and must, assess the credibility and reliability of evidence for tāngata whenua using the well settled “rule of reason approach” set out in Ngāti Hōkopū¹⁵¹. But where the considered, consistent and genuine view of tāngata whenua is that a proposal will result in significant adverse effects it is not open to a decision-maker to decide otherwise: a decision maker cannot substitute its view of the cultural effects for that expressed by tāngata whenua¹⁵²;*
- (f) *a logical extension of this principle is that nor should a decision maker substitute its view for that of tāngata whenua as to whether such effects are able to be appropriately avoided, remedied or mitigated; and*
- (g) *while there can be a role for technical evidence in interpreting values and concepts into terms comprehensible to non-Māori¹⁵³, such evidence cannot itself redefine the tāngata whenua values and beliefs.*

270. Again, we accept those submissions.

271. Mr Matheson also submitted that the Hearing Panel must consider the question of alternatives¹⁵⁴. We do this later in this decision.

¹⁴⁹ *Ngāti Maru Trust v Ngāti Whātua Ōrākei Whāia Māia Ltd* [2020] NZHC 2768, at [68].

¹⁵⁰ *Ngāti Maru Trust v Ngāti Whātua Ōrākei Whāia Māia Ltd* [2020] NZHC 2768, at [73].

¹⁵¹ *Ngāti Hōkopū ki Hōkowhitu v Whakatāne District Council* (2002) 9 ELRNZ 111 (EC), at [53]. This rule of reason approach has been cited with approval in (at least) two more recent High Court decisions: *Ngāti Maru Trust v Ngāti Whātua Ōrākei Whāia Māia Ltd* (2020) 22 ELRNZ 110 (HC), at [117]; and *Poutama Kaitiaki Charitable Trust v Taranaki Regional Council* (2020) 22 ELRNZ 202 (HC), at [106]-[108], and [167]-[168].

¹⁵² *Tauranga Environmental Protection Society v Tauranga City Council* [2021] NZRMA 492, at [65].

¹⁵³ *Land Air Water Association v Waikato Regional Council* EC Auckland, A110/01, 23 October 2001, at [396].

¹⁵⁴ Paragraphs 3.27 – 3.29 of Mr Matheson’s legal submissions.

Evidence and Submissions - Cultural Effects

272. The cultural effects of the proposal were outlined in the evidence and oral submissions from representatives of PTITB, Ngātiwai and Te Parawhau at Takahiwai marae¹⁵⁵. We again record that none of the evidence and material presented to us by iwi and hapū witnesses was contested.
273. Patuharakeke and Te Parawhau witnesses explained their history and whakapapa to the ancestral lands and waters at Rauiri - Poupouwhenua affected by these applications. Much of the evidence presented detailed their connection to the site and area and the importance of retaining a clear connection to it. It also addressed concerns that the proposal would have negative impacts on intangible connections and values such as whakapapa, mauri, manaakitanga, mana, wairuatanga, rangatiratanga, mātauranga and te reo Māori me ōna tikanga.
274. Ms Chetham provided cultural evidence on behalf of PTITB. She also provided a map of Patuharakeke cultural landscapes to assist us in the consideration of Policy D.1.4 and D.1.5 of the PRP- AV which we discuss in further detail below. It was her view that the while the port area/zone was not mapped as a site or place of significance to tāngata whenua, it was in terms of Policy D.1.5 (3) (b) – being:

“a landscape of significance to tāngata whenua, which is a collection of related resources identified and described within a mapped area, with the relationship between those component resources identified.”

with the footnote to that policy stating:

“A landscape of significance to tāngata whenua may include Sites and/or Areas of Significance to Tāngata Whenua.”

275. Ms Chetham stated in her evidence¹⁵⁶:

“The CVA identified Patuharakeke’s cultural landscape and seascape associated with the project area, made up of historical, traditional, cultural and spiritual relationships with and between our people as ahikā and the landscape components. These include tupuna maunga, mahinga mātaimai, Poupouwhenua and te wahapu o Whangārei Terenga Parāoa and are underpinned by values such as whakapapa, mauri, mana, manaakitanga and kaitiakitanga.

The CEA identified a range of effects on Patuharakeke environmental cultural and social wellbeing. Whangārei Terenga Parāoa is already in a degraded state such that many of our cultural practices and taonga species are impacted. The area of the harbour subject to this application is special habitat not universally distributed throughout the harbour and is a vital for taonga species at different

¹⁵⁵ Two days of hearings were held on the Marae.

¹⁵⁶ Paragraphs 1.1 – 1.3 of Ms Chetham’s evidence.

life stages. As kaitiaki we have worked extremely hard to monitor and improve the health of our mahinga mātaimai after decades of cumulative impacts have set them on the brink of collapse and we believe the potential effects of this proposal on ecology are understated as echoed by our expert witnesses. These have flow on impacts undermining cultural values such as kaitiakitanga, manaakitanga, mauri and mana.

The proposed reclamation will permanently modify the harbour, disrupt cultural landscape connections, extinguish access and relationship to this important part of Poupouwhenua and severely frustrate our Treaty rights and rights we seek to have recognised under the Marine and Coastal Area Act. We do not consider the applicant has made a strong economic case for the port expansion nor did the CEA process identify benefits to the hapū that outweigh these significant and adverse cultural and ecological effects.”

276. Mr Milner presented on tikanga for PTITB. He referred to the Supreme Court case of *Ellis v R* [2022] NZSC 114 that represented an elevation of tikanga in law, recognising tikanga as the original law of Aotearoa that constitutes a separate legal framework. He continued that in his view the decision solidifies earlier indications from lower courts, such as *Ngāti Whātua Ōrākei Trust v Attorney-General* [2022] NZHC 843, which also recognised tikanga as an independent legal framework.
277. Mr Milner, further set out that tikanga are the customary protocols and practices hapū and iwi are guided by tupuna kōrero tuku iho to uphold respect and integrity for the hauora or health of the environment and the rangatira affected by the activities proposed in this consent application. In this context he explained rangatira tupuna whenua as Poupouwhenua and rangatira tupuna moana as Terenga Paraoa.
278. Both Ms Chetham and Mr Milner did not consider that the proposed cultural mitigation (via the proposed cultural conditions) constituted an adequate response to the significant adverse effects on Patuharakeke’s cultural values. Mr Milner’s opinion was that the adverse effects on cultural values outweighed the mitigation offered. Both witnesses retained their view that the consents should not be granted.
279. We also heard from Patuharakeke mana whenua witnesses - Luana Pirihi, Hollie Kereopa and Te Rauaroa Deja Tuhoro.
280. Ms Pirihi spoke in support of the submissions by Patuharakeke. She recalled the impacts of a resource consent granted in 1997, the resultant degradation of pipi beds and the establishment of the Whangārei Harbour Kaitiaki Roopu with a fund that did not provide any tāngata whenua initiatives until late in the piece. She expressed concern that¹⁵⁷:

¹⁵⁷ Statement of Ms Pirihi on behalf of PTITB, 30 October 2023.

“My understanding of this new extension is that we will lose our last piece of an area of significance on the eastern side of the Port Facility. It is like deja vue for me. We continue to sacrifice our special places and suffer losses over and over again. The accumulative loss over generations has been for the greater good of the region and country, without any discernible benefits to our hapu and marae.”

281. Ms Kereopa offered her perspectives as an indigenous marine biologist/environmental scientist in opposition to the proposal. She raised a number of concerns including that the proposed port expansion is disrespectful to their ability to exercise kaitiakitanga and will provide additional loss of habitat for taonga species, shellfish, manu (birds), dolphin and other marine mammals¹⁵⁸.
282. Ms Tuhoro asserted the relationship to Te Rerengaparaoa is an intrinsic one and that it is the mauri of our people, a connection inherited by whakapapa¹⁵⁹ and that the proposal would impede on their mana as tāngata whenua.
283. Ms Dalton provided expert planning evidence on behalf of PTITB. She firstly addressed the environmental effects that remained in contention, including coastal processes, marine ecology, marine mammals, avifauna and recreation; and then addressed the cultural issues that we have addressed above. She opined¹⁶⁰:

“Overall, taking into account the statutory planning documents, in my opinion, consent should not be granted until such time as complete and accurate environmental effects assessments have been undertaken and adequate mitigation has been identified.”

284. We do not share Ms Dalton’s views expressed above. Other than for recreational effects (which we address later) we have found that appropriate effects assessments have been undertaken and appropriate mitigation has been identified, including by the Applicant’s proposed consent conditions.
285. Ms Dalton also opined that the cultural effects of the proposal had not been effectively avoided, remedied or mitigated to a level that is minor as set out in Policy D.1.4 of the PRP-AV. On this basis it was her view that it would be inappropriate to grant the consents to the proposal. For the reasons that follow we agree with Ms Dalton in this respect.
286. Ms Mere Kepa outlined that the Māori values of rangatiratanga and mana do not align with the values of Northport.

¹⁵⁸ Statement of Ms Kereopa on behalf of PTITB, 30 October 2023.

¹⁵⁹ Statement of Ms Tuhoro on behalf of PTITB, 30 October 2023.

¹⁶⁰ Paragraph 1.6 of Ms Dalton’s evidence.

287. Peter and Eve Vaughan presented on behalf of Te Iwitahi Manihera whanau, Te Parawhau hapu, Ngapuhi iwi in support of the submission of Waimarie Kingi of Ngati Kahu Torongare. They detailed how Poupuwhenua is a sacred site and expressed strong objection to the Northport proposal¹⁶¹.
288. Mira Norris for Te Parawhau and Marina Fletcher for Whangārei Harbour Kaitiaki Roopu presented on their experiences with the unhappy imbalance between kaitiaki values and Northport's values. Ms Fletcher continued that the kaitiaki of Whangārei Harbour and Bream Bay have long standing occupation of their tribal lands in and around Whangārei Harbour; that this is their home¹⁶².
289. Nicki Wakefield and representatives of Rewarewa D Māori Incorporation, Ngāti Kahu o Torongare and Ngā Hapu o Whangārei presented concerns on the impact of the proposal on the relationship of tāngata whenua with their whenua, moana and ability to be kaitiaki. They presented in support of Patuharakeke's position.
290. All of these submitters articulated the significant adverse effects of Northport's proposed expansion of industrial and port activities. As set out, these adverse effects included the impact on their identity as tāngata whenua, their ability to exercise rangatiratanga, kaitiakitanga, and mana whenua/moana over the moana and taonga species.
291. We find that the evidence and submissions presented to us from a cultural perspective was consistent and genuine; and that view was that the proposal would result in significant adverse effects. We accept, based on Mr Matheson's legal submissions citing relevant case law, that it is not open to a us to decide otherwise, and we cannot substitute our view of the cultural effects for that expressed by tāngata whenua.
292. In our view, the proposal directly impacts the ability of tāngata whenua to maintain a connection and a relationship to the land and harbour. This impact adversely affects their ability to perform their kaitiaki responsibilities, resulting in the loss of cultural identity for local iwi/hapū. We also find that the adverse effects of the proposal on Patuharakeke's, and to a similar extent Te Parawhau's and Ngatiwai's, relationships with the land, water and taonga, and the impact on their historical, cultural and spiritual values, would be significant.

The Applicant's Position

293. The Applicant's legal position was set out in its Opening, Interim and Final Reply submissions. Counsel responded in some detail in the Interim and Final Reply Submissions to Mr Matheson's legal submissions and the cultural evidence presented to us. We provide a summary of those submissions before setting out our finding in relation to: the cultural values; the effect the proposal will have on those values; and whether or not the proposal is consistent with the relevant planning provisions.

¹⁶¹ Statement of P and E Vaughan, 30 October 2023.

¹⁶² Statement of M Fletcher.

294. The Interim Reply Submission set out¹⁶³:

“Throughout the scoping and development of the Proposal, pre- and post-application engagement, and during the hearing process, Northport has acknowledged that Whangārei Te Rerenga Parāoa forms an intrinsic part of the culture and heritage of iwi/hapū.”

and

“It is not disputed that cultural effects are best identified by mana whenua¹⁶⁴. Here, comprehensive cultural assessments (both a CVA and CEA) were prepared by PTITB, which were carefully analysed by Northport and interpreted with the assistance of Mr Isaacs and others.”

295. We accept this.

296. With respect to Policy D.1.5 - Places of significance to tāngata whenua, Northport acknowledged that Te Poupouwhenua (Mair and Marsden Banks) is a mapped place of significance to tāngata whenua. This was addressed in Mr Hood’s evidence¹⁶⁵.

297. However, it was the Applicant’s position was that while there is clearly a strong cultural connection with the area around Te Poupouwhenua/Marsden Point generally, there was insufficient evidence before us to geographically define places of significance to tāngata whenua,¹⁶⁶ and therefore to understand the values that are affected by the proposal beyond the mapped location at Te Poupouwhenua (Mair and Marsden Banks)¹⁶⁷.

298. We note Ms Dalton set out in relation to Policy D.1.5, that despite the area not being mapped as a place of significance to tāngata whenua in the PRP- AV that *“Patuharakeke’s Cultural Landscape” is a place of significance to tāngata whenua*¹⁶⁸. This was based on a map provided by PTITB which *“consolidates a number of cultural resources that are mapped, described and discussed in PTB’s HEMP, Marine and Coastal Area Claim, and from the CVA and CEA*¹⁶⁹. ”

299. Mr Masefield set out his opinion in the Addendum section 42A report stating¹⁷⁰:

¹⁶³ Paragraphs 4.1 and 4.11 of the interim reply submissions.

¹⁶⁴ *Ngati Ruahine v Bay of Plenty Regional Council [2012] NZHC 2407, paragraph 90. Refer for example Tauranga Environmental Protection Society v Tauranga City Council [2021] NZRMA 492.*

¹⁶⁵ Paragraphs 8.88, 8.89, 8.99, and 8.169 (for example) of Mr Hood’s evidence-in-chief.

¹⁶⁶ As required by Policy D.1.5(5)(f) of the Proposed Regional Plan.

¹⁶⁷ Paragraphs 4.37(a) of the interim reply submissions.

¹⁶⁸ Paragraph 4.2 of Ms Dalton’s evidence-in-chief and 3.1 of her summary statement.

¹⁶⁹ Appendix A to Ms Chetham’s evidence-in-chief; and paragraph 3.2 and footnote 3 to Ms Dalton’s summary statement.

¹⁷⁰ Section 2.11 Place of Significance to Tāngata Whenua – paragraphs 28 and 29.

“The s42A Report queried whether the site was a Place of Significance to Tāngata Whenua for the purposes of RP Policy D.1.4. Ms Chetham provide the equivalent of an RMA s32 analysis of the site against the criteria in D.1.5 and her evidence concludes that it is.

Based on the footnote to D.1.4 and the robustness and uncontested nature of Ms Chetham’s evidence, Mr Masefield is of the opinion that the values and relevance of the place be given equivalent weight as if it was mapped.” [underlining is our emphasis]

300. We disagree with the Applicant’s position and agree with the evidence of PTITB and Mr Masefield’s opinion. We accept this area is a site or place of significance to tāngata whenua. This is an important aspect in terms of the applicability of the provisions of the PRP- AV which we address below.
301. Mr Matheson and Ms Chetham both addressed the need of the Applicant to have assessed alternatives to this proposal. The Applicant’s position was that alternatives had been assessed.
302. The issue of alternatives was set out in the ‘Issues and Options’ report forming Appendix 2 to the AEE (section 9 “Alternative Options - 9.1 – Options Evaluation since 2010 and 9.2 Alternative considered) as well as the evidence of Mr Moore, Mr Blomfield, Mr Khanna, and Ms Stanway. It was also addressed in the Applicant’s Opening Legal Submissions¹⁷¹.
303. We note that the ‘Issues and Options’ report: informed by the conceptual design study undertaken by consultants¹⁷², detailed the rationale for the project (being to provide additional freight capacity to Northland and the upper North Island); set out the advantages of closely integrating the Proposal with the existing port facility; addressed the various environmental constraints that existed; and set out the various location, footprint, design (including piled wharf) and operational alternatives considered. This was confirmed in the Applicant’s evidence as identified above.
304. It was Northport’s position that the evidence clearly demonstrated that the proposed location of the wharf and reclamation was the only practical location¹⁷³. It was also set out that even if it were possible for other land-based alternatives to be designed, there was no available land to do so¹⁷⁴.

¹⁷¹ Paragraphs 7.27-7.28 of the Applicant’s opening legal submissions.

¹⁷² ‘Northport Conceptual Design Study’, TBA Group, August 2021, attached to the Issues and Options report as Appendix A.

¹⁷³ Paragraphs 101-114 of Mr Blomfield’s evidence-in-chief; Paragraphs 41-42 of Mr Khanna’s evidence-in-chief; and section 9 of the Issues and Options report forming Appendix 2 to the application and AEE.

¹⁷⁴ Evidence of Ms Mercer, the Marsden Maritime Holdings Ltd CEO.

305. We also note that the Applicant addressed the nature of reclamation effects in their Reply submissions stating¹⁷⁵:

“During oral submissions, counsel for PTITB stressed the nature and permanence of reclamation impacts. By definition, reclamation involves turning what was once part of the CMA into land, and Northport has never shied away from acknowledging the permanence of the effects of the proposed reclamation. All Northport’s experts have been aware of these matters during their assessments and have proposed effects management measures as appropriate/required. Alternatives to reclamation have also been considered but are simply not practicable in this context¹⁷⁶.”

306. We are satisfied the Applicant had addressed a range of alternatives to this proposal.
307. Northport proposed a conditions framework that attempted to address the concerns of PTITB and other submitters regarding the impacts on cultural values of the proposal. This included a co-design process; to provide an on-going opportunity for Māori knowledge and tikanga/mātauranga Māori to be included into the design of the expansion of Northport, as well as a cultural monitoring framework.
308. The conditions also provided for a Tāngata Whenua Relationship Group to identify the cultural indicators for the monitoring framework, as well as to scope, design and implement initiatives for cultural and ecological restoration to enhance the mauri of Poupouwhenua and Whangārei Te Rerenga Parāoa. They also provided responsibility for establishing and designing the Pocket Park, with aims to educate visitors on mahinga kai, mahinga mātaimai and traditional iwi/hapū practices.
309. We next address the planning provisions relevant to determining if the applications can be granted consent, noting that the main issue is the effects of the reclamation, as the port expansion is based on obtaining consent for it (and the dredging).

PRP- AV’s Policies

310. As set out in the Applicant’s Interim and Final Reply Submissions¹⁷⁷ the key provision relating to managing effects on places of significance to tāngata whenua is Policy D.1.4. That policy reads:

“Resource consent for an activity may generally only be granted if the adverse effects from the activity on the values of places of significance to tāngata whenua in the coastal marine area and water bodies are avoided, remedied or mitigated so they are no more than minor.” [Underlining is our emphasis]

¹⁷⁵ Paragraph 4.39 of the Applicant’s interim reply submissions.

¹⁷⁶ Paragraphs 119 – 120 of Mr Blomfield’s evidence-in-chief.

¹⁷⁷ Paragraphs 4.35 and 2.11 of the interim and closing submissions respectively.

311. As already set out, we have found from the CVA, CEA and the cultural evidence that the adverse effects on cultural values are significant. We have also been told by PTITB witnesses and the iwi/hapū submitters that the proposed cultural consent conditions proposed by the Applicant would not mitigate those effects such that the effects are “no more than minor”. Therefore, the “generally” qualifier in policy D.1.4 is critical to determining if the policy can be ‘satisfied’.
312. We agree Policy D.1.4 is a key policy, which needs to be read in context with other related policies. We address this below. However, firstly, we are grateful to Mr Doesburg, who in his legal submissions set out the where the “generally only” qualification in Policy D.1.4 came from. These words were deliberately added in response to submissions to the notified regional plan to explicitly acknowledge that resource consents could be granted in some situations where effects on the values of places of significance to tāngata whenua are unable to be managed so that they are no more than minor¹⁷⁸.
313. It is clear that the PRP- AV seeks to support and enable/provide for Regionally Significant Infrastructure, which includes Northport¹⁷⁹, but this support/enableness is not unqualified. For clarity we set the relevant (parts of the) Policies below.

314. D.2.5 states:

Benefits of Regionally Significant Infrastructure.

Particular regard must be had to the national, regional and locally significant social, economic, and cultural benefits of Regionally Significant Infrastructure.

315. Policy D.2.7 states:

Minor adverse effects arising from the establishment and operation of Regionally Significant Infrastructure.

Enable the establishment and operation (including re consenting) of Regionally Significant Infrastructure by allowing any minor adverse effects providing:

- 1) *The Regionally Significant Infrastructure proposal is consistent with:*
 - a) *all policies in D.1 Tāngata whenua,*
- 3) *other adverse effects arising from the Regionally Significant Infrastructure are avoided, remedied, mitigated or offset to the extent they are no more than minor¹⁸⁰.*

316. Policy D.2.8 states:

¹⁷⁸ Paragraphs 26 – 31 of NRC’s legal submissions.

¹⁷⁹ We have addressed this matter in detail earlier in the decision.

¹⁸⁰ Noting there is no qualifying “generally” in this policy.

Maintenance, repair and upgrading of Regionally Significant Infrastructure

Enable the maintenance and upgrading of established Regionally Significant Infrastructure wherever it is located by allowing adverse effects, where:

- 2) *the adverse effects after the conclusion of the maintenance or upgrading are the same, or similar, to those arising from the Regionally Significant Infrastructure before the activity was undertaken.* [Underlining is our emphasis]

317. Policy D.2.9 states (relevant to this proposal):

Appropriateness of Regionally Significant Infrastructure proposals

When considering the appropriateness of a Regionally Significant Infrastructure activity (except the National Grid), have regard and give appropriate weight to:

- 1) *the benefits of the activity in terms of D.2.5 Benefits of Regionally Significant Infrastructure,*
- 4) *the extent to which any adverse environmental effects have been avoided, remedied or mitigated by route, site or method selection,*
- 7) *the extent to which the adverse effects of the activity can be practicably managed, inclusive of any positive effects and environmental offsets or compensation proposed*

318. These policies are directive in how regionally significant infrastructure proposals are to be assessed, alongside policies D.2.5 and D.1.4 and D.1.5, and other we have set out previously. We note that D.1.4 is also directive, but with the “generally” qualifier.

319. It was the Applicant’s position that the “generally” qualifier in D 1.4 should apply to Northport’s proposal. The Interim Reply Submissions stated¹⁸¹:

“In any event, we submit that the Proposal falls squarely into the category of application intended to be exempt from the broad (but qualified) application of Policy D.1.4. That is, it is exactly the type of application that may still be granted resource consent. This is for numerous reasons, but particularly the importance of Regionally Significant Infrastructure, its co-location with existing port infrastructure, the MPPZ zoning of the area, and the regional and national positive benefits associated.

and

“Northport therefore submits that the qualified nature of Policy D.1.4 sets it apart from some of the enabling policies relating to the MPPZ. In any event, we also submit that the Proposal is aligned with Policy D.1.4. “

¹⁸¹ Paragraphs 437 (c) and 438 of the interim reply submissions.

320. It was also the Applicant's position that policy D.1.4, in the context of the wider PRP-AV provisions, supports applying the qualifier. It was submitted that projects for Regionally Significant Infrastructure, such as this proposal, are precisely the type of projects intended to benefit from the exemption in policy D.1.4¹⁸².
321. We also note that Mr Hood's evidence set out that policy D.1.4 *"enables consent to be granted... notwithstanding that tāngata whenua have identified cultural effects as being more than minor"*¹⁸³.
322. The Applicant's Final Reply Submissions set out¹⁸⁴:
- In summary on this issue, and for the reasons detailed in our interim closing submissions, Northport submits that*
- (i) the qualified nature of Policy D.1.4 sets it apart from some of the enabling policies relating to the Marsden Point Port Zone, and*
 - (ii) in any event, the Proposal is aligned with Policy D.1.4.*
323. In our view determining whether the "generally" qualifier should be exercised (or not) needs to be in the context of the specific and directive enabling plan provisions for the port and its expansion, and the significance of the place to tāngata whenua and the magnitude of the adverse cultural effects.
324. We accept, as we have already outlined, the proposal receives 'specific and directive enabling support' from the plan/policy framework including by:
- Policy 9 of the NZCPS relating to ports;
 - The RPS policies 5.2.1-5.2.2 relating to infrastructure; and 5.3.2-5.3.3 of the relating to Regionally Significant Infrastructure.
 - The proposal sits entirely within the Marsden Point Port Zone of the PRP - AV with the purpose of that zone being to: *"Recognise that the purpose of the Coastal Commercial Zone and Marsden Point Port Zone is to enable the development and operation of existing and authorised maritime-related commercial enterprises or industrial activities located within these zones."*
 - The Regionally Significant Infrastructure provisions as set out earlier; and
 - Policy PORTZ-P1 'Regional Significance' of the WDP-OP, relating to landward port functions, provides: *"To recognise the regional significance of the Port by providing for a wide range of existing and future port operations and port activities within the Port Zone."*

¹⁸² Paragraph 437 (c) the interim reply submissions.

¹⁸³ Paragraph 8.90 of Mr Hood's evidence-in-chief.

¹⁸⁴ Paragraph 2.13 of the final reply submissions.

325. However, reclamations and dredging within the Marsden Point Port Zone are discretionary activities. We are required to have regard to all of the relevant plan provisions; and have regard to them, to determine if the proposal would promote the sustainable management of natural and physical resource.
326. As set out above, the 'policy support' for this proposal is not unqualified as we have addressed in relation to Regionally Significant Infrastructure – e.g. Policies D.2.7, D.2.8 and D.2.9. Those policies have a focus on regionally significant infrastructure having no more than minor adverse effects, or the same, or similar effects to that of the existing Regionally Significant Infrastructure. Policy D.1.4 has the same focus in terms of no more than minor adverse effects.
327. As we have already determined, that the project area is a place of significance to tāngata whenua (Policy D.1.5). We also found that the adverse effects on cultural values are significant, and remain significant despite the conditions offered by the Applicant.
328. It is our view, having had regard to the relevant planning provisions, that the proposal is inconsistent with a number of those planning provisions as addressed above. This is because the adverse effects of the reclamation's extent are significant and irreversible, which, as outlined by the PTITB, results in the severance of the physical relationship to this cultural landscape, the beach, the dunes and the takutai moana identified by tāngata whenua to be the most profound effect this proposal will have on them.
329. We find that due to the magnitude of the adverse effects on the cultural values of tāngata whenua that they are not mitigated by the conditions proposed by the Applicant. Those conditions mostly relate to tāngata whenua's involvement in facilitating the port development (e.g. co-designing the expansion of Northport and developing the cultural indicators for the monitoring framework of the implementation of the consents and port expansion); something PTITB and the other iwi/hapū submitters do not want as they sought that the applications be refused. We do acknowledge the other conditions were proposed seeking to mitigate effects including offering \$75,000.00 per annum¹⁸⁵ for studies or projects¹⁸⁶.
330. Furthermore, given our findings above, the proposal would not recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga as required by section 6 (e), a matter of national importance in the RMA. It also does not enable tāngata whenua's to fully exercise kaitiakitanga over this area; a section 7 matter of the RMA.
331. We have refused consent for the reasons set out above (and for those reasons set out in the section addressing recreation and public access below).

¹⁸⁵ Proposed Condition 243 of the regional consents.

¹⁸⁶ Proposed Condition 239 (l) of the regional consents - Identify, develop, establish and/or approve suitable studies or projects designed to improve water quality, coastal processes, environmental, ecological, and cultural health of the Whangārei Harbour entrance (including its shores) and northern Bream Bay.

Recreation and public access to and along the Coastal Marine Area (CMA).

332. The loss of the beach and public access to and along the CMA, due to the reclamation was a matter of contention between the Applicant, Council and some submitters. This was whether sufficient mitigation, or offsetting (off site), had been provided to address this loss.
333. The reclamation involves the removal of an area of beach and esplanade reserve to the immediate east of Northport. While much of the existing beach, and access to it would be lost, public access from Ralph Trimmer Drive to the remaining beach area between the expanded port and the CINZ jetties would be provided along the southern edge of the expanded port and along the eastern edge of the proposed reclamation.
334. It was accepted by the Applicant (and the opinion of both the Applicant's expert Mr Greenaway and WDC's expert Mr Jones) that the effects of the loss of the beach and public access to the coast would be significant for recreational beach users, and more than minor effects at the regional level¹⁸⁷. We agree.
335. Northport's proposed measures to provide recreation amenity were incorporated into the proposal and/or would be secured via conditions of consent¹⁸⁸. In summary, these include:
- (a) A 'pocket park', incorporating relocation of toilets, access and car parking, a swimming area, fishing pontoon, and water taxi facility¹⁸⁹.
 - (b) A cycleway to connect to other cycleways planned for the area¹⁹⁰, including for users of the Te Araroa Trail¹⁹¹.
 - (c) Investigating, scoping and, if necessary, authorisations are obtained¹⁹², carrying out improvements to carparking, passive recreation, and beach access facilities at Mair Road.
336. With respect to the Mair Road conditions, the Applicant addressed this in their final Reply Statement setting out¹⁹³:

"The Augier condition providing for improvement works at Mair Road has been amended, following feedback during the hearing, and subsequently from WDC officers, as to its practical application and certainty.

¹⁸⁷ We have addressed the cultural effects of the loss of beach and the access in the Cultural section above.

¹⁸⁸ These are discussed in some detail in the opening legal submissions at paragraphs 7.11-7.13.

¹⁸⁹ Noting that Northport is prepared to facilitate the permanent relocation of the water taxi facility if preferred by users. Note also that the design of the Pocket Park is to be subject to detailed design, including the updated requirement for Co-Design by the Tāngata Whenua Relationship Group.

¹⁹⁰ Noting the recent initiative by Marsden Maritime Holdings seeking to promote the Bream Bay Shared Path, as referenced in para 7.12 and Appendix A to the opening legal submissions.

¹⁹¹ Te Araroa Northland Trust filed a letter, dated 7 November 2023, clarifying its position on certain matters.

¹⁹² Including landowner approval. In this respect, discussions with representatives of DOC have been initiated.

¹⁹³ Paragraphs 4.21 – 4.23 of the final reply submissions.

As reframed, the condition requires the consent holder, before commencing construction of the Proposal, to create a 'Mair Road Improvements Plan' covering a range of matters, and to provide that plan to WDC for certification. The objective of the Plan is to investigate and detail improvements to the Mair Road carpark, beach access, and surrounding reserve area, to provide further mitigation of the effects of the port expansion Project on the coastal access and recreation values of East Beach and the adjacent public park. Importantly, the consent holder is then required to give effect to the improvements detailed in the Plan.

This amended condition provides the Hearing Panel with certainty that the Mair Road improvements will be delivered, and accordingly, that recreation mitigation will occur in a location proximate to the Proposal."

337. Expert conferencing between the recreation experts and the planners. The recreation experts provided 2 JWS's and in summary they agreed the following elements and outcomes were to be provided:

- *All mobility access to the beach from land;*
- *Carparking;*
- *Toilet to meet public needs;*
- *Fishing access to deep water;*
- *General pocket park design and function;*
- *Revetment fishing with walking access;*
- *Surfcasting off the beach;*
- *Beach access;*
- *Swimming directly off the beach;*
- *Water taxi operations provided in the marina environment with a change in the Te Araroa walkway location "elements and outcomes"¹⁹⁴.*

338. While Mr Greenaway supported providing for a pontoon, Mr Jones did not. This was on the basis of Mr Jones' safety concerns and some potential recreation conflict issues including swimming, fishing and the movement of vessels, plus the proximity to the CINZ's infrastructure terminal.

339. In terms of off-site proposals both experts agreed that there were residual significant adverse effects at the local scale and more than minor at the regional scale that had not been avoided, remedied or mitigated. The residual effects relate to access to coastal space of scale, fishing, walking and passive recreation. They both agree that off-site mitigation is required to address these residual effects.

¹⁹⁴ Section 10.3 of the JWS – dated 21 September 2023.

340. A list of alternative off-site mitigation options that could be considered were set out in the initial JWS¹⁹⁵. No costings were provided for these. In the second recreation JWS¹⁹⁶ potential costs of the listed mitigation options in the first JWS, along with the experts' responses to each, was provided.
341. In the initial Planners' JWS¹⁹⁷ Dr Mitchell, Mr Hood and Ms Sharp acknowledged that the recreation experts had concluded that there are significant residual recreation effects. Mr Hood set out that he had reviewed the relevant objectives and policies in the WDP-OP and that there were no provisions directing there be no net adverse effects on recreation. He also noted that the Applicant was already proposing mitigation in the form of the pocket park and its constituent facilities, and the proposed cycleway from Mair Road to Northport, as well as investigating the possibility of relocating the Te Araroa Trail water taxi berth to Marsden Cove.
342. In the second Planners' JWS¹⁹⁸, which largely addressed the recommended consent conditions, Ms Sharp sought additional conditions to those proposed by the Applicant's planners, relying on Mr Jones' opinion. These proposed conditions were included in the Addendum section 42A report.
343. As part of the Addendum section 42A report¹⁹⁹ Mr Jones provided a technical memorandum setting out, among other things, the following:

"The mitigation options (in totality) proposed in the Recreation JWS Addendum are, in my opinion, the minimum required to offset the current recreational opportunities that will be negatively impacted by the Applicant's development proposal. Leaving minor recreational opportunity effects at the local level.

The mitigation options outlined in the Recreation JWS Addendum do not mitigate the loss of the recreational environment from the proposed development.

I remain concerned for the safety of recreationists if a pontoon is developed as proposed by the applicant.

I do not believe Mair Road carpark is a suitable long term access solution onto Marsden Point Beach (and the Te Araroa Trail). This is primarily due to the need for steps and boardwalks given the steep elevated nature of the dune face. These structures are at constant risk of being washed out in storm events. I also have concerns about the long term viability of access under the Channel Infrastructure wharf. "[Underlining is our emphasis]

¹⁹⁵ Dated 21 September 2023.

¹⁹⁶ Dated 25 September 2023.

¹⁹⁷ Dated 28 September 2023.

¹⁹⁸ Dated 9 November 2023.

¹⁹⁹ Dated 16 November 2023.

344. Ms Sharp set out in the Addendum section 42A report²⁰⁰:

“In relying on the advice of Mr Jones, Ms Sharp recommends a replacement condition for NP-34 36 (Mair Road Improvement Feasibility Study, noted as an Augier condition) to require the consideration and implementation of the off-site recreation mitigation options recommended by Mr Jones.”

345. We note Ms Sharp’s position was largely unchanged from the section 42A report²⁰¹. She stated²⁰²:

“Based on the specialist advice of Mr Jones, subject to conditions, I consider actual or potential recreational effects will range from less than minor to significant. The proposal, in its current form, is not considered by Council’s specialist to have adequately mitigated residual significant recreational effects.”

346. The cultural effects have been addressed earlier. However, the following paragraph from Ms Chetham’s cultural evidence for PTITB is important with respect to the recreational aspect of the proposal²⁰³:

“Mana Whenua were not involved in the design of the Pocket Park concept. In terms of somehow ameliorating impacts on our landscape we agree with Mr Brown’s conclusion that its effectiveness in mitigating the high landscape, natural character, and amenity effects at Marsden Bay beach will be low. Mr Greenaway has drawn similar conclusions in his recreation assessment noting residual adverse effects on recreation, particularly the reduced sense of scale, are likely to be significant for recreational users of the beach and more than minor at the regional level. When we add the layers of value pertaining to Mana Whenua ahi kā, spiritual and whakapapa based connections, relationship to the location as kaitiaki, and diminishing of mauri through to recreational, landscape and amenity losses, in our view, the effects become unacceptable. The Pocket Park is cosmetic at best and cannot possibly be considered to mitigate recreation and amenity effects, let alone the severance of cultural connection and relationship to the site.” [Underlining is our emphasis]

347. We accept both the both the district and regional plan provisions provide for the development of the port (as addressed above). We note, also as we have done previously, that reclamation within the port zone is a full discretionary activity. This means we need to have regard to all the relevant objectives and policies to determine the appropriateness of (the scale of) the reclamation. We address those relating to recreation and public access below.

²⁰⁰ Paragraph 27 of the Addendum section 42A report.

²⁰¹ Paragraphs 372 – 379 of the section 42A report.

²⁰² Paragraph 379 of the section 42A report.

²⁰³ Paragraph 3.31 of Ms Chetham’s evidence.

348. We accept Mr Hood's opinion that there appears to be no policy directive requiring no net adverse effects in terms of 'recreational loss'. However, we do not think that is the 'test' to be applied, but rather the extent and magnitude to which and recreational opportunities and public access is lost and the extent which that is consistent with the plans' objectives policies.

349. Objective E 1 and F 1.8 of the of the PRP- AV state:

E.1.1 - Catchment-specific values

Recognise the following values in the Doubtless Bay, Waitangi, Poutō, Mangere and Whāngarei Harbour Catchments:

1) cultural and recreational uses associated with fresh and coastal waters, ...

F.1.8 Use and development in the coastal marine area

Use and development in the coastal marine area:

3) recognises the need to maintain and enhance public open space and recreational opportunities, [Underlining is our emphasis]

350. The language of the provisions is one of recognising the need to maintain and enhance public open space and recreational (and cultural) opportunities.

351. In terms of the WDP-OP, the following objectives are relevant from the Riparian and Coastal Margins and Coastal Environment chapters.

RCM-03

Maintain and enhance public access, where appropriate, to and along the coast and rivers.

RCM-05 - Objective 5

The relationship of tāngata whenua with their sites and other taonga is enhanced".

Coastal Environment

CE-06 Public Access

Maintain and enhance public access to and along the coast where appropriate. [underlining is our emphasis]

352. Again, the language of the provisions above is one of recognising the need to maintain and enhance public open space and recreational opportunities, accepting that this is cast as "where appropriate" in the WDP-OP. It is also about enhancing the relationship of tāngata whenua with their sites and other taonga.

353. In weighing the strategic and directive district and regional plan provisions against those relating to recreational values and uses, as well as the mitigation and offsetting provided by and offered (some on an Augier basis) by the Applicant, we find that the loss of recreational and amenity values and public access (matter of national importance) has not been sufficiently mitigated or offset. In this respect we agree with Mr Jones' view.

354. We accept public access and recreational opportunities will still be provided (albeit not over the area to be reclaimed). However, due to the scale of the reclamation, and the extent of the loss of beach (and its associated values) we do not consider sufficient mitigation or offsetting for that loss has been provided to address the residual significant adverse effects of the loss of recreational values and public access to and along the CMA.

Landscape/Natural Character/Visual Amenity

355. For the Applicant, as part of its AEE, Mr Brown prepared an Assessment of Landscape, Natural Character, and Amenity Effects. This report addressed the landscape, natural character and amenity effects that would be generated by berthage expansion at the eastern end of Northport's current port area at Marsden Point.

356. Mr Brown provided evidence concluding that²⁰⁴:

"Overall, I have concluded, therefore, that the proposed port development's landscape effects would range from very low to high, but that Marsden Point Beach and Bay is the one area that would be inordinately affected in this regard. Reotahi would be affected to a moderate-high degree, but effects in relation to the rest of Whangārei Harbour and its settled margins would typically be of a very low to low order.

Effects on the Harbour's natural character values would be more modest because of the already modified, to highly industrialised, nature of parts of its coastline – in the vicinity of Marsden Point most of all. Such effects would peak at a moderate to moderate-high level near the entrance to the harbour and along Reotahi's beachfront, but would also be of a typically very low to low order elsewhere.

Finally, amenity effects would reach a moderate to moderate-high level at Reotahi and Marsden Point Beach / Bay, but would rapidly tail off away from these locations – again being of a very low to low order for the vast majority of Whangārei Harbour's coastal environs and hinterland."

357. Mr Farrow provided a Council review of Mr Brown's report. He noted that Mr Brown's assessment has used a robust methodology consistent with best practice and concluding *"I concur with the types and levels of effects that are documented, and their impacts within the range of representative viewpoints that are examined by the Assessment"*²⁰⁵. However, he raised a number of concerns including the considerable scale of the STS cranes and bulk of stacked container storage relative to the stature of the existing Port infrastructure and adjacent refinery²⁰⁶.

²⁰⁴ Paragraphs 22 – 24 of Mr Brown's evidence.

²⁰⁵ Paragraph 282 of the section 42A report.

²⁰⁶ Pages 65 to 66 in the section 42A report.

358. Expert conferencing on landscape matters between Mr Farrow and Mr Brown focused on the height and scale of proposed STS cranes and potential container stacks in relation to mapped ONLs.
359. Mr Farrow considered that the effects of the STS cranes and container stacks (maximum height 30 metres) on the experiential values of Motukaroro Island and Mount Aubrey portion of the ONL (Bream Head manaia sequence) would be more than minor. Mr Brown identified the contrasting nature of the two coastlines of Whangārei Harbour with the highly significant volcanic coastline of Whangārei Heads contrasting very markedly with the industrialised lowland and spit of Marsden Point. He considered that the port expansion would increase the contrast, and to a degree, tension between the two halves, but he did not consider that the effects generated by this proposal would change the fundamental nature of the harbour landscape or the values of its ONLs. We agree with Mr Brown.
360. Mr Farrow and Mr Brown confirmed they had read PTITB’s evidence and considered that it was most appropriate for PTITB’s witnesses to express their values and concerns in relation to the proposal. We accept this, and note this issue is addressed in the section on cultural values and effects.
361. Both Mr Farrow and Mr Brown considered that the landscape related effects of the loss of most of the Marsden Point Beach, bay, beachfront, dune system, and coastal vegetation will be significant and would only be partly mitigated/offset by the proposed pocket park. However, they both considered that the off-site mitigation opportunities identified in the Recreation JWS dated 21 September 2023 were supported. We have set out our finding on the effects of recreation and public access above.
362. The Applicant addressed the Landscape, Natural Character, and Amenity effects in its Interim Closing Submissions, noting Mr Brown’s view that the proposal would not materially affect the characteristics and values of any ONLs and that²⁰⁷:
- (a) *The Proposal is located at the “gateway to the harbour” and that an existing dichotomy presently exists at this location: being the industrial infrastructure and activity presently occurring in and around Marsden Point, contrasted with the “amazing volcanic landscape” present at Whangārei Heads.*
 - (b) *The Proposal would not represent a “qualitative change”, and that the contrast or “dichotomy” Mr Brown describes is due to the current/permitted level of development. In Mr Brown’s view, this contrast exists now and the situation would be “very much as it is at present” if the proposal were constructed.*
 - (c) *STS cranes are currently permitted, without a limitation on number or type, within ‘Port Operations Area A’ of the Whangārei District Plan, of which the Proposal is intended to eventually form a cohesive and integrated part.*

²⁰⁷ Paragraph 9.3 of the Applicant’s interim closing submissions.

363. We agree with Mr Brown's opinions and the submissions quoted above.
364. We are satisfied that the matters raised in relation landscape, natural character and amenity effects have been appropriately addressed and that any adverse effects from the cranes will be no more than minor. We also find that the relevant 'policy tests' in the statutory policy documents, (including the NZCPS, as well as section 6 (a) and (b) of the RMA) are satisfied. However, we agree that the effects of the proposal on the Marsden Point Beach, bay, beachfront, dune system, and coastal vegetation will be significant and would only be partly mitigated/offset by the proposed pocket park.

Noise (terrestrial)/Amenity

365. Noise, and its associated amenity effects, from the current and proposed expansion of the port was a matter of contention, raised by a number of submitters who lived near the port, and in particular those opposite the port in Reotahi. We wish to acknowledge time and effort those submitters put into their submissions and evidence, and to attend the hearing.
366. In terms of noise and its context, it appeared to us that most submitters appearing at the hearing concerned about noise accepted that they did not live in a quiet environment; some acknowledged that they had moved 'recently' to this environment; and some also understood and accepted the significant positive economic and social contributions the Port makes to the district and region, and that the port was identified as Regionally Significant Infrastructure.
367. Furthermore, we were made aware (by the Applicant) of a number of noise management initiatives by Northport, such as its publicly accessible "traffic light" system based on real time measured wind speed and direction, and the fact that reversing beepers are not permitted on vehicles at Northport as a noise management response (flashing blue reversing lights are used instead). It appeared that some submitters were not aware of these initiatives.
368. While understanding the concerns raised by the submitters, we accept the expert evidence and recommended conditions of consent that the Port Noise Standard is appropriate and that noise has been appropriately addressed and where necessary the effects mitigated. Our reasons are set out below.
369. Of significance to the Hearing Panel in accepting that the noise environment created by the proposed expanded port operation was appropriate is that following expert conferencing, there were no remaining areas of disagreement regarding construction noise and vibration, port noise limits, port noise mitigation, and noise in open spaces²⁰⁸. In particular, the experts agreed:
- The Port Noise Standard, as opposed to the District Plan noise rules, was appropriate;
 - Northport's proposed construction noise conditions are appropriate.
 - Northport's proposed port noise limit conditions are appropriate.

²⁰⁸ As set out in the noise experts JWS in relation to terrestrial noise dated 21 September 2021.

- Northport’s proposed port noise mitigation conditions are appropriate, including:
 - Northport-funded noise mitigation (e.g., mechanical ventilation/cooling) to be offered when monitored or predicted noise reaches a specified level at the façade of any habitable space in a residential unit²⁰⁹; and
 - the establishment and implementation of a Port Noise Management Plan to minimise port noise through best practice, including ongoing community liaison.
370. We also accept that the recommended conditions of consent appropriately address and mitigate the adverse effects arising for the proposal, including the mitigation (e.g., mechanical ventilation/cooling) to be offered when monitored or predicted noise reaches a specified level at the façade of any habitable space in a residential unit.
371. We note that the Applicant responded to the concerns of the submitters who presented evidence in its Interim Reply²¹⁰. We agree with the Reply statement and do not repeat it here but in our view, it appropriately addresses submitters concerns (accepting of course that the submitters may not agree with those reply submissions).

Navigation

372. The Applicant prepared a Navigation and Safety Report and this was included in the AEE. The report concluded that:

“The proposed expansion of Northport will not adversely affect navigation safety. Northport has through its safety management system a number of risk control mechanisms which address the changes to shipping brought about by the proposal.

The existing main shipping channel has been proven to be safe for shipping up to 300m. Such ships have been safely brought into Northport to date without materially impacting on navigation safety.

Recreational craft activities are considered to not be materially affected by the proposed expansion with regard to navigation safety.

373. Mr Goodchild, for the Applicant, provided evidence based on his extensive experience in navigation safety, particularly as it applies to the Whangārei Harbour. He described Northport’s Safety Management System (SMS) which manages navigation safety through a series of risk control mechanisms including²¹¹:

(a) Implementation of and regular review/updating of the Dynamic Underkeel Clearance (“DUKC”) system;

(b) Use of a ship simulator;

²⁰⁹ We note the final set of recommended set of conditions removed the limitation on the number of dwellings to be retrofitted per year.

²¹⁰ Paragraph 8.4, a – d of the interim reply submissions.

²¹¹ Paragraph 12 of Mr Goodchild’s evidence.

- (c) *Careful consideration of turning basin dimensions;*
- (d) *Operating within environmental limitations;*
- (e) *Appropriate use of pilots and towage;*
- (f) *Navigation Aids; and*
- (g) *Local Port Service.*

374. Commercial operations adjacent to the port, including Seafuels²¹², BP Oil New Zealand (BP)²¹³ and Channel Infrastructure New Zealand (CINZ)²¹⁴. They raised various matters with respect the effects of the port expansion on the navigation safety of their operations; in particular, the ability to manoeuvre safely in and around the expanded port.
375. Expert conferencing on navigation safety included representatives from Northport, NRC and Seafuels²¹⁵. Agreement was reached and that the matters raised in the submissions could be addressed through appropriate conditions of consent.
376. Following ongoing discussions between Northport, Seafuels and CINZ agreement was reached over the potential navigation safety effects and how these matters could be addressed in draft conditions.
377. The proposed draft conditions included a number of measures to address navigation safety through the design and construction of marine structures, the implementation of a Safety Management Plan for commercial shipping and during capital and maintenance operations.
378. Overall, we are satisfied that the matters raised in relation to both construction and operational navigation safety have been appropriately addressed, and any adverse effects appropriately avoided or mitigated.

Transport

Roading, and in particular the State Highways

379. All of the issues in relation to traffic, mainly between the Applicant and Waka Kotahi, were agreed between the parties. Waka Kotahi (Mr Mutton) filed a supplementary statement of evidence confirming this – stating²¹⁶:

“Waka Kotahi confirms that the conditions attached to Northport’s closing reflect the agreed changes.”

380. The Applicant also addressed this in its Interim Reply Statement.

²¹² Submission 130.

²¹³ Submission 168.

²¹⁴ Submission 176.

²¹⁵ Noting again that their expert evidence was withdrawn as set out in the section above regarding “Procedural Matters”.

²¹⁶ Paragraphs 3.2 of Mr Mutton’s supplementary statement of evidence.

381. We record that while there was initially a difference of opinion between the Applicant and Waka Kotahi on the traffic implications and methods/conditions for addressing the adverse effects (these being agreed by the parties), that Waka Kotahi was nonetheless supportive of the Proposal. The issue was how could the adverse effects be addressed (by consent conditions).

382. The Applicant, Waka Kotahi and the WDC acknowledged that the effects of the proposed expansion on the transportation network needed to be managed. In this respect, the traffic and planning experts assessed the effects and proposed conditions requiring a comprehensive suite of monitoring and response mechanisms for the potential future scenario whereby traffic (both public and Northport-related) reduces the level of service at identified intersections on SH15.

383. As set out in the Applicant's Interim Reply²¹⁷:

"Late last week, Northport and Waka Kotahi reached agreement between themselves on proposed transport conditions that completely satisfy the concerns raised by Waka Kotahi. The agreed conditions are incorporated into the set of conditions at Appendix A. To be clear – these are the conditions that Northport is seeking. The evidential basis for the agreed conditions is already set out in the evidence before the Panel."

384. The Hearing Panel has reviewed the statement by Waka Kotahi, the Applicant's Reply and the proposed conditions. We accept that agreement has been reached and that the proposed conditions avoid or appropriately mitigate the adverse traffic effects.

State Highway 1 upgrading

385. We note that the section 42A Report Addendum no longer recommended that a condition be imposed requiring that SH1 be four-laned between the Brynderwyns and the port. As in the case of the rail network proposal, we again make the point that such a condition would likely frustrate or nullify the grant of consent. Northport has no ability to control the timing of such an upgrade, but more to the point it is our finding that any such condition would be unreasonable and disproportionate to the effects sought to be addressed.

Rail Link

386. Mr Gordon, Chief of Capital Planning and Asset Development for KiwiRail Holdings Ltd, in his evidence and presentation to the Hearing Panel described recent investment in rail to Northland, and expressed "*real commitment from the Crown*" toward enabling a rail connection to Northport. Mr Gordon confirmed that Northport is seen by KiwiRail as an increasingly important part of the Upper North Island Supply Chain ("UNISC"), and that KiwiRail is coordinating with Northport to ensure complementary road and rail provision for an expanded port.

²¹⁷ Paragraph 6.3 of the interim reply submissions.

387. Council officers, early in the hearing process, proposed what was effectively a “condition precedent”; that the Proposal cannot occur unless/until a construction contract for the rail connection to Northport has been awarded. The Applicant responded to this in its Opening Submissions.
388. It appeared to us from the section 42A Report Addendum that the Council no longer remains of the view that such a condition is required. We support that view and agree with the Applicant that such a condition would be unnecessary, inappropriate, and ultra vires. It would, if imposed, have the effect of frustrating or nullifying the grant of the consent. We would not have imposed this as a condition of consent.
389. That said, we accept Northport’s position that *“the provision of a rail connection to Northport is supported and would improve freight transport efficiency; but the Proposal is not reliant on the proposed rail spur. It can, and should, “stand alone”*²¹⁸.

Stormwater

390. The application includes discharge consent for stormwater associated with the land-based activities, discharge of decant water from reclamation activities, and discharge of sediment plumes associated with dredging.
391. The Northport stormwater system was described in the Applicant’s “Stormwater Pond Assessment Report for the proposed Northport Expansion”²¹⁹. The existing footprint comprises 49ha of reclamation plus a further 4.6ha of consented but not yet constructed reclamation. The expansion proposal would add a further 13.7ha to the consented catchment footprint to give a total footprint area of 67.3ha.
392. Stormwater will be discharged from the site both during the construction phase and the operational phase. The management of stormwater during the construction phase was described in the Applicant’s Draft Management Plans²²⁰. This primarily focussed on minimising discharges of sediment laden water through implementing an array of erosion and sediment control measures.
393. Mr Pettersson’s evidence, for the Applicant, described the risks and mitigation measures to manage sediment discharges during construction. It was his view that²²¹:

“The primary risk of sediment entering the marine environment during the reclamation works are:

- (a) Sediment-laden stormwater generated from flow across exposed ground.*
- (b) Fines within the reclamation fill material being washed out or eroded by wave action.”*

²¹⁸ Paragraph 6.7 of the interim reply submissions.

²¹⁹ Appendix 20, AEE.

²²⁰ Appendix 5 Draft Management Plans, AEE.

²²¹ Paragraph 31 and 32 of Mr Pettersson’s evidence-in-chief.

394. Mr Pettersson opined that a range of standard industry practices could be applied to manage the discharge of sediment and that these would be detailed in the Construction Environmental Management Plan (CEMP). We note that draft conditions²²² were included with the application specifying the preparation of the CEMP and the erosion and sediment control measures to be implemented.
395. Operational stormwater from the existing Northport operations area is currently managed via a canal and pond-based system established under an existing NRC discharge consent. Consent was granted in 1997 to discharge water treated by the canal/pond system through a diffuser to the Whangārei Harbour. The system which has been in use since mid-2002 consists of approximately 4ha of ponds and 2,000m of canals. The pond system was extended in 2016 to accommodate an extension of the hardstand area behind the port, and in 2018 further improvements were made.
396. The Applicant described the stormwater quality treatment system for the port as having been based on Auckland Council's stormwater treatment design guideline GD01 and its predecessor TP10²²³. An assessment of the dimensions of the pond system and the connecting canals concluded that the dead storage volume was less than the guideline's design parameters. However, additional storage in the canal system can be created installing a 250mm weir within the canal directly upstream of the pond inlet weir. With this additional weir the dead storage design criterion described in the guidance document would be met.
397. Evidence on the effects of the proposed expansion on the discharge of stormwater was provided by Mr Blackburn (for the Applicant). It was his opinion that²²⁴:
- “(a) The proposed operational stormwater management system under the full proposed port expansion scenario is anticipated to function effectively.*
- (b) The operational stormwater consent conditions proposed by Northport are appropriate from a stormwater management/engineering perspective; including the proposed adjustment to stormwater quality monitoring/compliance – being the use of the current resource consent conditions' mixing zone thresholds as a trigger for the application of proposed new at-source compliance parameters.”*

²²² Draft conditions 90 to 98. Draft Proposed NRC Conditions; Northport Limited (Updated /Final Version 16 May 2024).

²²³ Section 5, Appendix 20, AEE.

²²⁴ Paragraph 2.4 of Mr Blackburn's evidence.

398. Mr Blackburn described modelling using hydrological modelling software to assess the volumetric capacity of the pond for both the existing and proposed expansion of the port apron²²⁵. He noted that through calibration of the model with a selected event that it indicated noticeable losses from the pond and canal. He opined that this was likely due to exfiltration through the base of the unlined ponds and canals²²⁶. Accordingly, an exfiltration rate of 20mm/hr from the pond and canals was incorporated in the model.
399. Actual stormwater discharge volumes from the system were compared to a calculated volume based on the rainfall for the period from 2003 to 2015. The AEE stated that²²⁷:
- “The information shows that between 2003 and 2007 actual spill volumes were very much below the predicted volumes. In two of these years (2004 and 2006), there was in fact no discharge from the pond system. The Palmer report concluded that losses due to seepage and evapotranspiration over this period were very much higher than originally anticipated (in this case 'evapotranspiration is the process by which water is transferred to the atmosphere by evaporation from the pond surface and by transpiration from the emergent plants within the pond).”*
400. Questioning during the hearing raised issues about the system’s design parameters being founded on stormwater quality guidelines which are not intended for industrial sites. Further information via the Hearing Panel Directions was sought from the Applicant to provide greater clarity as to how stormwater quality was to be managed on the site²²⁸. The information sought included preparation of a draft Stormwater Operations and Maintenance Plan (SOMP).
401. The Applicant’s response to the Hearing Panel’s Direction 15 included a draft SOMP²²⁹. We are satisfied that this plan is comprehensive and addresses the questions raised over the management of stormwater quality on the site.
402. Based on the evidence that untreated stormwater was being lost through exfiltration, further questions were raised over the potential effects of untreated stormwater discharges to ground and potentially groundwater through the base of the systems canals and ponds. Greater focus on these issues was the subject of expert conferencing directed by the Hearing Panel.
403. The experts involved in the Expert Conferencing agreed on several important points that flow from the Hearing Panel’s questions²³⁰. These are:

²²⁵ Section 8, Mr Blackburn’s evidence.

²²⁶ Paragraph 8.9, Mr Blackburn’s evidence.

²²⁷ Section 2.2, AEE Appendix 29, Stormwater Discharge Review, Ecological and Water Quality Report.

²²⁸ Hearing Panel Direction 15 (1 December 2023).

²²⁹ Attachments to the Legal Counsel’s memo dated 21 February 2024.

²³⁰ JWS in relation to Stormwater, Groundwater and Planning.

- That Northport's stormwater catchment was being developed and increased over time in the period 2015 through to current size. The consequence of this is that the volume of discharge has increased.
- The exfiltration rate from the system is likely to be significantly lower than expressed in the Stormwater Discharge Review, Ecological and Water Quality Report 2015 included as Appendix 29 of the AEE. Total losses to groundwater are likely to be closer to 400m³/day but will vary depending on groundwater levels, rainfall and pond levels and tides.
- Exfiltration from the pond system will be a diffuse discharge to Blacksmith Creek and will have a lesser effect than the direct discharge because the ground water will end up in the same receiving environment having been filtered through the sand of the aquifer and dilution through mixing with the natural groundwater throughflow.
- The eventual receiving environment is brackish and therefore the marine water quality criteria are appropriate in this instance.
- The parameters measured historically provide a reasonable oversight of the likely environmental effects and the 2023 groundwater monitoring indicates very low concentrations of all tested constituents.
- There is no need for groundwater monitoring on the basis that the volumes discharged to ground are low. Further, the surface stormwater monitoring proposed would provide an early warning of any potential effects.

404. Following conferencing the Hearing Panel understands that the experts engaged over the operational stormwater conditions and the Applicant proposed a revised suite of draft conditions. These conditions detail:

- The location for the discharge of treated stormwater.
- The preparation of a Stormwater Monitoring and Maintenance Plan (SMMP) to set out how the stormwater system is to be managed to achieve compliance with performance-based conditions.
- A suite of chemical parameters and concentrations to meet compliance.
- The monitoring location and frequency; and
- Reporting annually to the Council on the results of monitoring and the outcomes of any recommended remedial actions. The monitoring data are to be in a tabulated spreadsheet. Any exceedances of performance standards are to be notified to the Council within 24 hours and reported on within 10 days identifying the exceedance, possible causes and remedial action.,

405. Having regard to the above, we are satisfied that the matters set out in section 105 – Matters relevant to certain applications and 107 – Restriction on the grant of certain discharge permits of the RMA have been appropriately addressed and the proposed consent consents will ensure that, after reasonable mixing, none of the matters in section 107 (1) (c) to (g) will occur.

406. We are satisfied that the matters raised in relation to both construction and operational stormwater have been appropriately addressed. We are also satisfied that the consent conditions offered by the Applicant in relation to stormwater and groundwater are appropriate and will ensure any adverse effects are avoided or mitigated.

Air Quality

407. Mr Curtis provided expert Air Quality evidence for Northport. It was his view that the main potential air quality effects that could be generated are dust nuisance effects. It was his opinion that through the use of appropriate mitigation any potential for nuisance effects could be minimised such that the site should not result in offensive or objectional dust nuisance.
408. He did not consider that there was potential for any off-site effects caused by vehicles involved in the construction process, but recommend that appropriate maintenance and operational practice is used to minimise any emissions, and would be managed through conditions of consent, including management plan(s). Furthermore, no significant discharges are expected from the operation of the expanded container port, noting particularly as much of the port equipment will be electrified (or capable of electrification).
409. The Council officers in the section 42A report agreed with Mr Curtis' assessment and concluded²³¹:
- "Based on the specialist advice of Mr Noonan and Mr Curtis, subject to conditions, I consider actual or potential air quality effects will be less than minor and suitably mitigated."*
410. We also note that Ms Dalton for PTITB acknowledged that was a level of agreement between PTITB's and Northport's experts on a range of matters, including, air quality.
411. We accept, with the conditions offered by the Applicant, that the air quality aspect of the proposal has been appropriately addressed.

Lapse date for the Regional Consents

412. The appropriate lapse period was a matter in contention. Different views were held on this – particularly the Applicant (who initially sought a 35-year lapse but revised this to 20 years), the NRC (Mr Masefield) recommending 10-year lapse and Mr Doesburg submissions essentially supporting a 10-year lapse date, and Mr Matheson, counsel for PTITB, submitting that 5 to 8 years was sufficient. We address this below.

²³¹ Paragraph 391 of the section 42A report.

413. The Applicant's legal submissions addressed the issue of 'lapse' in its Opening Submissions (paragraphs 7.30 – 7.31), its Interim Reply Submissions (paragraphs 20.5 – 20.10) and its Final Reply Submissions (paragraphs 4.5 – 4.7). Its case was essentially that a lapse period of 20 years is necessary to cover the likely development period for the proposal, with allowance for its complex nature, size and scale, and the range of external and unpredictable events which can cause delay to construction planning; and that this is consistent with other large-scale infrastructure projects.
414. As addressed by Messrs Jagger, Moore and Akehurst above, we accept the rationale and economic imperatives for the project. We also accept, as Mr Moore and others outlined, that for complex and significant proposals such as this, there is a degree of uncertainty about timing requiring the need for some flexibility for when the development can be undertaken. This clearly impacts on what may be an appropriate lapse period.
415. In relation to the above, we accept Mr Moore's evidence that *"the development process alone for this Project will likely span 9-14 years"*²³². However, as he set out 5 to 7 years of that is *"Consenting pathway: application/hearings"* (i.e. this process), with *"business case and detailed design"* being 1 – 2 years with *"build using local/NZ capability"* 3- 5 years. This means construction could be completed 7 years from when any consents were granted.
416. We also accept the complex nature, size and scale of the Proposal, and the range of external and unpredictable events which can cause delay to construction planning: the Applicant setting out recent examples including the Covid-19 pandemic and response, and Cyclone Gabrielle, both of which had material implications for Northport operations and future planning. The Applicant's legal submissions set out a number of cases where longer (20 plus year) lapse periods were given.
417. Mr Masefield addressed the 'lapse period' in the two section 42A reports. In the Addendum section 42A report he stated²³³:
- "Mr Doesburg has provided useful submissions on both these issues. From these, Mr Masefield maintains that a 10-year lapse period strikes the appropriate balance between efficient use of time and resources to reconsider this matter if consents were not exercised and reconsider the appropriateness of the activity and how the existing environment may have changed."*
418. Mr Doesburg's submissions raised legal issues in respect of long lapse period. In cautioning about longer lapse periods he stated²³⁴:

"There are compelling policy reasons as to why a resource consent should not subsist for a lengthy period of time without being put into effect, as discussed in Katz v Auckland City. Those policy reasons include (but are not limited to):

(a) physical and social environment change;

²³² Paragraph 79 of Mr Moore's evidence.

²³³ Paragraph 39 of the Addendum section 42A report.

²³⁴ Paragraph 11 of the NRC legal submissions.

- (b) *changing circumstances may render conditions, restrictions and prohibitions in a consent inappropriate or unnecessary; and*
- (c) *when a consent is put into effect it becomes a physical reality as well as a legal right. But if a consent is not put into effect within a reasonable time it cannot properly remain a fixed opportunity in an ever-changing scene.”*

419. He also set out²³⁵:

“The physical and social environment is likely to change materially in that time [20 years as submitted by the Applicant], particularly in this dynamic coastal environment that has experienced significant change over the past 100 years, and in the context of future climate change. The proposed conditions of consent are generally “static”. They do not provide for ongoing review or an adaptive response to changes in the environment. If the environment changes and the consents are implemented in year 19, the conditions may no longer be appropriate. In the context of designations, the courts have expressed concerns with granting a 20-year lapse period, due to its potential to create planning blight. The same concerns are relevant in the context of a resource consent that allocates a limited resource to the exclusion of others.”

420. Mr Doesburg also addressed relevant case law²³⁶.

421. Mr Matheson also addressed the appropriate lapse period in some detail²³⁷, submitting, if consent were to be granted it should be no more than 5 or at most 8 years. He stated²³⁸:

“The concept of an appropriate lapse date lies at the heart of sound resource management principles. Imagine for a moment what a resource consent granted in 1990 might have looked like and what the conditions would have required. Then imagine that such a consent was implemented next year in reliance on those conditions.”

422. He further stated²³⁹:

“If the reclamation is essential or of such value to the Northland Region, then that reclamation should be undertaken without delay”.

²³⁵ Paragraph 15 of the NRC legal submissions.

²³⁶ Paragraph 12 of the NRC legal submissions.

²³⁷ Paragraphs 4.16 to 4.24 of PTITB’s legal submissions.

²³⁸ Paragraph 4.18 of PTITB’s legal submissions.

²³⁹ Paragraph 4.23 of PTITB’s legal submissions.

423. We agree with NRC's and PTITP's position; that it is not appropriate to provide a 20-lapse period for the reasons they set out. While the Applicant's legal submissions were that the 20-year lapse period was justified, we do not think the Applicant's evidence (Mr Akehurst and Mr Moore) makes a strong case for a longer lapse period. We agree that the longer period would have a significant effect on Patuharakeke (and others) as outlined in Mr Matheson's submissions²⁴⁰:

"A 35 year lapse date [revised to 20 years by the Applicant] would represent a "sword of Damocles" hanging over Patuharakeke, not knowing when their takutai moana would be taken from them, and being caught in an invidious position of not knowing whether they should invest very limited time and financial resources into the protection and restoration of the nearby kaimoana sites".

424. Had we granted consent we would have provided a 10-year lapse period. It is our view, based on the legal submissions and the evidence, that this is sufficient time, with some flexibility to have, commenced (and completed) the reclamation. If the consent was not given effect to by then, then it would be appropriate to re-assess the reclamation proposal at that time to understand what the potential benefits or adverse effects might be then.

Consent Duration

425. Consent duration was addressed in the Applicant's opening and reply submissions. This was mainly due to Mr Masfield's concern (as most recently set out in the section 42A Report Addendum). Mr Masfield's recommendation was that the duration of the reclamation consents be limited to 35 years, and recommended durations of 20 years for the other regional consents
426. The Applicant addressed this matter in its Interim Reply²⁴¹, and followed it up in its final Reply stating²⁴²:

"It seems that the NRC remains of the view that there should be a specified duration for the consents authorising the reclamation, which is unusual. Section 123(a) of the RMA provides that the default position is that a reclamation consent duration is unlimited. We are advised that Northport's previous reclamation consents included unlimited durations, which is routine. The rationale for the recommendation for a shorter duration is unclear. Once the reclamation is complete, there is nothing in the CMA to which the regional consents apply (i.e. NRC's jurisdiction over the reclamation ends)."

427. We agree with the Applicant. We would not have imposed a duration on the reclamation consent.

²⁴⁰ Paragraphs 4.44 (a) – (f), including (e) of PTITB's legal submissions.

²⁴¹ Paragraph 20.14 of the Applicant's interim reply submissions.

²⁴² Paragraph 4.9 of the Applicant's final reply submissions.

Part 2 of the RMA

428. As we set out earlier, we have been able to rely on the provisions of the operative and proposed regional and district planning documents, in particular the PRP- AV and the WDP- OP, to determine these applications without recourse to Part 2. However, given the nature of this proposal and its range of potential adverse and/or positive effects we have addressed the Part 2 matters in this decision. This has been, in particular section 6 (d) - in relation to public access to and along the CMA, and 6(e) regarding the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga, and section 7 (a) regarding kaitiakitanga.

429. We find that the Part 2 matters above are not met by the proposal in its current form.

Decision

430. For all of the reasons set out above, including the Part 2 considerations, we find that the proposal, in its current form, would not meet section 5 of the RMA – that the proposal would not “*promote the sustainable management of natural and physical resources*”.



Greg Hill (Chair)

On behalf of the Independent Hearings Commissioners.

5 July 2024

Appendix 1 – Evidence and/or Appearances at the Hearing

<p>Applicant – noting that those names marked * did not appear at the hearing as they were excused by the hearing Panel.</p>	<ul style="list-style-type: none"> • Kitt Littlejohn/Chris Simmons – Legal Counsel • Murray Jagger – Chairman of the Board of Directors for Northport Limited • Jonathan Moore – Chief Executive Officer of Northport Limited • Greg Blomfield – Terminal Facilities Manager at Northport Limited • Mahim Khanna* – Terminal design and alternatives at Northport Limited • Greg Akehurst – Economist • Dr Brett Beamsley – Hydrodynamic and Morphodynamic Modelling • Dr David Fox – Environmetrics - establishment of turbidity triggers • Richard Reinen-Hamill – Engineer - Coastal Processes • Dr Shane Kelly – Marine Ecology • Dr Leigh Bull – Ecologist, Avifauna • Dr Deanna Clement – Ecologist, Marine Mammals • Dr Sarah Flynn – Ecologist, terrestrial • Ross Sneddon* – Ecologist, peer review of marine ecology (excluding avifauna and marine mammals) • Jared Pettersson – Environmental Management • Stephen Brown – Landscape, Natural Character and Visual Amenity • Robert Greenaway – Recreation and Tourism • Nerissa Harrison – Transport • Dee Isaacs – Cultural • Jan Stanway * – design and construction • Craig Fitzgerald – acoustics • Dr Matthew Pine* - marine scientist specialising in underwater noise and ocean bioacoustics • Andrew Curtis* – Air Quality • James Blackburn – Stormwater • Bruce Goodchild *- Navigation safety • Brett Hood – Planner • Dr Philip Mitchell – Planner
<p>Submitters</p>	<ul style="list-style-type: none"> • Christopher Howell • Bream Head Conservation Trust: Nicola Hartwell • Peter Fitzgerald • Northland Chamber of Commerce Inc (North Chamber): Tim Robinson and Colin Hanna • Marsden Maritime Holdings: Rosie Mercer • Robert Twyman • Paul Cresswell • Whangārei District Council: Christine Niblock • Director-General of Conservation: Lisa Sutherland, Dr Tony Beauchamp and Linda Kirk

	<ul style="list-style-type: none"> • Steve Tyson • Waka Kotahi NZ Transport Agency: Christina Sheard – Legal Counsel, Steve Mutton - Director Regional Relationships Te Tai Tokerau me Tāmaki Makaurau, Cath Heppelthwaite – Planning, Angie Crafer – Transport • National Road Carriers Association: Justin Tighe-Umbers - CEO and James Smith - GM Policy and Advocacy • Clinton (Jack) Craw • Te Araroa Northland Trust: Shane Knowler • Stan Semenoff Transport Limited: Stan Semenoff • IK & SM Newey Transport Ltd: Ian Newey • KiwiRail: David Gordon – Chief Capital Planning and Asset Development and Marija Batistich – Legal Counsel • Channel Infrastructure NZ Limited: Jack Stewart - GM Operations and Stephanie de Groot – Legal Counsel • Wright Technologies Ltd: Colin Mitten • Swire Shipping Ltd (including Pacifica Shipping): Alistair Skingley • Northland Inc: Vaughan Cooper • Forest & Bird: May Downing- Legal Counsel • Northland Wood Council: Ursula Buckingham and Steve Weir • Mountains to Sea Conservation Trust: Samara Nicholas • Te Hononga Whakaruruhau o Whangārei Terenga Paraoa - Whangārei Harbour Marine Reserve Advisory Committee: Samara Nicholas • New Zealand Cruise Association: Jacqui Lloyd • New Zealand Shipping Federation: John Harbord - Executive Director • Ruakaka Residents and Ratepayers Association Incorporated: Richard Morris • Janice Ellen Boyes • Matthew Oliver Evans • Joshua James Gwilliam • Patuharakeke Te Iwi Trust Board: Bal Matheson (Legal), Professor Karin Bryan (Hydrodynamics and Coastal Processes), Dr Richard Bulmer (Marine Ecology), Dr Tom Brough (Marine Mammals) Juliane Chetham (Cultural), Luana Pirihi, Taitamariki, Hollie Kereopa, Deja Tuhoro, Makarena Dalton (Planning) and David Milner. • Mere Kepa • Te Parawhau (Mira Norris) • Te Pouwhenua o Tiakiriri Kukupa Trust - Whangārei Harbour Kaitiaki Ropu (Marina Fletcher) • Waimarie Kingi (Ngati Kahu O Torongare Te Parawhau Hapu Iwi Trust)
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	<ul style="list-style-type: none"> Nicki Louisa Wakefield (Rewarewa D Māori Incorporation, Ngati Kahu o Torongare and Nga Hapu o Whangārei)
<p>Council (NRC and WDC) - -- noting that those names marked * did not appear at the hearing as they were excused by the hearing Panel.</p>	<ul style="list-style-type: none"> Blair Masefield – Planner, section 42A author for NRC Stacey Sharp – Planner, section 42A author for WDC Dr Doug Treloar – Coastal Engineer Mike Farrow – Landscape, Natural Character and Visual Amenity Dr Drew Lohrer – Marine Ecology Claire Webb – Coastal Avifauna Helen McConnell – Marine Mammals Scott Keane* – Navigation & Safety Peter Runcie* – Terrestrial Acoustics Craig Jones – Recreation John McLaren – Stormwater Suzanne Cawood and Mathew Noonan* – Air Quality Robert Inman – Transport Claire Webb and Sandy Huang – Terrestrial Ecology Dr Christo Rautenbach* – Hydrodynamic, Morphology and Sediment Transport Modelling Peter Clough – Economic Scott Keane – Port Demand Design and Operations Jonathan Vallarta* – Underwater Acoustics
Hearings Administrator	Alissa Sluys - Consents and Hearing Administrator

ATTACHMENT C: CONDITIONS PROPOSED AT HEARING

DRAFT PROPOSED NRC CONDITIONS: NORTHPORT LIMITED (UPDATED/FINAL VERSION 16 MAY 2024)

PORT EXPANSION, SH15, MARSDEN POINT

To undertake the following activities at or near Ralph Trimmer Drive, Marsden Point and/or within the Whangārei Harbour:

- Reclamation of part of the Coastal Marine Area (CMA) to the immediate east of Northport, including associated deposition and discharge of decant water.
- Capital and associated maintenance dredging.
- Wharf structures on the northern (seaward) edge of the proposed reclamation.
- Sheet piling and rock revetment structures on the eastern edge of the reclamation.
- Treatment of operational stormwater via the existing pond-based stormwater system and/or proprietary systems, and subsequent discharge to ground and the CMA.
- Port related activities on the proposed reclamation and wharves, and on parts of the proposed development above MHWS.
- Construction of additional beach roosting habitat to the west of Northport.
- Construction of a public access from the existing car park at the end of Ralph Trimmer Drive (to be replaced) through to a proposed reserve and related amenities at the eastern edge of the proposed reclamation.
- Construction of a tug berthing facility and fishing pontoon at the eastern edge of the proposed reclamation.

Note: All location coordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection (unless expressly stated otherwise).

SUBJECT TO THE FOLLOWING CONDITIONS:

DEFINITIONS

“Allowable Duration”

is the maximum number of hours in a rolling 30-day period during which the Intensity prescribed at a telemetered turbidity monitoring location in relation to turbidity trigger Tiers 1 and 2 or Tier 3 Compliance Level may be exceeded without a management action being required. The maximum number of hours for each Tier is as follows:

- (i) Tier 1: 144
- (ii) Tier 2: 36
- (iii) Tier 3: 7.2;

“AQMP”

means the Air Quality Management Plan;

“BMP”	means the Biosecurity Management Plan(s);
“Capital DMP”	means the Capital Dredging Management Plan;
“CEMP”	means the Construction Environmental Management Plan;
“Certification”	has the meaning set out in Condition 24;
“Channel Infrastructure”	means Channel Infrastructure NZ Ltd and its wholly-owned subsidiaries and any successor in title to some or all of its coastal structures including existing jetties (including the fire pump intake dolphin moorings and spillway) and other coastal structures including outfalls and a boat ramp;
“CIH”	means the Cultural Indicators Hub;
“CMA”	means the coastal marine area as defined in s2 of the RMA;
“Commencement of reclamation works”	means earthworks/filling and other physical works associated with construction of the Project in the CMA. Works associated with preliminary investigations/reporting do not fall within this definition;
“Commencement of these consents”	means the date the last of the consents applied for by Northport for its Expansion Project commences according to s 116 of the RMA;
“Council”	means Northland Regional Council or its successor;
“CRMS”	means Craft Risk Management Standard;
“Dredge Spoil”	means seabed material that has been removed by a dredge;
“Declared Depth”	means the depth below Chart Datum that is required for navigational safety, therefore set as the minimum requirement for the dredge operator to achieve. This excludes the over dredge tolerance in both the vertical and horizontal planes;
“DMMOZ”	means the Dredging Marine Mammal Observation Zone;
“EMMOZ”	means the Extended Marine Mammal Observation Zone;
“EMMP”	means the Environmental Monitoring and Management Plan;
“Exceedance”	means the exceedance of an Allowable Duration;
“Expansion Project”	means the Northport expansion to the east of the existing port for the purpose of constructing, operating, and maintaining a container terminal as authorised by these consents (and associated district consents), including reclamation and wharf construction and all associated activities and works;
“FNU”	Formazin Nephelometric Unit;

"FTU"	means Formazine Turbidity Unit;
"Index-linked"	means linked to the Consumer Price Index, but capped at 2.5%, and compounding over 5-years, with adjustment to the level of funding at every 5-yearly review.
"Intensity"	<p>means the turbidity level (in NTU/FTU) established for each Tier at each telemetered turbidity monitoring location using the methodology contained in the document titled <i>"Turbidity Monitoring for the Northport Expansion Project"</i> (1 June 2023, Environmetrics Australia), and the following percentiles:</p> <ul style="list-style-type: none">(i) Tier 1: 80%(ii) Tier 2: 95%(iii) Tier 3: 99%;
"Maintenance DMP"	means the Maintenance Dredging Management Plan;
"MMMP"	means the Marine Mammal Management Plan;
"MMO"	means a suitably qualified and experienced person (holding a tertiary ecology or similar qualification and experience working with marine mammals, or a person with at least 2 years marine mammal observation experience from similar projects) that has successfully completed an appropriate MMO training course, followed by a 1 day on site training course delivered by a suitably qualified marine scientist.
"MMOZ"	means Marine Mammal Observation Zone;
"NTU"	means nephelometric turbidity unit;
"Pocket Park"	means the public park (recreational open space) area near the south-eastern corner of the Expansion Project site, as shown in Boffa Miskell <i>"Proposed Concept Plan"</i> , BM220519-201 (Revision B, 25.7.22) at Appendix 1 .
"Practical Completion"	in relation to the reclamation, means the date that the completed reclamation (or any part thereof) is available for port activities;
"Predicted Dredging Turbidity"	means the TSS from the dredging that is predicted from the hydrodynamic modelling detailed in Appendix 9 of the Assessment of Environmental Effects supporting the application lodged in October 2022;
"RG"	Tangata Whenua Relationship Group

“RMA”	means the Resource Management Act 1991;
“Sandbank Renourishment Area”	means the additional avifauna roosting habitat (for the benefit of Tōrea pango <i>Variable oystercatcher</i> and Tūturiwhatu <i>New Zealand dotterel</i>) that is authorised by these consents to be established through the deposition of sand within the CMA to the west of the Expansion Project (as generally shown in Tonkin+Taylor “ <i>Bird Roost Concept</i> ”, DWG No. 1017349-02 (Revision 1, August 2022));
“SCMP”	means the Stakeholder and Communications Management Plan described in Conditions 15-18;
“SMMP”	means Stormwater Operations, Monitoring, and Maintenance Plan
“Suitably Qualified and Experienced”	means a person or persons with a recognised qualification and/or experience relevant to the topic being assessed;
“Tier 3 Compliance Level”	means the turbidity compliance level for each of the telemetered turbidity monitoring locations established in accordance with Condition 162 and the document titled “ <i>Turbidity Monitoring for the Northport Expansion Project</i> ” (1 June 2023, Environmetrics Australia).
“TSS”	means Total Suspended Solids, measured in mg/L;
“Water Taxi Pontoon”	means the pontoon adjacent to the eastern end of the proposed reclamation which is proposed to be used for water taxi services, as shown in “Northport relocated tug facility – eastern end concept plan”, D60-X (Issue R0, September 2022) at Appendix 1 .
“Working Day”	means any day of the year other than: <ul style="list-style-type: none">(a) A Saturday, a Sunday, Waitangi Day, Good Friday, Easter Monday, Anzac Day, the Sovereign’s birthday, Matariki, and Labour Day; and(b) If Waitangi Day or Anzac Day falls on a Saturday or a Sunday, the following Monday; and(c) A day in the period commencing on 20 December in any year and ending with 10 January in the following year.
“Wharf”	means the wharf structure to be constructed adjacent to the proposed reclamation, which is proposed to accommodate Berth 5, as shown in “Plan Reference” at Appendix 1 .

GENERAL CONDITIONS

1. Works/activities authorised by these consents must be undertaken in general accordance with the application received by Council on 6 October 2022 and all supporting information, including the following documents and plans (including as amended through the application and hearing process). If there is any conflict between the relevant documents/plans and these conditions of consent, these conditions of consent prevail.

AEE reports

- Marshall Day Acoustics Ltd '*Northport Container Terminal Expansion Noise Assessment*' (Rp 002 R07 20200547) dated 29 September 2022.
- Enviser Ltd '*Draft Construction Environmental Management Plan*' (Enviser ref. 1116) dated October 2022.
- MetOcean Solutions '*Effects of Proposed Reclamation and Dredging Layout on Hydrodynamics*' dated August 2022.
- Tonkin and Taylor Ltd '*Coastal Process Assessment*' (ref. 1017349 v3) dated September 2022.
- Coast and Catchment Ltd '*Assessment of Ecological Effects*' Report number 2021-24 dated September 2022.
- Boffa Miskell Ltd '*Coastal Avifauna Assessment*' Rev. G dated 3 October 2022.
- Cawthron Institute '*Potential Effects of the Proposed Northport reclamation on Marine Mammals in the Whangarei Harbour Region*' Report no. 3652 dated September 2022.
- Brown NZ Ltd '*Assessment of Landscape, Natural Character and Amenity Effects*' dated September 2022.
- Clough and Associates Ltd '*Archaeological Assessment*' dated June 2022.
- WSP Ltd '*Concept Design Report*' Ref. 6-DV652.00 Rev. C dated August 2022.
- Rob Greenaway and Associates '*Recreation Effects Assessment*' dated September 2022.
- Hawthorn Geddes Ltd '*Stormwater Pond Assessment Report*' HG ref. 12377 Rev. 3 dated 10.8.22.
- Pattle Delamore Partners Ltd '*Air Quality Assessment*' Ref. A03566800R001 dated 5.8.22.
- Market Economics Ltd '*Economic Assessment*' Ref. NPL 001.20 dated September 2021.
- Patuharakeke Te Iwi Trust Board '*Interim Cultural Effects Assessment*' dated November 2021.
- Styles Group '*Assessment of Underwater Noise Effects*' dated 2 August 2022.
- Northport '*Navigation Safety Report*' dated September 2022.
- WSP Ltd '*Traffic Impact Assessment*' Ref. 1-19278.01/00006 dated 30.08.22.
- 4Sight Ltd '*Intertidal Ecology Report*' dated May 2018.

RFI responses

- Response to information request dated 25 October 2022.
- Response to information request dated 21 February 2023.
- Response to information request dated 13 July 2023.

Plans/drawings

- WSP Ltd 'Design Drawings' 1-19278.01(03) – Sheets C01 (Rev. D), C02 (Rev. D), C03 (Rev. D), and C04 (Rev E).
 - Boffa Miskell Ltd – 'Pocket Park Concept Plan' – BM220519-201 and BM 220519-200 (Rev B).
 - Reyburn and Bryant – 'Northport Expansion (Berth 5) – O14656 (Rev. A).
 - Northport – 'Relocated Tug Facility Eastern End – Concept Plan' (R0) dated September 2022.
 - 'One Tree Point – Manganese Point Line' plan dated 30 January 2024.
 - 'Underwater Noise Measurement Point' plan dated 16 February 2024.
2. The location of the activities authorised by these consents must be in general accordance with the plans at **Appendix 1**.
- Advice Note:** 'General accordance' includes any changes to the location and extent of the reclamation, wharf, tug berthing facility and water taxi pontoon required by Condition 32 or Condition 39, noting the extent of occupation of these structures (excluding the rock revetment below MHWS) cannot increase or extend further seaward from the footprint shown in the plans in Appendix 1 as an in general accordance change.*
3. At least thirty (30) working days in advance of the date of the commencement of works authorised by these consents, the consent holder must contact the Council to arrange for a site meeting with the consent holder's contractor(s) and a Council compliance officer prior to commencement of construction works. The details to be provided at the meeting, and then in writing no more than five (5) working days after the meeting, must include:
- (a) The intended date of the commencement of works and a programme for the works.
 - (b) A draft programme for the CEMP and any other design plan, engineering plan, report or management plan required to be submitted for certification under these conditions (if not already provided).
 - (c) The intended date for providing the final design drawings to demonstrate how the works are in general accordance with the conditions of these consents, including **Appendix 1**.
 - (d) The nominated Consent Holder contact and contractor representative (or equivalent) for the works
 - (e) Any intended staging of the CEMP and works.
 - (f) A list of the proposed Suitably Qualified and Experienced Persons and Chartered Engineers proposed to be used in preparation of any design plans, engineering plan(s), report, or management plan requiring Council certification.
4. The consent holder must keep the CMA free of litter and other debris arising from the exercise of these consents.
5. The consent holder must maintain all structures and the reclamation authorised by these consents in good order and repair. Maintenance works authorised by these consents must be routine maintenance and repair, including to the exterior walls of the reclamation consistent with the scale and form of the initial approved reclamation.
6. A copy of these consents and the most up-to-date certified versions of all management plans required by these consent conditions must be kept on site at all times and made available to all persons undertaking activities authorised by these consents.

7. The consent holder must notify the Council in writing within five (5) working days of Practical Completion of the reclamation.
8. The consent holder must notify the Council in writing within ten (10) working days following the date of the completion of all construction works authorised by these consents.
9. All monitoring/sampling required under these consents must be undertaken by or under the supervision of a Suitably Qualified and Experienced person(s).

Review under s128 of the RMA

10. The Council may serve notice on the consent holder of its intention to review the conditions of these consents pursuant to Section 128 of the RMA either:
 - (a) Annually during the month of March, for any one or more of the following purposes:
 - (i) To require the adoption of the Best Practicable Option to remove or reduce any adverse effect on the environment; or
 - (ii) To deal with any change(s) to the materials handled through the Port Terminal; or
 - (iii) To respond to any new technology, standards or monitoring parameters relevant to the environmental monitoring undertaken in accordance with these consents.
 - (b) At any time, to deal with any adverse effects on the environment which may arise from the exercise of the consents and which it is appropriate to deal with at a later stage, including effects identified in the consent holders monitoring results or reports from activities authorised by these consents and/or as a result of Council's state of the environment monitoring in the area.
11. The consent holder must meet all reasonable costs of any such review.

Accidental discovery protocol

12. If subsurface archaeological evidence is unearthed during construction (e.g. intact shell midden, hangi, or storage pits relating to Māori occupation; or cobbled floors, brick or stone foundations, or rubbish pits relating to 19th century European occupation), work in the immediate vicinity must cease. Heritage NZ Pouhere Taonga and the Council must be notified as soon as reasonably practicable.
13. Work must not recommence in the immediate vicinity of the discovery until either: it has been determined that no Heritage New Zealand Pouhere Taonga approval(s) are required; or that any necessary Heritage New Zealand Pouhere Taonga approval(s) have been obtained.
14. In the event of koiwi tangata (human remains) being uncovered, work in the immediate vicinity of the remains must cease. Heritage NZ Pouhere Taonga, NZ Police, iwi, hapū and Māori and the Council must be contacted so that appropriate arrangements can be made.

Advice Note: *The Heritage New Zealand Pouhere Taonga Act 2014 makes it unlawful for any person to destroy, damage or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand Pouhere Taonga. For the avoidance of doubt, the accidental discovery protocol conditions apply to works undertaken within land and CMA.*

Stakeholder and Communications Management Plan

15. The consent holder must prepare and implement a SCMP not later than 12 months prior to commencement of construction works. The purpose of the SCMP is to set out a framework for how the consent holder will communicate with the community, stakeholders and affected parties for the duration of construction, and the operation of the Expansion Project.
16. The SCMP must set out, prior to construction, how the consent holder will:
 - (a) Identify the stakeholders for communication;
 - (b) Inform the community of project process and likely commencement of construction works and programme;
 - (c) Engage with the community and stakeholders to foster good relationships and provide opportunities for learning about the project;
 - (d) Utilise the project website to provide updates to the community;
 - (e) Communicate with tangata whenua regarding construction of the project;
 - (f) Respond to queries and complaints; and
 - (g) Provide updates on progress with management plans.
17. The SCMP must set out the framework for how, during construction and operation, the consent holder will:
 - (a) Engage with stakeholders such as Channel Infrastructure, Seafuels, affected landowners, tangata whenua, community groups, recreational boating groups, Mountains to Sea Conservation Trust, local businesses and representative groups, residents' organisations, other interested groups or individuals, network utility operators, Whangarei District Council and associated local authorities, and the Council;
 - (b) Inform the Whangarei district community of construction progress, including proposed hours of work;
 - (c) Inform the Whangarei district community of ongoing dredging;
 - (d) Engage with the communities to foster good relationships and to provide opportunities for learning about the project;
 - (e) Provide information of key project milestones; and
 - (f) Make each management plan publicly available once a management plan is finalised, and for the duration of project works.
18. The consent holder must prepare the SCMP in consultation with the following parties and submit the final SCMP for certification with the CEMP:
 - (a) The Council;
 - (b) Whangarei District Council; and
 - (c) Iwi/hapū.

Website

19. The consent holder must, for the duration of these resource consents, maintain a website that is accessible to, and readily usable by, the public.
20. The website must include the following information:
 - (a) Copies of relevant resource consents;
 - (b) A statement summarising steps toward progressing commencement of these consents, and the consent holder's expected timeframe for commencement. This statement must be updated at least annually.
21. From Commencement of these consents to Practical Completion, the website must include the following information:
 - (a) Copies of these resource consents;
 - (b) A summary of real-time data collected from the telemetered turbidity monitoring stations required under these conditions;
 - (c) Quarterly monitoring reports prepared under Condition 158.
 - (d) A record of all Tier 3 Compliance Level Exceedances that are correlated with identification of any extraordinary natural events;
 - (e) Any Tier 3 Compliance Level Exceedance report prepared under Condition 169.
 - (f) All certified management plans required by these conditions and any certified variations;
 - (g) All written reports, peer reviews, written evidence, reviews, and outcomes and recommendations prepared under these consent conditions;
 - (h) A mechanism for members of the public to raise matters with, make an enquiry of, or lodge a complaint with the consent holder (with any complaints received to be maintained in the Complaints Register in accordance with Condition 22 below) ; and
 - (i) Updated project timing and duration information for the Project and activities conducted in accordance with these resource consents, including but not limited to; reclamation, capital dredging, preclusion or reinstatement of public access to Marsden Bay Beach and Ralph Trimmer Drive.

Complaints

22. The consent holder must maintain a Complaints Register for the purpose of recording and dealing with any complaints that are received by the consent holder in relation to the exercise of these resource consents. The Complaints Register must record, where this information is available:
 - (a) Name of complainant, if provided to the consent holder;
 - (b) The date and time of the complaint;
 - (c) A description of the complaint;
 - (d) The location of the issue raised;
 - (e) Weather conditions at the time of complaint, including a description of wind speed and wind direction when the complaint occurred (if relevant);

- (f) Any possible cause of the issue raised;
 - (g) Any investigations that the consent holder undertook in response to the complaint;
 - (h) Any corrective action taken to address the cause of the complaint, including the timing of that corrective action; and
 - (i) Any feedback provided to the complainant.
23. The consent holder must provide a copy of the complaints register to the Council's Compliance Manager within five working days of receiving a request to do so from the Council.

Certification

24. Where any condition requires the consent holder to submit design plans, engineering plans, a report or management plan to the Council for "**certification**" it must mean the process set out in the following paragraphs (a) to (d) and the terms "certify" and "certified" must have the equivalent meanings:
- (a) The consent holder supplies design plans, engineering plans, reports or management plans to the Council, and the Council assesses the documentation submitted. The certification process for design plans, engineering plans, management plans and reports required by conditions of this consent must be confined to confirming that the plans or reports give effect to their purposes, consent condition requirements, and schedule requirements, and contain the required information;
 - (b) Should the Council determine that the documentation supplied in accordance with (a) above achieves the requirements of the relevant condition(s), the Council must issue a written confirmation of certification to the consent holder;
 - (c) If the Council's response is that it is not able to certify a design plan, engineering plan, management plan or report, it must provide the consent holder with reasons and recommendations for changes to the plan or report in writing. The consent holders must consider any reasons and recommendations of the Council and resubmit an amended design plan/engineering plan/management plan/report for certification;
 - (d) A design plan, engineering plan, management plan or report cannot be subject to a third-party approval. The Council in deciding whether to certify the design plan, engineering plan, management plan or report, however, may also obtain advice from other qualified person(s).
25. The process in Condition 24 must be repeated until the Council is able to provide written confirmation that the requirements of the applicable condition(s) have been satisfied.
26. The consent holder must comply with the certified management plan or report at all times.

Lapse

27. These consents will lapse 20 years from commencement.

Consent surrender

28. Within three (3) months of the date of Practical Completion of the Expansion Project reclamation, the consent holder will give notice of the surrender of the existing resource consent for the current stormwater collection, treatment, and disposal system (CON20090505532 issued on 13 April 2010)

Advice Note: *The surrender of the above resource consents will consolidate the stormwater resource consents and conditions applying to the expanded Northport, meaning that a single consent and single set of conditions will apply to all Northport operational stormwater.*

UNAUTHORISED DISCHARGES / HAZARDOUS SPILLS

29. During construction the consent holder must take all practicable measures to prevent unauthorised discharges of hazardous substances into the CMA. Such measures must include:

- (a) Measures to prevent oil and fuel leaks from vehicles and machinery, including maintaining machinery and equipment in good working order;
- (b) Refuelling of land-based machinery and vehicles not occurring within 20 metres of the CMA where practicable, and occurring under supervision throughout the whole activity;
- (c) All refuelling equipment having a shut-off valves;
- (d) The stationary land-based storage of fuel and other hazardous substances not occurring within 20 metres of the CMA;
- (e) All vehicles and/or works areas having a spill kit capable of absorbing the quantity of fuel and other hazardous substances that may leak or be spilt; and
- (f) Spill containment equipment being immediately available and kept on-site at all times.

Advice Note: *Nothing in Condition 29 is intended to affect existing obligations under other legislation, including the Maritime Transport Act and associated statutory instruments such as marine protection rules.*

30. The consent holder must, on becoming aware of any discharge and/or spill associated with the consent holder's operations that is not authorised by these consents:

- (a) Immediately take such action, or execute such work as may be necessary, to stop and/or contain the discharge/spill;
- (b) Immediately notify the Council by telephone of the discharge/spill;
- (c) Take all reasonable steps to remedy or mitigate any adverse effects on the environment resulting from the discharge/spill; and
- (d) Report to the Council in writing within one (1) week on the cause of the discharge and the steps taken or being taken to effectively manage the discharge and prevent any recurrence.

During Council's opening hours, telephone contact with the Council must be via the Council's landline. If the relevant person cannot be spoken to directly, or it is outside of the Council's opening hours, then the Environmental Emergency Hotline must be contacted.

Advice Note: *The Environmental Emergency Hotline is a 24 hour, seven day a week, service that is free to call on 0800 504 639.*

31. In addition to the requirements in condition 30, for any spill of a hazardous substance into the CMA that is greater than 20 litres, the consent holder must provide the Council with the following information within 24 hours:
- (a) The date, time, location and estimated volume of the spill;
 - (b) The cause of the spill;
 - (c) The type of contaminant(s) spilled;
 - (d) Observations of any spilt material within the marine environment;
 - (e) Clean up procedures undertaken;
 - (f) Details of the steps taken to control and remediate the effects of the spill on the receiving environment;
 - (g) An initial assessment of the potential ecological effects of the spill; and
 - (h) Measures to be undertaken to prevent a recurrence.

DESIGN AND CONSTRUCTION OF RECLAMATION, MARINE STRUCTURES, SANDBANK RENOURISHMENT AREA AND STORMWATER INFRASTRUCTURE

Engineering Plans

32. The consent holder must submit detailed engineering plans (including drawings and calculations if applicable) prepared in accordance with an appropriate design standard / guideline and any other requirements of the conditions of this consent, to the Council for certification prior to works commencing. These can be submitted in stages. The plans must include:
- (a) Berth 5 reclamation, and revetment,;
 - (b) Berth 5 wharf, sea wall(s), and associated coastal structures;
 - (c) Tug facility, and Water taxi pontoon.
 - (d) Sandbank Renourishment Area;
 - (e) Stormwater infrastructure, including:
 - (i) Floatables trap at weir-controlled-spillways; and
 - (ii) Any new or upgraded canals, weirs, spillways and associated stormwater infrastructure servicing proposed Berth 5 or Berths 1 – 4; and

- (f) A staging plan to demonstrate how the terminal can be modified at a later date from Reach stacker operations to RTG crane terminal operations so as not to reduce capacity and delays through construction and avoid the need for additional coastal occupation.
- 33. The design and engineering plans must be independently peer reviewed by a Suitably Qualified and Experienced person and when submitting the plans, the consent holder must provide to Council written evidence of this review and how the review comments have been responded to.
- 34. The structures and infrastructure related to the container terminal must be designed to the relevant Importance Level to provide lifeline utility services. The consent holder when submitting the plans, must provide written evidence from the Ministry of Civil Defence (or Equivalent) of the necessary Importance Level.

Reclamation design and construction

- 35. The reclamation must be constructed within the area marked 'Proposed Reclamation' on plan C03 contained in **Appendix 1**.
- 36. The reclamation must be designed by a suitably experienced Chartered Professional Engineer, with input from other relevant specialists.
- 37. A Chartered Professional Engineer with relevant experience in reclamation construction must oversee the construction of the reclamation to ensure it complies with the design. A statement must be provided by the engineer to Council confirming the construction was undertaken in accordance with the design (by way of a Producer Statement 4 or equivalent).
- 38. Any material deposited into the reclamation areas for bulk filling must only consist of the following:
 - (a) Dredge Spoil; and/or
 - (b) Imported material, including sand, soil, rock, gravel, and crushed concrete; and/or
 - (c) Construction materials, including stabilising agents such as cement or lime.

Marine structures design and construction

- 39. The design of the reclamation, wharf, tug berthing facility, and Water Taxi Pontoon must:
 - (a) be prepared by a suitably experienced Chartered Professional Engineer
 - (b) not give rise to any navigation or safety effects, including on the operation of the adjacent Channel Infrastructure jetties (including shipping movements to and from Channel Infrastructure's jetty 3) and in respect of recreational conflicts.
 - (c) be reviewed by an independent Suitably Qualified and Experienced person to confirm that there are no navigation or safety effects associated with the design including in respect of the operation of the adjacent Channel Infrastructure jetties and potential recreational conflicts. The review must be submitted to Council for certification at least two (2) months prior to construction of these structures and must have regard to and incorporate where appropriate:

- (i) any recommended changes to the design to manage predicted changes to hydrodynamics and minimise effects on the Channel Infrastructure structures (including berth pockets) and turning basin, including the mooring of commercial vessels frequenting the Channel Infrastructure structures set out in the report required by condition 114(a)(ii) and (iii); and
 - (ii) any outcomes and recommendations of the Full Mission Bridge Simulations required by Condition 117, to be provided to Channel Infrastructure and Seafuels at the same time as the independent Suitably Qualified and Experienced person; and
 - (d) be provided to Channel Infrastructure and Seafuels, along with the results of the independent review required by Condition 39(c) with an opportunity for Channel Infrastructure and Seafuels to make comment within 20 working days on navigation or safety effects associated with the operation of the adjacent Channel Infrastructure jetties including shipping movements to and from Channel's jetty 3, and including in relation to successive versions of the design before it is finalised;
 - (e) be updated to address any effects identified in the independent review required by Condition 39(c) above and respond to and reasonably incorporate any comments provided by Channel Infrastructure or Seafuels pursuant to 39(d) above;
 - (f) be submitted to the Council for certification at least three (3) months prior to construction of the reclamation or structures, along with the results of the independent review required by Condition 39(c) above, any updates to respond to the independent review required by condition 39 above, and/or any comments provided by Channel Infrastructure or Seafuels pursuant to Condition 39(d) above and where incorporated, that practicable alternatives have been considered.
40. For the purposes of Condition 39:
- (a) The design of the reclamation, wharf, tug berthing facility, and Water Taxi Pontoon, includes the design detail, as well as the extent and location of each structure and the berthing of ships at these structures.
 - (b) Navigation and safety effects includes (but is not limited to) the effects of vessels berthed at the Wharf, tug berthing facility and Water Taxi Pontoon.
 - (c) The requirement for the design to have no navigation or safety effects applies in all existing operable weather conditions (including wind) and tide conditions, that have occurred over the preceding 12 months and must take into account any changes that could potentially be made to a third parties' structures or operations to mitigate any navigation or safety effects (unless their permission is obtained).
41. The consent holder will notify Channel Infrastructure and Seafuels when it engages the Suitably Qualified and Experienced person in accordance with Condition 39(c) so that Channel Infrastructure and Seafuels may prepare internally for its review of the design in accordance with condition 39(d).
42. A Chartered Professional Engineer with relevant experience must oversee the construction of the wharf, tug berthing facility, and Water Taxi Pontoon structures to ensure they comply with the design. A statement must be provided by the engineer to Council confirming the construction was undertaken in accordance with the design (by way of a Producer Statement 4 or equivalent).

43. The tug berthing facility must be located at the general location shown in “Northport relocated tug facility – eastern end concept plan”, D60-X (Issue R0, September 2022) at **Appendix 1**.

Advice Note: ‘General location’ includes any changes to the location and extent of the tug berthing facility required by Condition 32 or Condition 39.

44. The Water Taxi Pontoon must be located at the general location shown in plan “Northport expansion – Berth 5”, 014656 (July 2023) at **Appendix 1**.

Advice Note: Public access to the Water Taxi Pontoon will be via the public Pocket Park.

Advice Note: ‘General location’ includes any changes to the location and extent of the Water Taxi Pontoon required by Condition 32 or Condition 39.

Sandbank Renourishment Area

45. At least three (3) months prior to the commencement of the sandbank (bird roost) construction works the consent holder must prepare and submit to the Council a Sandbank (Bird Roost) Management Plan (“SBRMP”). The purpose of the SBRMP is to ensure that the ongoing structural integrity of the Sandbank Renourishment Area in providing replacement roosting habitat for Tōrea pango (Variable oystercatcher) and Tūturiwhatu (New Zealand dotterel

46. The SBRMP must include:

- (a) an assessment of performance standards and specifications (including minimum area and height above mean high water springs) to achieve its purpose;
- (b) the construction methodology, including how tracking of any vehicles and machinery over the surrounding intertidal area will be avoided;
- (c) maintenance monitoring, in accordance with Conditions 198-201;
- (d) the likely duration of the Sandbank operating as an effective high tide bird roost, including between renourishment;
- (e) and the likely nourishment frequency and volumes required;
- (f) confirmation from a Suitably Qualified and Experienced person that the material used in the Sandbank Renourishment Area construction contains no contaminants above background levels, based on the average of no less than five sediment sample locations within the western intertidal area of Marsden Bay.

47. The final design of the Sandbank Renourishment Area must be in general accordance with Tonkin+Taylor “Bird Roost Concept”, DWG No. 1017349-02 (Revision 1, September 2022) and the Avifauna section of the CEMP and the SBRMP.

48. Before the commencement of construction works on the proposed reclamation, the consent holder must construct the Sandbank Renourishment Area.

49. A Chartered Professional Coastal Engineer with relevant experience must oversee the construction of the sandbank to ensure it complies with the SBRMP and sand renourishment area plans. A statement must

be provided by the engineer to Council confirming the construction was undertaken in accordance with the design.

50. Subject to obtaining the necessary consents to do so, the Consent Holder must maintain the bird roost in perpetuity.

Advice Note: *If the ongoing maintenance of the bird roost requires replacement resource consents, it is the Consent Holders intention to obtain these consents in order to maintain the avifauna roost in perpetuity, or at least as long as the port is operating.*

ENVIRONMENTAL MITIGATION

Public access

51. Prior to commencement of the works, the consent holder must provide or facilitate an alternate location for the Te Araroa trail and Water Taxi to connect from Reotahi to Marsden Point and must maintain this facility until Practical Completion of the replacement Water Taxi Berth.
52. The consent holder must maintain existing public access to and along the foreshore and public reserve areas to the greatest extent practicable, except where these consents authorise exclusive occupation and/or where necessary for operational requirements or to ensure public safety.

Contribution to Indigenous Duneland Vegetation

53. Prior to the commencement of reclamation works, the consent holder must make a donation of \$100,000.00 (Index-Linked) to an established group(s) whose purpose includes the conservation, maintenance and restoration of indigenous duneland ecosystems within the Waipu Ecological District. The intended purpose of the donation is to enable the group to undertake duneland revegetation, weed and/or pest control within the Waipu Ecological District.
54. Prior to distribution of funds the Consent Holder must provide confirmation to the Council of compliance with condition 53, including the intended use and timing of the donation.
55. Within three months of completion of the works identified in condition 53, the Consent Holder must provide confirmation to the Council that the works have been undertaken, including a report detailing the location and scale of works, and any proposed ongoing management.

Integrated marine planning initiative

56. Within 6 months of Commencement of these resource consents, the Consent Holder must use reasonable endeavours to establish a Steering Committee to examine and promote Integrated Marine Planning and Governance for Bream Bay in accordance with the draft Discussion Document dated 28 July 2023. The consent holder's obligations include, as a minimum:

- (a) Inviting stakeholders and the Tangata Whenua Relationship Group to participate in a Steering Committee;
- (b) Providing funding towards the establishment, administration, and promotion of the roles and outcomes of, a Steering Committee ('Steering Committee Funding'). The Steering Committee Funding will be \$10,000.00 per annum (plus GST, if any) for a period of 5 years, beginning the first full calendar year following the commencement of these consents. A record of payments constituting the Steering Committee Funding for each full calendar year is to be provided by the consent holder to the Council's Compliance Manager not later than 31 March the following year; and
- (c) Generally promoting the Steering Committee to assist it to carry out its functions and achieve the outcomes sought.
- (d) Promote appropriate steps to manage vessel movements in order to minimise marine mammal ship strike, such as adoption of the Hauraki Gulf Transit Protocol.

Advice Note: *The consent holder has offered, on an Augier basis, to use its reasonable endeavours to establish and promote a Steering Committee to examine integrated co-governance of Bream Bay, including the promotion of an Integrated Marine Planning Framework that provides for the integration of all interests towards the wellbeing of the marine environment. Information regarding Northport's aim in promoting and establishing a Steering Committee, including its' proposed constitution, structure, functions, and outcomes sought is set out in the Statement of Intent.*

It is acknowledged that the likely constitution of a Steering Committee will include representatives of central and local government, quasi-governmental bodies, interest groups, industry, and hapū/iwi/Māori. As such, it is recognised that the obligations on Northport secured through these consent conditions need to be appropriately scoped.

CONSTRUCTION MANAGEMENT

Construction noise

57. Construction noise from activities within the CMA, including from capital and maintenance dredging, must not exceed the noise limits in the following table:

RESIDENTIAL ZONES AND DWELLINGS IN RURAL AREAS:

Upper limits for construction noise received in residential zones and dwellings in rural areas

Time of week	Time period	Noise limits (dB)	
		L _{Aeq}	L _{AFmax}
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75
Saturdays	0630-0730	45	75

	0730-1800	70	85
	1800-2000	45	75
	2000-0630	45	75
Sundays and public holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75

INDUSTRIAL OR COMMERCIAL AREAS:

Upper limits for construction noise received in industrial or commercial areas on all days

Time period	Noise limits (dB L _{Aeq})
0730-1800	70
1800-0730	75

58. Construction noise must be measured and assessed in accordance with New Zealand Standard NZS 6803:1999 “Acoustics – Construction Noise”.

Construction dust

59. The consent holder must manage dust associated with construction works to avoid having an offensive or objectionable effect beyond the boundary of the land or structures owned or occupied by the consent holder.

Advice Note: *There is potential for discharges to air in the form of dust from at least the following activities:*

- a) The stockpiling, crushing or handling of material;*
- b) The loading and unloading of material and the movement of vehicles associated with the handling of material;*
- c) Transport of material;*
- d) Vehicle movements;*
- e) The deposition of material associated with the construction of the reclamation; and*
- f) Fugitive dust from unconsolidated surfaces.*

60. If dust from site activities results in any form of nuisance effect beyond the boundary of land or structures owned or occupied by the consent holder, the consent holder must immediately review the dust mitigation measures and amend or implement additional dust control methods necessary to prevent a reoccurrence.

Avifauna

Kororā Little Penguin

61. Within 24 hours prior to any works resulting in the disturbance of existing revetment rock, the consent holder must undertake surveys by a Suitably Qualified and Experienced coastal ornithologist and a

certified penguin detector dog to determine the presence or absence of kororā *Little Penguin* within the existing eastern boundary riprap revetment.

62. If an active burrow or moulting penguin is discovered under Condition 61, until such time that nesting or moulting is complete, the following applies:
- (a) No rock removal or piling activities must be undertaken within 10 m of the active burrow or moulting penguin; and
 - (b) No other construction activity may occur in proximity to an active burrow or moulting penguin unless that activity can achieve a maximum sound level of 75 dB LAeq(15min) as measured outside of the entrance of a burrow containing an active burrow or moulting penguin.
63. If kororā *Little Penguin* are present within 10 m of a proposed reclamation works area, any rock removal works must be undertaken in the presence of a Suitably Qualified and Experienced coastal ornithologist.
64. The consent holder must ensure that no kororā *Little Penguin* are trapped by reclamation construction works.

Advice Note: *Catching, holding, and/or releasing kororā Little Penguin will require authorisation from the Department of Conservation under the Wildlife Act 1953.*

Advice Note: *“Active burrow” is defined as a kororā burrow containing, or suspected to contain, a nesting bird, viable nest contents (i.e. eggs and / or chicks) or moulting bird based on the time of the year and other evidence observed at the burrow location by a Suitably Qualified and Experienced coastal ornithologist.*

Tōrea pango Variable oystercatcher

65. If reclamation construction works are to occur during September to March inclusive (being Tōrea pango *Variable oystercatcher* breeding season), surveys must be undertaken by a Suitably Qualified and Experienced coastal ornithologist to determine potential Tōrea pango *Variable oystercatcher* nesting habitat within the proposed works footprint(s).
66. If reclamation construction works are to occur during the Tōrea pango *Variable oystercatcher* breeding season and within 20 metres of an area identified as potential Tōrea pango *Variable oystercatcher* nesting habitat, a Suitably Qualified and Experienced coastal ornithologist must survey for the presence of active nests.
67. If an active nest is detected, a 20 metres exclusion zone must be implemented for all reclamation construction machinery and personnel.

Advice Note: *Refer also the requirements in these conditions for constructing and maintaining the Sandbank Renourishment Area to provide additional avifauna roosting habitat.*

Marine mammals

Marine Mammal Observation Zone (MMOZ)

68. Before commencing any pile driving activity, the consent holder must establish a MMOZ and an Extended Marine Mammal Observation Zone (EMMOZ) within which personnel having the necessary training and experience must act as observers to search the MMOZ for marine mammals as far as reasonably practicable, including pre-start and during works observations.
- (a) The MMOZ extent must be any CMA within 200 metres of the pile driving.
 - (b) The EMMOZ extent must be any CMA within 800 metres of the pile driving and be enacted for a period of 5 days following a reported sighting of a baleen whale or popoiangore leopard seal in the wider Whangarei Area (Bream Bay to Tutukaka).
 - (c) The pre-start observation zone will extend from a line between One Tree Point and Manganese Point and the eastern boundary of the MMOZ (or EMMOZ if in place).
 - (d) Pre-start observations must occur for 30 minutes prior to the commencement of piling each day.
69. The default MMOZ extent must be confirmed (or adjusted) following the verification of in-situ pile driving sound levels and model verification in accordance with the procedures set out in the Conditions 74-80.

Pile driving prohibition requirements

70. If:
- (a) dolphin, toothed whale or pinniped (other than a leopard seal) is sighted in waters within the MMOZ; or
 - (b) a baleen whale or popoiangore leopard seal is sighted in waters within the EMMOZ;
- pile driving must not commence or must immediately cease; and must only commence or re-commence once all marine mammals have left the relevant location(s) specified in (a) and (b) above and in accordance with Condition 71 below.
71. if a baleen whale or popoiangore leopard seal passes through the EMMOZ and continues westward up the harbour:
- (a) An additional MMO must be stationed at One Tree Point and that MMO must observe the waters to the west of a line between One Tree Point and Manganese Point as shown on the plan entitled 'One Tree Point – Manganese Point Line' dated 30 January 2024 in **Appendix 4** and the waters between the EMMOZ and the line between One Tree Point and Manganese Point.
 - (b) Piling must remain ceased whilst:
 - (a) the sighted baleen whale is observed to be west of the EMMOZ.
 - (b) the sighted popoiangore leopard seal is observed to be west of the EMMOZ but east of the line between One Tree Point and Manganese Point
 - (c) Piling can recommence if:
 - (i) The sighted popoiangore leopard seal crosses the line between One Tree Point and Manganese Point in a westerly direction.

- (ii) The sighted popoia ngore leopard seal enters the Marsden Cove Marina.
 - (iii) The sighted baleen whale or popoia ngore leopard seal exits the eastern edge of the EMMOZ.
 - (d) If a popoia ngore leopard seal is observed crossing the line between One Tree Point and Manganese Point in eastward direction towards the port, piling must cease and can only recommence if the mammal is visually confirmed to exit the eastward edge of the EMMOZ or has not been sighted for 1 hour.
72. The distances in condition 68 must be confirmed (or adjusted) following the verification of in-situ pile driving sound levels in accordance with condition 74-80.
73. During the first five instances of dolphin or orca entering the harbour and crossing the line between One Tree Point and Manganese Point in a westward direction, the following must occur:
- (a) An additional MMO must be stationed at One Tree Point
 - (b) That MMO and the one stationed at Northport, must observe the dolphin or orca behaviour to track and record the general behaviour of these same animals as they return to the east, cross the One Tree Point line and eventually exit the harbour.

If the MMO, in consultation with a suitably qualified and experienced marine mammal expert, determine there are obvious signs of avoidance or deterrence by these species, then piling must cease in future instances of dolphin or orca travelling eastward across a line between One Tree Point and Manganese Point

Pile-driving sound level verification

74. The Consent Holder must carry out acoustic monitoring during Pile Driving to measure the unweighted twenty-four hour cumulative Sound Exposure level (SEL_{cum}(24h)) at the point shown on the plan entitled 'Underwater Noise Measurement Point' dated 16 February 2024 in **Appendix 5**. The unweighted SEL_{cum}(24h) must be derived from the impact driven and vibro-driven piling operations over a twenty-four hour period.
75. The acoustic monitoring required under Condition 74 must include, but not be limited to, measurement work undertaken within two weeks of commencing pile driving activities for the wharf and during normal operating conditions on each of the different pile diameters for a minimum of three days each.
76. The monitoring results collected in accordance with Conditions 74 and 75 must be compared to the unweighted twenty-four hour cumulative Sound Exposure level (SEL_{cum}(24h)) and must not exceed 180dB re 1µPa2s (SEL_{cum}(24 hour)) during the first year of piling
77. Within 2 weeks of completion of the measurements work completed under Conditions 74 and 75, an acoustic monitoring report must be prepared by the Consent Holder. The report must detail the acoustic monitoring undertaken, the piling activity during the monitoring and a comparison of the monitoring results to the criteria in condition 76. A copy of the report must be provided to the NRC.

78. If piling activities are to extend into a second successive winter, the monitoring set out in Conditions 74 and 75 must be repeated in June of that year. The unweighted twenty-four hour cumulative Sound Exposure level (SEL_{cum}(24h)) measured during this monitoring must be not exceed 170 dB re 1μPa_{2s} at the measurement point shown on the plan entitled 'Underwater Noise Measurement Point' dated 16 February 2024 in **Appendix 5**.
79. The radius of the MMOZ and the EMMOZ in Condition 68 may be reduced in size if the acoustic monitoring and subsequent model verification carried out in accordance with Conditions 74 and 75 establishes that:
- (a) the unweighted 190 dB re 1μPa_{2s} SEL_{cum}(24h) contour which sets the MMOZ is less than 200 metres from the Pile Driving unit.
 - (b) the unweighted 176 dB re 1μPa_{2s} SEL_{cum}(24h) contour which sets the EMMOZ is less than 800m from the Pile Driving unit.
80. Any reduction in the size of the MMOZ must be approved in writing by the Council on the basis of provision of the results of representative acoustic monitoring in accordance with Condition 79.

Pile driving timing and scheduling

81. Pile driving must only be undertaken during daylight hours (half hour after sunrise and half hour before sunset).
82. To the extent practicable, pile driving must be scheduled and carried out to minimise the potential impact on marine mammals. This includes scheduling commencement of pile driving at a time which minimises the need for it to occur over successive marine mammal "seasons" (i.e. back-to-back winters).

Advice Note: Conditions 68-82 are for the purposes of minimising any risk of hearing impairment to marine mammals from pile-driving activities. Refer also the various controls required by the Marine Mammals section of the CEMP.

Discharge of reclamation decant water

83. Reclamation construction decant water must be discharged to coastal water via pipeline with an outlet(s) that is:
- (a) adjacent to the active reclamation edge; and
 - (b) at least 1 (one) metre below Mean High Water Springs.
84. Monitoring of the reclamation construction decant discharge must occur as follows:
- (a) On a daily basis during decant discharge, the consent holder must measure the outlet discharge turbidity in NTU/FTU and compare this value with the turbidity trigger value in NTU/FTU that equates to a TSS of 300mg/l. The NTU/FTU equivalent must be established following contemporaneous TSS and turbidity testing of the discharge in the first week of operations.
 - (b) If the measured median turbidity, over a one-hour period, exceeds the trigger value in (a), the consent holder must:
 - (i) Implement management practices to reduce the turbidity of the discharge;
 - (ii) Collect a sample of discharge from the outlet pipe at a point prior to discharge into the CMA; and

(iii) Analyse the sample for TSS concentration and compare it with the TSS trigger value in (a) above.

85. The consent holder must provide the results of sampling completed under condition 84 upon request.
86. If a discharge sample collected in accordance with Condition 84 exceeds the TSS concentration limit the following must occur:
- (a) The consent holder must immediately cease the discharge and implement any management practices required to reduce the TSS concentration of the decanted discharge, after which the discharge may recommence;
 - (b) Within one (1) hour of resuming the discharge, the consent holder must measure the outlet discharge turbidity in NTU/FTU to reassess for compliance with Condition 84; and
 - (c) If compliance with Condition 84 is not achieved, the consent holder must undertake further management measures to reduce the TSS concentration of the decanted discharge and inform the Council within 48 hours.

Discharge of stormwater during construction

87. The discharge of stormwater from the reclamation and/or wharf area while under construction must only be:
- (a) into the decant discharge system;
 - (b) directly into coastal water; or
 - (c) into the existing canal and pond-based stormwater system.
88. Any construction stormwater discharge system(s) discharging directly to coastal water must be designed to achieve a NTU/FTU concentration of equivalent to 300mg/l TSS using the relationship established in accordance with condition 84(a) at the point of discharge for all rainfall events up to and including the 1 in 20-year storm event.
89. The Consent Holder must monitor the stormwater discharges twice a year to ensure that they meet the 300mg/l TSS in condition 88. The monitoring results must be forwarded to Council within 10 working days.

Construction and Environmental Management Plan (CEMP)

90. At least three (3) months prior to the commencement of construction authorised by these consents, the consent holder must submit a Construction and Environmental Management Plan (CEMP) to the Council for certification. The objectives of the CEMP are:
- (a) to detail the environmental monitoring and management procedures to be implemented during the Expansion Project's construction phase to ensure that appropriate environmental management practices are followed and adverse construction effects are minimised to the extent practicable; and
 - (b) to ensure construction effects of the Expansion Project are in accordance with the assessments accompanying the resource consent applications.
91. The CEMP must include the following sections:
- (a) Construction phase roles and responsibilities protocols;

- (b) Environmental Risk Assessment;
 - (c) Dust;
 - (d) Hazardous Substances;
 - (e) Erosion and Sediment Control;
 - (f) Marine Works;
 - (g) Wildlife, including:
 - (i) Avifauna;
 - (ii) Lizards; and
 - (iii) Marine Mammals;
 - (h) Archaeology;
 - (i) Construction Noise; and
 - (j) Complaints Procedures and incident reporting.
92. The CEMP must be prepared by a Suitably Qualified and Experienced person, with advice from relevant technical experts, and be in general accordance with the draft CEMP provided as part of the resource consent application (*Enviser, Draft Construction and Environmental Management Plan, October 2022*).
93. The CEMP must be certified in writing by the Council's Compliance Manager prior to construction works authorised by these consents first commencing, and the consent holder must undertake all activities authorised by these consents in accordance with the certified CEMP (including any certified variation).
94. The CEMP may be submitted in stages to reflect the design and construction programme. If staging is proposed and any of the matters in condition 91 are not relevant, a statement must be provided of why management of these effects are not relevant to the particular stage of works.
95. Any variation to the CEMP must be subject to certification by the Council.
96. Specific requirements for certain sections of the CEMP are set out in the conditions below.

Dust

97. The dust section must set out dust management practices during construction to achieve the outcomes of Conditions 59-60, and to minimise the risk of dust discharges having an offensive or objectionable effect beyond the boundary of land or structures owned or occupied by the consent holder, and must include:
- (a) A description of the potential Expansion Project construction dust sources;
 - (b) The methods to be used for controlling dust at each source including:
 - (i) Stabilisation of unconsolidated surfaces using water, wetting agents, chemical dust suppressants, and/or other surface modification methods;
 - (ii) Assessing meteorological conditions in advance to determine whether dust minimisation measures need to be activated or adjusted;
 - (iii) Regular sweeping of sealed surfaces;
 - (iv) Minimising vehicle speeds to 20km/h on unsealed surfaces; and

- (v) Handling and stockpiling practices, including guidelines for removal and stockpiling during windy conditions.
- (c) A description of inspection and monitoring procedures;
- (d) A system of training for employees and contractors to make them aware of the requirements of the dust management section of the CEMP;
- (e) A method for recording and responding to dust complaints from the public; and
- (f) Procedures for managing dust when staff are not on site.

Erosion and Sediment Control

98. The erosion and sediment control section of the CEMP must include measures for managing the decant discharge and any other construction stormwater discharges during reclamation, including the following information:
- (a) A plan of the location of the discharge;
 - (b) A description of the best practice methods that will be used to manage the quantity and quality of the discharge, so that the discharges achieve the turbidity conditions standards;
 - (c) Methods to avoid and contain spillages during pumping; and
 - (d) Methods to monitor, report on, and manage the decant discharge in accordance with Conditions 83-86; and
 - (e) Methods to establish whether contaminants are present in sediment that could pose an unacceptable risk to the health of marine organisms (that is, if they are above the relevant Interim ANZECC Guidelines for Sediment (ISQG-Low)), and if contaminants are observed above those guideline values, a strategy to manage the risk to a point that is deemed acceptable.

Avifauna

99. The Avifauna section of the CEMP must be written by a Suitably Qualified and Experienced ornithologist and must address the measures required to ensure compliance with conditions 61-67, set out construction protocols to avoid injury/mortality of coastal avifauna, and include:
- (a) Detailed descriptions and methodologies setting out how adverse effects on Kororā *Little Penguin* and Tōrea pango *Variable oystercatcher* will be managed, including:
 - (i) For Kororā *Little Penguin*, to ensure compliance with conditions 61 to 64 (relating to pre-construction surveys, implementation of construction works exclusion zones, and measures to reduce underwater noise from pile driving); and
 - (ii) For Tōrea pango *Variable oystercatcher*, to ensure compliance with conditions 65 to 67 (requiring protocols for pre- and during-constructions surveys, and implementation of exclusions zones around active nests and nesting birds).
 - (iii) Low impact sediment controls and dredging methodology as specified in the Coastal Avifauna Assessment; and

- (iv) Piling methodology for protection of Kororā as specified in the Coastal Avifauna Assessment.
- (b) Measures to minimise the effects of artificial construction lighting on avifauna, including a description of the outdoor lighting to be used during construction to reduce the potential for bird strike, and may include:
 - (i) targeting of luminaires;
 - (ii) use of shields or baffles;
 - (iii) use of light dimmers and/or timers for areas that are not constantly in use; and
 - (iv) use of coloured and/or LED lights to reduce overall light intensity.

Lizards

100. The Lizards section of the CEMP must be prepared by a Suitably Qualified and Experienced person, and should include:
- (a) Protocols of a comprehensive lizard survey prior to construction;
 - (b) Protocols of lizard salvage and vegetation clearance management during construction (if required); and
 - (c) Protocols of an ongoing programme of mammalian pest control post-development (if required).

Advice Note: *If native lizards are detected during the lizard survey to be present in affected areas, a permit under the Wildlife Act 1953 may be required for their handling and relocation.*

Marine Mammals

101. The Marine Mammals section of the CEMP must include (as an attachment) a Marine Mammal Management Plan (MMMP) which must detail:
- (a) The potential for adverse effects of noise produced by construction activities on marine mammals that may be present within Whangarei Harbour.
 - (b) Procedures for the verification of the in-situ noise levels produced from pile-driving activities by measuring the underwater noise of these activities within two weeks of pile-driving commencement, and a process for identifying and implementing any corresponding adjustments to mitigation actions, if required (including revised Marine Mammal Observation Zones (MMOZs) and associated pile driving prohibition procedures).
 - (c) Underwater noise management, including passive acoustic monitoring where appropriate, and implementation measures for the MMOZs provided in condition 101(f).
 - (d) Procedures for the continuation of acoustic monitoring at the established baseline stations across the Whangārei Harbour during pile-driving activities.
 - (e) Piling methodology procedures for the reduction of noise levels at source, which may include:

- (i) The use of vibro-driving where practicable;
- (ii) “Soft start” or “ramping up” procedures over a ten-minute period in accordance with best practice for impact and vibro-piling where practicable;

Advice Note: “Soft start” and “ramping up” are procedures whereby pile-driving energy is gradually increased to normal operating levels to give nearby marine animals an opportunity to move away from the area before sound levels increase to an extent that may cause discomfort or injury.

- (iii) The use of a sacrificial non-metallic (e.g. wooden) hammer cushion caps or dollies for impact piling to reduce underwater noise where practicable;
 - (iv) Modifications to pile striking by changing the contact time of the hammer (to reduce the noise generated by impacts through a reduction in the amplitude of the pile vibration) where practicable;
 - (v) Available technologies to reduce noise at source and their implementation where practicable (for example bottom-driven piles, air balloons inflated within open piles to reduce ringing, and/or bubble curtain technology); and/or
 - (vi) The use of available technologies to reduce underwater noise propagation (e.g. bubble curtains).
- (f) Protocols for the implementation of Marine Mammal Observation Zones (MMOZs) and associated pile driving prohibition procedures, including;
- (i) Establishment of MMOZs, including relevant procedures, within which personnel having the necessary training and experience will act as observers to search the MMOZ for marine mammals;
 - (ii) Reporting and logging of marine mammal sightings; and
 - (iii) Establishment of pile driving prohibition procedures if a marine mammal is cited within an MMOZ.
- (g) Protocols for the implementation of a Dredging Marine Mammal Observation Zone (DMMOZ) located 50 metres all around an actively dredging dredge vessel and associated dredging prohibition procedures including:
- (i) Establishment of the DMMOZ, including relevant procedures, within which personnel having the necessary training and experience will act as observers to search the DMMOZ for marine mammals;
 - (ii) Reporting and logging of marine mammal sightings; and
 - (iii) Establishment of dredging prohibition procedures if a marine mammal is cited within an DMMOZ.
- (h) Protocols for marine mammal training of construction staff and the required training and experience of the designated Marine Mammal Observers.

- (i) Vessel operating guidelines to minimise the risk of vessel strike (including compliance with the Marine Mammals Protection Regulations 1992), equivalent to the Hauraki Gulf Transit Protocol with relation to speed limits, watch keeping, and reporting.
 - (j) Protocols for reducing risk of entanglement of marine mammals in construction equipment.
 - (k) Protocols for the control of construction-related debris and waste, including waste management protocols for the secure onboard storage of items such as lines, nets, and waste to avoid entanglement of marine mammals or their ingestion of waste material.
 - (l) Protocols for the maintenance and inspection of marine-based construction equipment having the potential for effects on marine mammals (for example the monthly inspection and maintenance of marine silt curtains, if used).
 - (m) Procedures for the liaison with:
 - (i) the Department of Conservation *Te Papa Atawhai* to request up-to-date regional sighting information for the duration of construction works (excluding maintenance dredging), particularly for visiting baleen whales; and
 - (ii) Marsden Cove marina staff to request up-to-date sighting information for Leopard seals *Popoiangore* in the Marina for the duration of construction works (excluding maintenance dredging). This might include, subject to agreement, installing appropriate signage at the marina with a contact telephone number for the Northport Service Centre; and
 - (iii) Iwi and/or hapū.
 - (n) Procedures, including timeframes, for reviewing management actions to ensure their continuing efficacy during operations.
 - (o) Incident reporting procedures.
102. The MMMP must be in general accordance with the draft MMMP provided as part of the resource consent application (*Enviser, Draft Marine Mammal Management Plan, September 2022*).

COMMERCIAL SHIPPING

Safety Management Plan ('SMP')

103. The consent holder must prepare a draft SMP and, following consultation on the content of the draft SMP with representatives from Channel Infrastructure, North Tugz Limited, Seafuels, the Whangarei Harbour Safety Committee, and the Harbourmaster (including provision of at least fifteen (15) working days for feedback to be provided), the consent holder must no later than three (3) months prior to the commencement of Expansion Project capital dredging provide the draft SMP to the Council for Certification.
104. The objective of the SMP is to specify procedures for the management of Expansion Project capital dredging, reclamation, and construction operations to ensure that any actual or potential adverse effects of capital dredging and reclamation on other commercial shipping operations in the Whangarei Harbour, with respect to harbour safety and vessel navigation, are appropriately managed.

105. In order to achieve the objective set out in condition 104, the SMP must, as a minimum, include:
- (a) The processes and procedures, including real-time communication protocols, that will be implemented to minimise disruption to commercial shipping schedules, including for ships visiting Channel Infrastructure and Northport;
 - (b) The process and procedures, including real-time communication protocols, that will be implemented to avoid, as far as reasonably practicable, disruption to commercial shipping movements to / from Channel Infrastructure's jetties 1 and 2;
 - (c) The measures/procedures that will be implemented in relation to Expansion Project capital dredging and reclamation operations to manage any potential conflicts between the capital dredging and reclamation programmes and other commercial shipping, including ships visiting Channel Infrastructure and Northport;
 - (d) The measures/procedures that will be implemented in relation to Expansion Project capital dredging, and reclamation operations to maintain the safety of all commercial shipping in Whangarei Harbour;
 - (e) Any changes required to the existing Dynamic Under Keel Clearance System as a result of the Expansion Project, and the necessary implementation processes for any such changes;
 - (f) The training and/or information regarding the above matters that will be provided to dredge vessel crews.
106. The consent holder must undertake all activities authorised by these resource consents in accordance with the Certified SMP.
107. Any amendments to the Certified SMP proposed by the consent holder must be supported by a report from a Suitably Qualified and Experienced person, following consultation by the consent holder with representatives from Channel Infrastructure, Seafuels, North Tugz Limited, the Whangarei Harbour Safety Committee, and the Harbourmaster. Any amendments to the MSP must be Certified by the Council.

Potential sedimentation at Channel Infrastructure jetties and turning basin

108. In order to inform the coastal process shoreline monitoring required by Conditions 202-205 the consent holder must undertake an initial pre-Expansion Project baseline sub-tidal, inter—tidal, and dry beach survey of the shoreline from Northport to Mair Bank (inclusive), including the Channel Infrastructure jetty area. The pre-Expansion Project baseline bathymetry survey must be completed prior to commencement of Expansion Project capital dredging and must expressly consider the bathymetry in the vicinity of the following areas:
- (a) the Channel Infrastructure jetty structures, including the berth pockets and turning basin, and
 - (b) other marine structures owned/operated by Channel Infrastructure (and existing as at 1 January 2023), including the firepump intake, outfall locations, boat ramp and spillway.
109. A report on the outputs of the pre-dredging baseline survey required by Condition 108 to be provided to Channel Infrastructure within 4 months of the completion of the survey.

Advice Note: The consent holder agrees to also make available to Channel Infrastructure copies of all reports required by Condition 204 (reporting on the coastal process shoreline monitoring required to be undertaken by the consent holder) immediately after they are provided to Council in accordance with those conditions.

110. The consent holder must procure an independent Suitably Qualified and Experienced person to review any reports or other data provided to the Council in accordance with Conditions 109 and 204, and to prepare a further report that, as a minimum:
 - (a) Describes the levels of sedimentation or erosion in the areas in the vicinity of the Channel Infrastructure structures and turning basin, and outlines any changes that have occurred since the pre-Expansion Project baseline bathymetry survey, and/or any preceding report produced under this condition; and
 - (b) Based on the monitoring undertaken, assess whether it is possible to determine that any materially increased sedimentation or erosion at the Channel Infrastructure structures or turning basin has been caused by the Expansion Project and to quantify the relative contribution of the Expansion Project to the observed changes to other processes.
111. The consent holder must no later than 18 months following the completion of Expansion Project capital dredging submit the report required by condition 110 to Channel Infrastructure. Thereafter, reports must be submitted annually to Channel Infrastructure for a further five years. At the end of that five year period, if the opinion of the independent Suitably Qualified and Experienced person is that material changes to levels of sedimentation or erosion in the areas in the vicinity of the Channel Infrastructure structures and turning basin continue to be observed, then monitoring and reporting in accordance with condition 112 must be reviewed and updated to reflect the observed changes and establish a new monitoring regime and timeframe..
112. Where a report produced under condition 111 concludes that the Expansion Project has contributed to materially increased sedimentation or erosion at the Channel Infrastructure structures or turning basin, the consent holder must engage with Channel Infrastructure to determine an appropriate mechanism to fund the actual and reasonable costs for any:
 - (a) measures including maintenance dredging required to be undertaken to return the levels of sedimentation at the Channel Infrastructure structures or turning basin to pre-Expansion Project levels, and/or
 - (b) monitoring and/or scour protection works required to be undertaken to manage erosion at the Channel Infrastructure structures or turning basin due to the Expansion Project.
113. The consent holder will contribute funding for the actual and reasonable costs to implement the measures and works in condition 112 (a) and (b) proportionate to the consent holders' contribution to increased sedimentation or erosion at the Channel Infrastructure structures or turning basin.

Advice Note: The above conditions do not require the consent holder to obtain any authorisations required for any maintenance dredging or scour protection works at the Channel Infrastructure structures or turning basin. It is anticipated that potential maintenance dredging and/or scour protection works will be able to be carried out pursuant to existing resource consents held by Northport and Channel Infrastructure. If

additional resource consents are required, obtaining such consents must be the responsibility of the consent holder.

Potential changes to mooring forces

114. The consent holder must engage an independent Suitably Qualified and Experienced person(s) to:

- (a) Prior to finalising the design of the reclamation, wharf, tug berthing facility, and Water Taxi Pontoon in accordance with Condition 39:
 - (i) confirm that the model used to inform the report 'Hydrodynamic Modelling Additional Output Locations: of Proposed Reclamation and dredging Layout on Hydrodynamics' (MetOcean Solutions, April 2023) accurately reflects the actual (i.e. constructed/existing) format and extent of structures within the study area, and if necessary to update the model's parameters relied on in that report to reflect the environment as it exists; and
 - (ii) using the model referenced in Condition 114(a)(i) above, prepare a report describing the changes in hydrodynamics in the immediate vicinity of the Channel Infrastructure structures (including berths) and turning basin resulting from the Expansion Project; and
 - (iii) using the information obtained from (ii) above, determine whether any changes to the design of the reclamation, wharf, tug berthing facility, and Water Taxi Pontoon are required in order to manage predicted changes to hydrodynamics and minimise effects on the Channel Infrastructure structures (including berths) and turning basin including the mooring of commercial vessels frequenting Channel Infrastructure structures;
- (b) Prior to construction commencing, review the modelled changes in current velocities predicted in the report in condition 114 (a)(ii) reflecting the finalised design subject to Condition 114(a)(iii) above and either:
 - (i) confirm that the modelled changes in hydrodynamics will not materially change mooring of commercial vessels frequenting the Channel Infrastructure structures (including berths), or
 - (ii) if appropriate, recommend that instruments be deployed to quantify the post-construction changes in hydrodynamics in the immediate vicinity of the Channel Infrastructure structures (including berths) and turning basin and prepare a report in accordance with Condition 114(c)(c) below; and
- (c) Produce a report for certification by the Council which must, as a minimum:
 - (i) Describe the changes in hydrodynamics in the immediate vicinity of the Channel Infrastructure structures (including berths) and turning basin, and whether those changes are materially different to the modelled changes predicted in the report required by condition 114(a)(ii) reflecting the finalised design subject to Condition 114(a)(iii) above; and
 - (ii) If the changes in hydrodynamics are materially different to the modelled changes predicted in the report required by condition 114(a)(ii) reflecting the finalised design subject to Condition 114(a)(iii) above, assess whether it is possible to determine that any such changes in

hydrodynamics at the Channel Infrastructure structures (including berths) or turning basin have been caused by the Expansion Project; and

- (iii) Assess whether any changes determined in Condition 114(c)(ii) above will give rise to a material change to the arrival, departure and mooring of commercial vessels frequenting the Channel Infrastructure jetties.
115. The consent holder must provide the reports produced pursuant to Condition 114(a)(ii) and 114(c), any confirmation pursuant to Condition 114(b)(i) to Channel Infrastructure within one month of their completion.
116. Where a report produced pursuant to Condition 114 concludes that the Expansion Project has contributed to changes in hydrodynamics at the Channel Infrastructure structures (including berth pockets) or turning basin which are materially different to predicted in the report required by Condition 114(a)(ii) above and which will materially affect mooring of commercial vessels frequenting the Channel Infrastructure structures, the consent holder must:
- (a) Engage with Channel Infrastructure to determine an appropriate mechanism to upgrade the existing mooring equipment to accommodate the changed hydrodynamics and ensure that the mooring capability of Channel Infrastructure's structures (including berth pockets) is maintained; and
 - (b) Contribute funding for the actual and reasonable costs necessary to upgrade the existing mooring equipment proportionate to the consent holders' contribution to changed hydrodynamics affecting the mooring equipment.

Advice Note: *The above conditions are in addition to the other design requirements in these conditions, and the other coastal process monitoring for geomorphological changes in these conditions. They are specifically aimed to provide assurance for Channel Infrastructure that any actual effects associated with the Expansion Project on mooring forces at its jetties will be consistent with the predicted (modelled) effects, and further, to facilitate a management response in the unlikely event that the actual effects are materially different than predicted.*

Full mission bridge simulation

117. Prior to construction of the port expansion, the consent holder must provide to Council for certification results of Full Mission Bridge Simulations (FMBS) with outcomes and recommendations (e.g. ship size, environmental conditions, tug capacities and emergency response) agreed by an independent Suitably Qualified and Experienced observer. The FMBS are to include:
- (a) Navigation to and from pilot boarding through to berthing at the extended berth associated with the resource consent application, all tide conditions, agreed limiting conditions (i.e. Harbourmaster limits for wind, waves, currents) with real time / model inputs into simulator;
 - (b) Assessment of passing ship, swing safety, emergency planning / procedures and minimum towage requirements;
 - (c) Manoeuvres into/out of Channel Infrastructure's jetty 3 bunker facility with new facility berths occupied / passing effects and safety / emergency procedures and risk assessment.

Advice Note: *The FMBS's are to include independent verification / observer as well as representation from other industry (i.e. CINZ and Seafuels). The comprehensive inclusion of MetOcean modelling and limiting*

criteria for navigation, together with suitable sized (design) vessels and support vessels (tugs) to enable a range of arrival and departure manoeuvres as well as ad-hoc (unplanned) emergencies such as loss of steerage and / or loss of propulsion. The FMBS must also include a comprehensive full-scale mock-up of the simulated ships' bridge including a high-resolution, full-scale display of the relevant ship and surrounding area (as seen from the ship's bridge), the relevant controller hardware where installed on an existing ship such as telegraph, thrusters, independent helm and Azi Pods, together with other instruments required for navigation and manoeuvring.

Oil spill risk assessment

118. At least six months prior to Practical Completion, the consent holder must provide an Oil Spill Risk Assessment (OSRA) to Council for certification. The OSRA must be for the purpose of informing any required updates or changes to the Northland Marine Oil Spill Contingency Plan and associated spill response procedures and equipment requirements. The OSRA must, at a minimum, consider all navigation (i.e. whole transit from boarding to departure of Pilot), emergency procedures, and potential sources and scale of oil spill and response times.

DREDGING

Capital dredging

119. Conditions 120-179 apply to capital dredging only.

General

120. The Consent Holder must not undertake capital dredging between the months of 1 October to 31 January in two successive years.
121. At least ten (10) working days in advance of the date of the commencement of capital dredging associated with these consents, the consent holder must:
- (a) notify the Council of the commencement of capital dredging; and
 - (b) advertise the anticipated dredging in the Northern Advocate (or equivalent); and
 - (c) advise the anticipated location and timing of the dredging on its website.
122. Capital dredging must:
- (a) be undertaken only within the area marked "Extent of Proposed Dredge Area" on the plan C04 contained in **Appendix 1**; and
 - (b) result in a Declared Depth of no deeper than 14.5 metres for Area G on and 16.0 metres for Area H on plan C04 contained in **Appendix 1**.
123. The consent holder must record the locations and periods of all dredging, the method of dredging, and the quantities of in situ material dredged (in cubic metres) and must provide these records to the Council within 20 working days after the dredging work is completed.

124. Except for incidental dredging discharges, all seabed material dredged during the capital dredging programme must be:
- (a) Placed in the reclamation associated with the Expansion Project; or
 - (b) Deposited on land at Marsden Point presently owned by the consent holder or Marsden Maritime Holdings Ltd; or
 - (c) Deposited in any other authorised location.
125. The consent holder must notify the Council within ten (10) working days following the date of the completion of capital dredging works associated with these consents.
126. As soon as practicable following completion of the capital dredging, the consent holder must provide a bathymetric plan defining the location and depth of the dredging area and batters within the CMA to the entities listed below. The plan must include GPS co-ordinate data (using Transverse Mercator 2000 or an equivalent system).

Hydrographic Surveyor

Maritime New Zealand

Toitū Te Whenua Land Information New Zealand

PO Box 25620

PO Box 5501

Wellington 6140

Wellington 6145

Northland Regional Council

Channel Infrastructure

Private Bag 9021

Private Bag 9024

Whangarei Mail Centre

Whangarei 0148

Whangarei 0148

Timing of capital dredging with respect to capital dredging authorised by AUT.037197.01-13

127. Capital dredging under these consents must not commence:
- (a) during capital dredging authorised under consents *AUT.037197.01-13*; or
 - (b) within a 6 month period following the completion of a capital dredging event authorised under consents *AUT.037197.01-13* –

in each case only where the capital dredging event undertaken pursuant to consents *AUT.037197.01-13* is within Harbour Area A (inner), as described in those consents.

Advice Note: Channel Infrastructure holds resource consents *AUT.037197.01-13* for the deepening and realignment of the Whangārei Harbour shipping channel and associated works. Condition 79 of those resource consents requires the consent holder to notify the Council, and other parties, of each dredging event at least two (2) weeks before commencing dredging. Condition 80 also requires the consent holder

to publicly advertise the location and timing of dredging in the Northern Advocate at least one (1) week, but not more than two (2) weeks, in advance of commencing dredging operations on each occasion.

Advice Note: Condition 127 is for the purpose of managing potential cumulative marine ecological effects associated with capital dredging under these resource consents and consents AUT.037197.01-13 held by Channel Infrastructure.

Capital Dredging Management Plan (Capital DMP)

128. The consent holder must, at least three (3) months prior to capital dredging commencing, submit to the Council a Capital Dredging Management Plan (Capital DMP) for certification.
129. The objective of the Capital DMP is to describe the capital dredging plant, work methodologies, and environmental management systems to be used for the delivery of the capital dredging to ensure that any actual or potential adverse effects associated with capital dredging are appropriately managed. The Capital DMP may cross reference or include relevant sections of the CEMP, particularly those relating to Wildlife.
130. The plan must provide the following information:
 - (a) A description of proposed works, together with drawings;
 - (b) A description of the number and types of dredges to be used;
 - (c) A dredging programme including a timetable, sequence of events and expected duration of all proposed works;
 - (d) A description of dredging methodology to be used;
 - (e) A description of how the location and quantities of Dredge Spoil and/or in situ seabed material are to be recorded;
 - (f) A description of the maintenance of equipment and systems that are to be used during dredging;
 - (g) Community liaison arrangements, including arrangements for liaising with Channel Infrastructure;
 - (h) A description of the storage and handling of hazardous substances during dredging;
 - (i) Protocols for managing accidental discharge of sediments or other contaminants into the CMA;
 - (j) A description of the outdoor lighting to be used to reduce the potential for bird strike, for example targeting of luminaries and the use of shields or baffles;
 - (k) A description of measures to manage any conflicts between the dredging program and organised sporting events in Whangārei harbour;
 - (l) A description of a turbulence reducing (green or environmental) valve to be incorporated with the overflow system (if a TSHD is used);
 - (m) A description of all other relevant measures, systems, and training that will be implemented to manage adverse effects on the receiving environment during the operation of the dredge vessel; including measures relating to biofouling, management of waste, and refuelling.
 - (n) Details of the training for personnel involved in the operation of the dredge so that they may recognise any potential archaeological material including koiwi tangata or taonga, and to ensure compliance with the conditions of these consents and the DMP;

- (o) Measures required to ensure compliance with relevant terrestrial noise limits in condition 57 including the following matters:
 - i) Procedures for noise monitoring at the commencement of capital dredging for each dredge used to determine actual noise emissions;
 - ii) Ongoing monitoring methods and procedures to ensure compliance with the noise limits;
 - iii) Procedures for the promotion of the awareness of noise management for the crew of each dredging vessel, including maintenance of noisy plant or equipment; and
 - iv) A procedure for the receipt, response and management of any noise related complaints received during the dredging period.
 - (p) Procedures to be implemented to manage underwater dredging noise;
 - (q) Other relevant requirements specified in these conditions of consent (including other management plans); and
 - (r) A Contingency response plan.
131. The Capital DMP must be certified in writing by the Council prior to capital dredging first commencing, and the consent holder must undertake capital dredging in accordance with the certified Capital DMP.
132. Any variation to the Capital DMP must be subject to certification by the Council.
133. The consent holder must provide the Capital DMP, and any variations to the Capital DMP, to Channel Infrastructure within ten (10) working days of the document's certification by the Council.
134. Appropriate navigation signals must be shown at all times during dredging activities.

Environmental Monitoring and Management Plan (EMMP)

135. At least three (3) months prior to the commencement of marine ecology assurance monitoring required by these consents, the consent holder must provide an EMMP to the Council for certification.
136. The objectives of the EMMP are:
- (a) *Turbidity monitoring and management*: to detail how capital dredging turbidity monitoring and management actions are implemented to minimise the risk of elevated turbidity that can be attributed to capital dredging and to ensure that turbidity during dredging does not exceed the expected background combined with the modelled turbidity, therefore ensuring that related effects on sensitive marine ecology (including SEAs) are within predicted levels; and
 - (b) *Marine ecology assurance monitoring*: to facilitate the comparison of changes in the marine receiving environment caused by Expansion Project capital dredging with those predicted in the information filed in support of the resource consent application, including by:
 - (i) Characterising the responses of surrounding sub-tidal and inter-tidal habitats and benthic communities to sediments suspended and deposited offsite during channel dredging, and subsequent changes after dredging is complete.
 - (ii) Confirming whether benthic habitats and communities similar to those currently existing re-establish on the dredged basin once dredging is complete, and if not, determine why.

- (c) *Bathymetric and shoreline surveys*: to collect spatial data on the seabed and shoreline to assess any physical changes to the coastline and seabed that may result from the Expansion Project and potential actions if adverse changes associated with the Expansion Project are identified through monitoring.

137. The EMMP must include the following topics:

Turbidity monitoring and management

- (a) The monitoring of turbidity plumes, including roles and responsibilities of groups involved in monitoring;
- (b) Management actions to be undertaken in response to an exceedance of a turbidity trigger or Tier 3 Compliance Level;

Marine ecology assurance monitoring

- (c) Detailed assurance monitoring survey methodologies providing for:
 - (i) sub-tidal marine ecology assurance monitoring in accordance with Conditions 171-172;
 - (ii) inter-tidal marine ecology assurance monitoring in accordance with Conditions 171-175;
 - (iii) the collection of assurance monitoring data on the following key physical and ecological indicators:
 - sediment grain size;
 - the composition of sub-tidal and inter-tidal infaunal communities (including diversity, abundance, evenness);
 - the distribution and cover of seagrass and macroalgae beds; and
 - the presence (and/or abundance) and distribution of sub-tidal epifauna (or indicator species).
- (d) Where relevant, methodologies for the analysis of marine ecology assurance monitoring data collected;
- (e) A process for the refinement of the Marsden Bay seagrass monitoring area pursuant to condition 175;

Bathymetric and shoreline surveys:

- (f) The methodologies for the bathymetric and shoreline surveys required by Conditions 203 and 204; and

Miscellaneous

- (g) The EMMP content requirements specified in other conditions of these consents;
- (h) Reporting requirements specified in these conditions of consent and otherwise needed to achieve the objectives of the EMMP;
- (i) Identification of any other relevant management plans (for example the CEMP, Capital DMP, Maintenance DMP) and the linkages with those plans; and
- (j) Documentation procedures for handling complaints relating to capital dredging.

Monitoring of Turbidity

138. As part of the EMMP, the consent holder must detail how the capital dredging turbidity plumes are to be monitored to:
- (a) Confirm whether or not turbidity plumes exceed the turbidity triggers and Tier 3 Compliance Level that are to be specified under condition 141;
 - (b) Assess whether a turbidity event is determined to be an extraordinary natural event; and
 - (c) Assess the relative contributions of dredging and non-dredging sources to observed turbidity.
139. The EMMP must include the following details, and the Consent Holder must consult with the Council on these details at least 60 working days prior to providing the EMMP for certification:
- (a) The monitoring equipment to be used, including the use of nephelometers;
 - (b) The process for pre deployment calibration, in-situ validation and post deployment verification.
 - (c) The process for data processing, including data editing, and replacing missing records.
 - (d) The location of the monitoring equipment;
 - (e) The setting up and maintenance of monitoring equipment;
 - (f) The establishment of real-time monitoring; and
 - (g) Data management;
 - (h) Quality assurance /quality control methods including management of missing and aberrant data.

Management Actions in Response to Turbidity Plumes

140. As part of the EMMP, the consent holder must detail the management actions to be carried out in response to elevated turbidity as defined by the turbidity Tier 1 and Tier 2 triggers.
141. To achieve condition 143, the EMMP must include the following:
- (a) Details of the rationale for classifying the turbidity observations into two (2) tiers of turbidity triggers and one (1) Tier 3 Compliance Level;
 - (b) Details of how the Tier 1, and Tier 2 turbidity triggers and Tier 3 Compliance Level are determined using the methodology referred to in condition 162;
 - (c) Setting out the Intensity values for Tier 1, and Tier 2 turbidity triggers and Tier 3 Compliance Level which are based on the 80th, 95th, and 99th percentile of baseline plus Predicted Dredging Turbidity respectively; and
 - (d) Description of the management actions (including potentially ceasing dredging at a particular location) set out in condition 143 and how they may be applied by the dredge operator when a Tier 1, or Tier 2 turbidity trigger or Tier 3 Compliance Limit is exceeded.
142. The EMMP must also include procedures on:
- (a) Investigating whether the exceedance of the trigger is caused by capital dredging; and

- (b) Where necessary, increasing monitoring effort to better understand the characteristics of the turbidity causing an Exceedance, such as carrying out manual turbidity measurements in the vicinity of the monitoring station.
143. The EMMP must include a suite of management response measures that may be undertaken in response to an Exceedance of a turbidity trigger, including:
- (a) A change in the location of dredging;
 - (b) A change in the dredging process, including timing of dredging within the tidal phase; and/or
 - (c) The cessation of dredging in the vicinity of a telemetered turbidity monitoring station.
144. The EMMP must be in general accordance with the draft EMMP provided as part of the resource consent application [insert ref].
145. The EMMP must be certified in writing by the Council prior to commencement of pre-dredging marine ecology assurance monitoring required by these conditions, and the consent holder must undertake capital dredging, and pre-, during-, and post-dredging marine ecology assurance monitoring and reporting, in accordance with the certified EMMP (including any certified variation).
146. Any variation to the EMMP must be subject to certification by the Council.
147. A copy of the EMMP and all amended EMMPs must be provided to iwi/hapū by the Consent Holder as soon as practicable, and in any event not more than five (5) Working Days following certification.

Capital dredging turbidity monitoring

148. The consent holder must undertake a capital dredging monitoring and reporting programme in accordance with conditions 150 to 154.
149. The telemetered turbidity monitoring stations must be operational whilst dredging is undertaken. If an instrument fails, or requires maintenance, dredging can only continue if:
- (a) The instrument (or an equivalent) is replaced within 48 hours; and
 - (b) Manual turbidity readings are collected on a 4 hourly basis during daylight hours.
150. The purpose of the capital dredging monitoring programme is to:
- (a) Ensure that turbidity during dredging does not exceed the expected background combined with the modelled turbidity, therefore ensuring that the related effects on sensitive marine ecology (including SEAs) are within predicted levels.
 - (b) Provide baseline water quality information to enable the calculation of trigger levels; and
 - (c) Monitor capital dredging so that any management actions can be implemented to address unanticipated environmental effects.
151. The consent holder must carry out baseline water quality monitoring required by conditions 155 to 156 over a period of at least one (1) year, prior to the first commencement of capital dredging authorised by these consents.

152. There must be no fewer than three (3) stations carrying out telemetered monitoring of turbidity (NTU) for the purposes of baseline water quality monitoring and capital dredging management.
153. For the purposes of the baseline water quality monitoring, the consent holder must
- (a) Monitor for turbidity (in NTU/FTU) at all locations and salinity at one location. Each parameter must be monitored at a frequency of not less than once every 15 minutes. The specific location of the water quality monitoring stations, the parameters to be monitored at each station, and the methodology and equipment to be used are to be detailed in the EMMP.
 - (b) Monitor turbidity for at least 12 months, with a target of 95% data recovery over the 12 months.
 - (c) At each monitoring location, monthly water sampling must be undertaken to contemporaneously record the TSS and NTU/FTU levels at that location.
154. The monitoring programme contained in the EMMP must be designed and carried out by a person(s) who is suitably experienced in marine environment monitoring.

Reporting

155. The consent holder must prepare a baseline water quality monitoring report. The report must:
- (a) Present and discuss the results of baseline water quality monitoring; and
 - (b) Detail the pre deployment calibration, in-situ field validation, data processing, and quality assurance.
 - (c) Recommend any amendments to the EMMP for the purposes of future water quality monitoring required by these consents to change the location of a station(s) within the relevant zone or the monitoring parameters at each station, provided that the amended locations or monitoring parameters at the station better achieve the purpose of the EMMP.
156. The baseline water quality monitoring report must be provided to the Council at least two (2) months prior to the first commencement of capital dredging. This report must be used to re-certify the EMMP to set the turbidity triggers and Teir 3 compliance limit.
157. During and after capital dredging, the consent holder must provide to the Council, at least quarterly, a report that summarises the:
- (a) Water quality monitoring data from the previous quarter and any monitoring or equipment issues that occurred during that period;
 - (b) Details of equipment calibration, in situ field validation, data processing, and quality assurance.
 - (c) Collation of other monitoring undertaken; and
 - (d) Details of any Exceedance(s), the management response measures carried out and the results of monitoring after the management response measures have been completed.
158. There must be no fewer than two (2) quarterly reports prepared immediately after capital dredging is completed.
159. Within nine (9) months of the completion of capital dredging, the consent holder must provide the Council a Dredging Turbidity Monitoring and Management Report. The report must provide a summary of the turbidity monitoring and management response measures carried out during the capital dredging

(excluding for marine ecology assurance monitoring, the requirements for which are set out below) and must include, but not be limited, to the following:

- (a) Summary of the turbidity monitoring undertaken; and
- (b) Summary of the management actions carried out and the results of monitoring after the management actions have been completed.

Turbidity Triggers and Tier 3 Compliance Limit

Establishment of turbidity triggers and Tier 3 Compliance Level:

- 160. The consent holder must establish turbidity triggers and a Tier 3 Compliance Limit for each of the telemetered turbidity monitoring locations. There must be two (2) tiers of turbidity triggers and one (1) Tier 3 Compliance Limit, each with an Intensity and Allowable Duration value.
- 161. The purpose of turbidity triggers is to:
 - (a) Initiate a management action(s), as detailed in the EMMP and required under condition 143, in the event of a Tier 1 or 2 turbidity trigger exceedance;
 - (b) Cease dredging in the vicinity of a monitoring location in the case of an Exceedance of the Tier 3 Compliance Limit as set out in conditions 166 to 170.
- 162. Turbidity triggers and Tier 3 Compliance Levels must be established in accordance with the methodology (including the modified-Intensity-Frequency-Duration approach) in the document titled "*Turbidity Monitoring for the Northport Expansion Project*" (1 June 2023, Environmetrics Australia) included as **Appendix 3**.
- 163. Upon completion of the baseline water quality monitoring, the Intensity component of the turbidity triggers and Tier 3 Compliance Level for each telemetered turbidity monitoring location must be calculated using the baseline turbidity data referred to in Condition 151 plus the Predicted Dredging Turbidity at that location, using the methodology referred to in Condition 162.
- 164. The consent holder must provide to the Council, at least two (2) months prior to commencement of capital dredging, a written report prepared by a Suitably Qualified and Experienced person which demonstrates that the turbidity triggers and Tier 3 Compliance Level have been established in accordance conditions 162 and 163.
- 165. The report prepared under condition 164 must be certified in writing by the Council's Compliance Manager prior to the first commencement of capital dredging authorised by these consents.

Tier 3 Compliance Levels and Exceedance Events

- 166. The telemetered turbidity monitoring stations required under condition 152 are to be used to determine whether there has been a Tier 3 Compliance Level Exceedance.

167. If a monitoring station records an Exceedance of the Tier 3 intensity value for more than 7.2 hours over a rolling 30-day period, capital dredging must cease in the vicinity of that monitoring station and only recommence in the following circumstances:
- (a) The number of Tier 3 “exceedance hours” has fallen below the 7.2 hours available at that station over a rolling 30-day period, or
 - (b) The turbidity recorded at that station is less than the Tier 3 NTU/FTU intensity value calculated for that station; or
 - (c) The exceedance is due to an extraordinary natural event as detailed in Condition 169.
168. The consent holder must ensure that methods for managing and achieving compliance with the requirements of condition 167 must be set out in the EMMP.
169. Notwithstanding condition 167, capital dredging may continue in the vicinity of a telemetered turbidity monitoring station provided that:
- (a) The consent holder provides the Council a written report, within 24 hours of a Tier 3 Compliance Level Exceedance referred to in condition 167 which demonstrates that the elevated turbidity is due to an extraordinary natural event and not attributable to dredging; and
 - (b) If the Council, acting in its technical capacity, disagrees with the findings of the report the capital dredging must cease in the vicinity of the affected monitoring station(s) and only recommence in accordance with condition 167(a) and 167(b). If the Council provides no written response after two (2) working days then it is deemed that the Council agrees with the findings of the report prepared under Condition 169(a) and dredging may continue.
- Advice Note:** *An extraordinary natural event should be a significant and self-evident natural event that has clearly caused an Exceedance of the Tier 3 Compliance Level at one (1) or more of the turbidity monitoring stations. The high-concentration turbidity plumes would have been generated from events such as a tsunami, a weather event causing significant flooding, extreme swells, or a land slip.*
170. The consent holder must place a copy of the report prepared under Condition 169(a) on its website.

Marine ecology assurance monitoring

Sub-tidal monitoring

171. The consent holder must undertake marine benthic ecology assurance monitoring of sub-tidal biota and sediments:
- (a) in accordance with the certified EMMP; and
 - (b) in general accordance with the following table and plan:

Timing requirements of each sub-tidal sampling round (✓ means sampling is required; ✕ means no sampling is required)

	Within a one year period within 18 months prior to dredging commencing		During dredging (except in the dredge basin)		One year after dredging is complete		Three years after dredging is complete	
Area	Spring / summer	Autumn / winter	Spring / summer	Autumn / winter	Spring / summer	Autumn / winter	Spring / summer	Autumn / winter
Existing Dredge	✓	✓	✕	✕	✓	✓	✓	✓
West Impact	✓	✓	✓	✓	✓	✓	✕	✕
East Impact	✓	✓	✓	✓	✓	✓	✕	✕
North Impact	✓	✓	✓	✓	✓	✓	✕	✕
Reference	✓	✓	✓	✓	✓	✓	✓	✓

Plan showing indicative sample areas for sub-tidal benthic ecological monitoring



172. The spring/summer and autumn/winter sampling rounds required in Condition 171 must be as close to six (6) months apart as practicable.

Inter-tidal and sub-tidal monitoring

173. The consent holder must undertake marine ecology assurance monitoring of inter-tidal infauna, sediments, and seagrass:

- (a) in accordance with the certified EMMP; and
- (b) in general accordance with the following table and plans:

Timing requirements of each inter-tidal sampling round (✓ means sampling is required; * means sampling is required if the previous monitoring round shows that scientifically significant adverse effects have occurred)

	Within a one year period within 18 months prior to dredging commencing		During dredging		One year after dredging is complete		Three years after dredging is complete	
Area	Spring / summer	Autumn / winter	Spring / summer	Autumn / winter	Spring / summer	Autumn / winter	Spring / summer	Autumn / winter
Marsden Bay benthic sediments and ecology	✓	✓	✓	✓	✓	✓	*	*
Tamaterau benthic sediments and ecology (reference location)	✓	✓	✓	✓	✓	✓	*	*
Marsden Bay inter-tidal and sub-tidal seagrass	✓	✓	✓	✓	✓	✓	*	*

Plan showing indicative sample areas for inter-tidal sediment and infauna monitoring



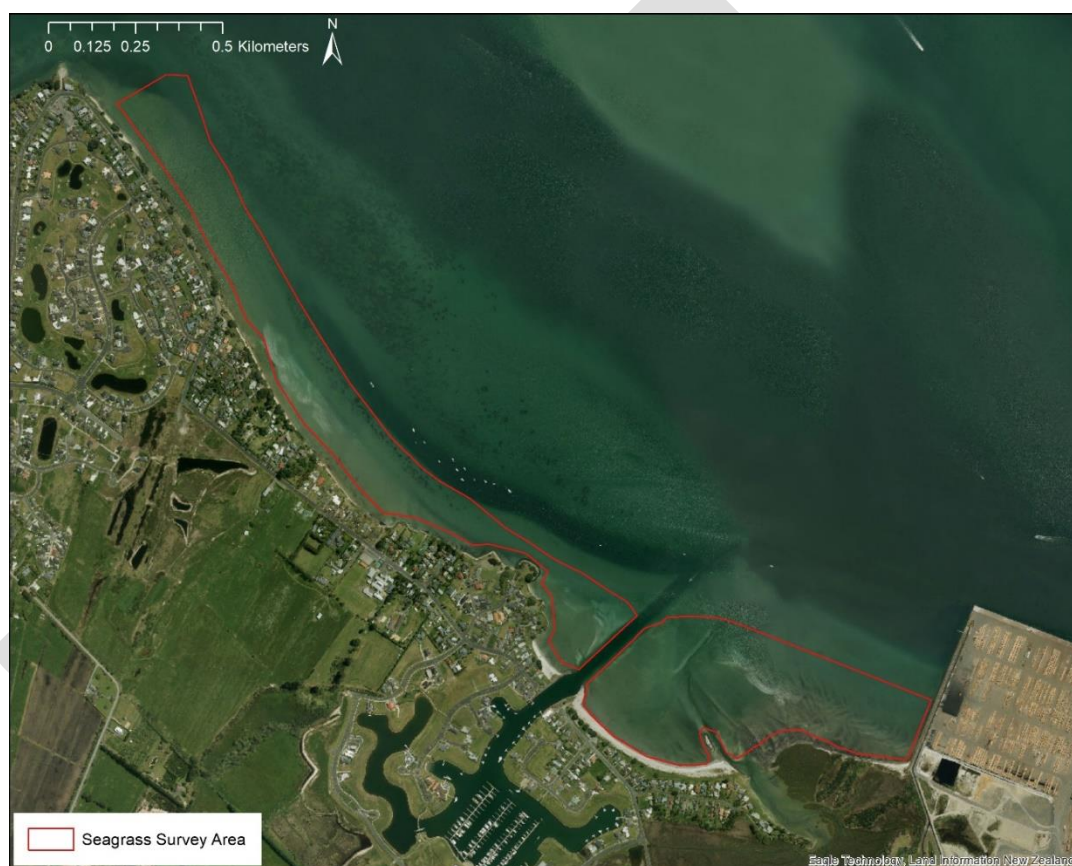
174. The spring/summer and autumn/winter sampling rounds required in condition 173 must be as close to six (6) months apart as practicable.

175. The Marsden Bay seagrass monitoring required by condition 173 must include either:
- a) The mapping of seagrass at Marsden Bay using georeferenced and ortho-corrected photogrammetry obtained by UAV (drone) survey; or if this is not practicable,
 - b) Video transects through intertidal and subtidal seagrass beds.

The initial survey area must be in general accordance with the below plan. Subsequent survey areas may be refined following the process to be set out in the EMMP.

Advice Note: Video transects can be used if drone photogrammetry is prevented by drone flight restrictions, or water visibility is insufficient to map subtidal beds.

Indicative area for Marsden Bay inter-tidal and sub-tidal seagrass monitoring



Marine ecology assurance monitoring reporting

176. After the completion of each set of annual (i.e. spring/summer and autumn/winter) marine ecology assurance monitoring required by these consents, the consent holder must engage a Suitably Qualified and Experienced marine ecologist to produce a report detailing the assurance monitoring undertaken during that period, including with reference to any previous assurance monitoring in order to illustrate any relevant trends over time.
177. Each monitoring report required under Condition 176 must be provided to the Council within three (3) months of the completion of the relevant set of annual marine ecology assurance monitoring.

Advice Note: *The marine ecology assurance monitoring conditions above are consistent with the document titled “Ecological Assurance Monitoring Plan” attached to the Draft EMMP submitted during the resource consent hearing for the expansion Project. The above conditions are intended to set out the key requirements and standards of the marine ecology assurance monitoring that is required under these consents, with the EMMP to set out the detailed monitoring methodologies.*

178. The last monitoring report covering the period 3-years after dredging is completed in accordance with Conditions 171 and 173, must consider and assess whether the observed ecological effects of dredging are within the bounds of those anticipated in the report titled Northport expansion project: Assessment of marine ecological effects lodged in support of this consent. If the observed effects exceed those anticipated, the Consent holder must engage a suitably qualified and experienced person to assess whether benthic habitats and communities are recovering, but at a lower than anticipated rate; and:
- (a) If so, provide an estimate of likely timeframes for residual effects to resolve and recommendations on further monitoring to track that recovery; and
 - (b) If recovery is not occurring, to assess the reasons why and options, including a proposal for remedying or mitigating those effects.
179. In the event that Condition 178(b) applies, and following certification by the Council, the consent holder must implement the proposed remediation or mitigation measures to the satisfaction of the Council.

Maintenance dredging

180. Conditions 181-197 apply to maintenance dredging only.
181. Maintenance dredging must not be undertaken between 1 October and 31 January inclusive unless it is necessary to do so as a result of unforeseen events or there is no practicable alternative timing.
182. Maintenance dredging must:
- (a) Only be undertaken within the area marked “Extent of Proposed Dredge Area” on the plan C04 contained in **Appendix 1**; and
 - (b) Result in a Declared Depth of no deeper than 14.5 metres for Area G and 16 metres for Area H on plan C04 contained in **Appendix 1**.
183. Except for urgent dredging required for navigational safety or stability of structures, at least ten (10) working days in advance of the date of the commencement of a maintenance dredging programme associated with these consents, the consent holder must:
- (a) Notify the Council of the intended maintenance dredging;
 - (b) Advertise the intended maintenance dredging in the Northern Advocate (or equivalent); and
 - (c) Advise the anticipated location and timing of maintenance dredging on its website.
184. The consent holder must ensure that a copy of this consent is provided to the person who is to carry out the dredging, prior to any work commencing. A copy of the consent must be held on the dredger.

185. When any maintenance dredging is carried out, the consent holder must record the periods of dredging, the method of dredging and the quantities of material dredged (in cubic metres) and must provide these records to the Council within twenty (20) working days after the maintenance dredging work is completed.
186. Maintenance dredging must not cause any of the following effects on the quality of the receiving waters, as measured at or beyond a 100 metre distance from the marked "Dredge Area" on [plan]:
- (a) The turbidity of the water (NTU/FNU) or visual clarity (Secchi depth) must not be increased by more than 33% of the background turbidity at the time of measurement;
 - (b) The production of any conspicuous oil or grease film, scums or foams, or floatable or suspended materials, or emissions of objectionable odour; and
 - (c) The destruction of natural aquatic life by reason of a concentration of toxic substances.
187. During periods of maintenance dredging, visual checks must be carried out daily and in the event that such a check shows evidence of conspicuous change in visual clarity in the water column, testing must be carried out and reported in accordance with Condition 186.
188. The results of each monitoring campaign must be reported to the Council within one (1) week of monitoring being completed, or within 24 hours of any non-compliance.
189. Except for incidental dredging discharges, all material dredged during maintenance dredging must be:
- (a) Placed in the reclamation associated with the Expansion Project; or
 - (b) Deposited on land at Marsden Point presently owned by the consent holder or Marsden Maritime Holdings Ltd; or
 - (c) Deposited in any other authorised location.
190. The consent holder must notify the Council within ten (10) working days following the date of the completion of a maintenance dredging programme associated with these consents.
191. On completion of a maintenance dredging programme, the consent holder must provide to the Council a bathymetric plan defining the location and depth of the dredging area and batters within the CMA. The plan must include GPS co-ordinate data (using Transverse Mercator 2000).

Maintenance Dredging Management Plan (Maintenance DMP)

192. At least three (3) months prior to maintenance dredging commencing, the consent holder must submit to the Council a Maintenance Dredging Management Plan (Maintenance DMP) for certification. The objective of the Maintenance DMP is to describe the maintenance dredging plant, work methodologies, and environmental management systems to be used to ensure that potential adverse effects associated with maintenance dredging are appropriately managed.
193. The plan must provide the following information:
- (a) A description of proposed works, together with drawings;

- (b) A description of the number and types of dredges to be used;
 - (c) A dredging programme including a timetable, sequence of events and expected duration of all proposed works;
 - (d) A description of dredging methodology to be used;
 - (e) A description of how the location and quantities of Dredge Spoil are to be recorded, and (if necessary) evidence that the dredge spoil disposal location is appropriately authorised;
 - (f) A description of the maintenance of equipment and systems that are used during dredging;
 - (g) Community liaison arrangements, including arrangements for liaising with Channel Infrastructure;
 - (h) A description of the storage and handling of hazardous substances during dredging;
 - (i) Protocols for managing accidental discharge of sediments or other contaminants into the CMA;
 - (j) A description of the outdoor lighting to be used to reduce the potential for bird strike, for example targeting of luminaries and the use of shields or baffles;
 - (k) A description of measures to manage any conflicts between the dredging program and organised sporting events in Whangārei harbour;
 - (l) A description of a turbulence reducing (green or environmental) valve to be incorporated with the overflow system;
 - (m) A description of all other relevant measures, systems, and training that will be implemented to manage adverse effects on the receiving environment during the operation of the dredge vessel; including measures relating to biofouling, management of waste, and refuelling.
 - (n) Details of the training for personnel involved in the operation of the dredge so that they may recognise any potential archaeological material including koiwi tangata or taonga, and to ensure compliance with the conditions of these consents;
 - (o) Procedures to be implemented to manage underwater dredging noise within the noise limits specified in these consents, including how any noise complaints are to be received and actioned; and
 - (s) Other relevant requirements specified in these conditions of consent (including other management plans); and
 - (p) A Contingency response plan and incident reporting.
194. The Maintenance DMP must be certified in writing by the Council prior to maintenance dredging first commencing, and the consent holder must undertake maintenance dredging in accordance with the certified Maintenance DMP (including any certified variation).
195. Any variation to the Maintenance DMP must be subject to certification by the Council.
196. The consent holder must provide the Maintenance DMP, and any variations to the Maintenance DMP, to Channel Infrastructure within ten (10) working days of the document's certification by the Council.
197. Appropriate navigation signals must be shown at all times during dredging activities.

SANDBANK RENOURISHMENT AREA GEOMORPHOLOGICAL MONITORING AND MAINTENANCE

198. The consent holder must commission inter-tidal and sub-tidal geomorphological surveys of the Sandbank Renourishment Area and the CMA within 200m of the Sandbank Renourishment Area.
199. The monitoring required by Condition 198 must be undertaken every two years for the first ten (10) years following the construction of the Sandbank Renourishment Area, and thereafter every five years.
200. Within three (3) months of each survey required by Conditions 198 and 199, the consent holder must provide to the Council for certification a report by a Suitably Qualified and Experienced coastal processes expert addressing the following:
- (a) The geomorphological performance of the Sandbank Renourishment Area; and
 - (b) The efficacy of potential periodic renourishment “top-up(s)” through the deposition of additional sand/material, including a recommendation on whether such top-up(s) are necessary to achieve the purpose of the Sandbank Renourishment Area; and, if so, the proposed details for such top-up(s) or any changes to a current top-up(s) regime (including the location, volume, and frequency of proposed additional sand deposition).
201. Where a report certified under Condition 200 recommends Sandbank Renourishment Area top-up(s), top-up(s) to the initial Sandbank Renourishment Area must be undertaken in accordance with the latest certified report.

COASTAL PROCESSES: BATHYMETRIC AND SHORELINE MONITORING

202. The consent holder must commission an independent and Suitably Qualified and Experienced person to undertake sub-tidal, inter-tidal, and dry beach surveys of the following areas to monitor for potential long-term coastal geomorphological changes associated with the development authorised by these consents:
- (a) Marsden Bay including the Marsden Cove Marina channel and Blacksmiths Creek channel; and
 - (b) The shoreline from Northport to Mair Bank (inclusive), including the Channel Infrastructure jetty area as described in Condition 108.
203. The detailed methodologies for the surveys required by Condition 202 are required to be set out in the EMMP (see EMMP conditions 135-159).
204. The monitoring required by Condition 202, and associated reporting, must be undertaken in accordance with the frequencies in the following table. Reporting must include:
- (a) a comparison between the most recent surveys and surveys undertaken in previous project phases to identify any trends over time; and
 - (b) observations based on the results of the analysis, including in the context of ambient conditions such as wind speed and direction, water level variations, and any significant climate events; and
 - (c) any recommendations around proposed mitigation measures such as sand back-passing, beach nourishment, groynes and other structures.

Bathymetric and shoreline monitoring and reporting frequencies

Project Phase	Monitoring frequency	Reporting frequency
Within a one year period within 18 months prior to capital dredging commencing	Two surveys over the 12 month period	Nil
During dredging and in the first year post capital dredging	6 monthly (biannual) surveys	One report within six (6) months of the final survey completion
1-5 years post-completion of capital dredging	One survey annually	One report within six (6) months of the final survey completion

205. In the event that Condition 204(c) applies, and following certification by the Council that the recommendations will address the change in bathymetric and or shoreline profiles, the consent holder must implement the proposed remediation or mitigation measures to the satisfaction of the Council.

MARINE BIOSECURITY

206. At least three (3) months prior to the arrival of a dredge or reclamation vessel in New Zealand, the consent holder must submit a Biosecurity Management Plan(s) (BMP(s)) to the Council for certification.
207. The objective of the BMP(s) is to specify how the risk of a biosecurity incursion via introduction by Expansion Project construction vessels is to be primarily avoided, and to ensure effective treatment of all plant and equipment used in association with the works authorised by these consents to ensure that these do not become a vector for the spread of any unwanted or risk species. The BMP must include:
- (a) A description of the construction vessel(s) and its (their) attributes that affect biosecurity incursion risk, including key operational attributes (e.g. voyage speed, periods of time idle), maintenance history (including prior inspection and cleaning undertaken), and voyage history since last dry-docking and antifouling (e.g. countries visited and duration of stay);
 - (b) A description of the key sources of potential marine biosecurity risk from ballast water, sediments and biofouling. This must cover the hull, niche areas, and associated equipment, and consider both submerged and above-water surfaces;
 - (c) Findings from previous inspections, if available;
 - (d) If Northport is the first New Zealand destination since the latest hull cleaning, a description of the risk mitigation that has been or will be taken prior to arrival in New Zealand, including:
 - (i) Routine preventative treatment measures and their efficacy, including the age and condition of the antifouling coating, and marine growth prevention systems for sea chests and internal sea water systems;

- (ii) Any specific treatments for submerged and above-water surfaces that will be undertaken to address the Import Health Standards and CRMS requirements prior to departure for New Zealand. These could include, for example, in-water removal of biofouling, or above-water cleaning to remove sediment;
 - (iii) Any additional risk mitigation planned during transit to New Zealand, including expected procedures for ballast water management;
 - (iv) Expected desiccation period of above-water surfaces on arrival to New Zealand (i.e. period of air exposure since last dredging operations);
208. The BMP(s) must be prepared by a suitably experienced person.
209. The BMP(s) must be certified in writing by the Council's Compliance Manager prior to construction works authorised by these consents first commencing, and the consent holder must undertake all activities authorised by these consents in accordance with the certified BMP(s) (including any certified variation).
210. Any variation to the BMP(s) must be subject to certification by the Council.
211. Prior to dredging commencing, the consent holder must provide written certification from a Suitably Qualified and Experienced person to the Council to confirm that all plant and equipment entering the CMA associated with the exercise of these consents is free from unwanted or pest marine species.

OCCUPATION AND USE OF THE CMA FOR PORT CONSTRUCTION, OPERATION, AND MAINTENANCE

212. These consents authorise the consent holder to occupy, on an exclusive basis, and use for the purposes of these consents (including port construction, operation, and maintenance):
- (a) Those parts of the Whangārei Harbour being the proposed reclamation area (for the period such occupation is necessary); and
 - (b) Those parts of the Whangārei Harbour containing all approved port structures, including batter slopes, as shown on plan C03 contained in **Appendix 1**.
213. These consents authorise the consent holder to occupy, on a nonexclusive basis, and use for the purposes of these consents (including port operation and maintenance) an area generally within a line [60] metres seaward of all approved port structures and the proposed reclamation area, as shown on plan C03 contained in **Appendix 1**.
214. The Water Taxi Pontoon is to be completed within twelve (12) months of Practical Completion.
215. Notwithstanding Condition 214, the consent holder must allow for reasonable public recreational access on the Water Taxi Pontoon, except as required to ensure operational or public safety, or in an emergency response scenario.

Advice Note: *Public access to the Water Taxi Pontoon will be via the public Pocket Park.*

EARTHWORKS (TERRESTRIAL)

216. Before commencement of earthworks (terrestrial), final engineering plans must be prepared and provided to the Council and Whangārei District Council. The plans must include:

- (a) The finished interface between the spatial extent of the port and the adjoining esplanade reserve.
- (b) A demonstration of how public access has been facilitated to the residual beach area to the east.

STORMWATER DISCHARGES (OPERATIONAL)

217. The consent holder must submit a Stormwater Monitoring and Maintenance Plan (SMMP) for the proposed stormwater system prior to Practical Completion. The SMMP is to be prepared by a suitably qualified and experienced practitioner with experience in the design and implementation of stormwater quality management practices and procedures for industrial sites, and be in general accordance with the draft SMMP provided as part of the resource consent application (*Stormwater Operation and Maintenance Plan: Northport, Marsden Point*, SLR Consulting New Zealand, 7 February 2024).

The SMMP must include:

- (a) Measures to reduce the entrainment of contaminants into stormwater including, but not limited to, source control measures such as sweeping, vacuuming and/or covering potential contaminant sources.
- (b) Methods to remove, as far as practicable, coarse sediments and debris, suspended sediment, adsorbed contaminants, and dissolved contaminants.
- (c) Operational and maintenance details for:
 - (i) Pond and associated pumps;
 - (ii) Canals;
 - (iii) Spillways;
 - (iv) Removal of silt and any contaminants settled in spillways;
 - (v) Isolation and removal of any spills on the port apron before entering canals;
 - (vi) Repair of any erosion;
 - (vii) Removal of blockages;
 - (viii) Pond and canal sludge management; and
- (d) Sludge management details under 217(c)(viii) must include:
 - (i) The methodology for managing sludge build up in the stormwater basin so as to minimise the potential discharge of a contaminants to groundwater.

- (ii) The inspection regime and record keeping requirements for the canals and ponds;
 - (iii) Maintenance requirements and the sediment testing regime for TPH, copper, lead, zinc and aluminium.
 - (iv) The predicted frequency of desludging; and
 - (v) The likely disposal location(s), including any secondary approvals required if contaminant levels do not meet cleanfill guidelines and the disposal site is not to a consented disposal facility
218. Conditions 219 to 229 apply to all operational stormwater discharges from Northport from Practical Completion of the reclamation.
- Advice Note:** *It is intended that the consent holder will surrender the existing resource consent for the current stormwater collection, treatment, and disposal system (CON20090505532 issued on 13 April 2010) concurrently with the commencement of the application of conditions 219 to 229 in accordance with condition 28. This will consolidate the stormwater resource consents and conditions applying to the expanded Northport, meaning that a single consent and single set of conditions will apply to all Northport operational stormwater.*
219. Operational stormwater must be treated either:
- (a) Via connection to the existing canal and pond-based stormwater system discharging to the CMA at co-ordinate location 1733997E 6033711N; and/or
 - (b) Via alternative proprietary stormwater treatment systems/devices prior to discharge to the CMA, subject to prior certification by Council that they are capable of meeting the compliance parameters in these consent conditions.
220. The consent holder must make an underwater examination of diffuser(s) and pipelines at least once every two (2) years and take such measures as are necessary to ensure that diffuser(s) operate as designed and that all the stormwater discharges, except for the emergency overflow(s), pass through diffuser(s).
221. A report on all such examinations and action taken to remedy defects, as required under Condition 220, must be forwarded to the Council's Compliance Manager within once month of the examination being completed.

Attributable compliance parameters

222. Water within the Northport site stormwater network directly upstream of the confluence with discharges from the Marsden Maritime Holdings site (i.e. at the downstream limit of the Northport 525 mm gravity pipework), or prior to discharge from any proprietary system, must not exceed the following;
- (i) 70 µg/L Total Petroleum Hydrocarbons;
 - (ii) 10 µg/L of total copper;
 - (iii) 44 µg/L of total lead;

- (iv) 150 µg/L of total zinc; or
- (v) 100 mg/L of suspended solids.

Advice Note: The compliance parameters in condition 222 impose enforceable limits on Northport's "at source" stormwater discharges.

- 223. The compliance location specified in Condition 222 may be changed if the Council, following receipt of a report from the consent holder, certifies that a proposed alternative location is equally or more suitable for the purpose of measuring Northport's stormwater discharge quality.
- 224. The quality of stormwater discharged from the canal and pond-based stormwater system at the pumps must meet the following:
 - (a) A pH within the range of 6.5 to 9.0;
 - (b) 1.86mg/L ammoniacal nitrogen;
 - (c) A total suspended solids median concentration not greater than 50 grams per cubic metre and a 95 percentile concentration not greater than 100 grams per cubic metre.
- 225. The operational port area must, as far as practicable, be maintained free of accumulation of wood debris and other organic product such that it is limited in its ability to be conveyed to the stormwater drains and cause objectionable odours beyond the site boundary.
- 226. The consent holder must undertake the following measures to minimise adverse effects associated with operational stormwater discharges:
 - (a) Removal of bark and wood debris.
 - (b) Routine sweeping of the operational port area.
 - (c) Dust suppression measures.
 - (d) Regular cleaning of catchpits.
- 227. Sediment and sludge collected from the maintenance of the stormwater system, including internal drains and any debris traps, must be disposed of at a suitably authorised site or facility.

Monitoring

- 228. The consent holder must undertake stormwater monitoring in accordance with the monitoring programme at **Appendix 2** and the SMMP. Any changes to **Appendix 2** must be certified by the Council.

Advice Note: The monitoring programme at **Appendix 2** sets out monitoring and reporting requirements only. It does not include stormwater quality compliance parameters.

Changes in cargo

- 229. The consent holder shall notify the Council Monitoring Manager in writing of any proposed change(s) to the types of cargo handled through the Port Terminal from those detailed in the application, where they

have the potential to materially affect stormwater quality, at least one week prior to the proposed change(s) occurring, and shall, if required to do so by the Council Monitoring Manager, in writing, update the SMMP to reflect any additional monitoring that may be required.

Advice Note: *The current terminal activities are forestry products, containers, fertiliser, animal feed, and coal.*

PORT ACTIVITIES AIR DISCHARGES (OPERATIONAL)

230. Conditions 231 to 233 apply to all Northport port operations from Practical Completion of the reclamation.
231. At least three (3) months prior to the commencement of any Expansion Project Port Activities (excluding Expansion Project construction) an Air Quality Management Plan (AQMP) must be prepared and submitted to the Council for certification. The objective of the AQMP is to detail dust management procedures that will be implemented by the consent holder to minimise discharges of dust from port operations and to ensure that effects are in accordance with the assessments accompanying the resource consent applications. The plan must include guidelines to control dust associated with the handling of bulk material and stockpiles, including regarding the following:
- (a) Use of appropriate equipment when transferring material, such as hoppers.
 - (b) The use of covers.
 - (c) Limiting drop heights.
 - (d) Undertaking work in favourable wind conditions.
 - (e) Having a method available to apply water to dampen material when required and as appropriate.
 - (f) The regular sweeping of sealed surfaces.
 - (g) Restrictions on activities during strong winds.
 - (h) Limitations on the height of stockpiles.
 - (i) Installation of wind breaks.
 - (j) Minimising vehicle speeds to 20km/h on unsealed surfaces.
 - (k) Inclusion of procedures to minimise emissions.
232. The AQMP must be certified in writing by the Council prior to the commencement of port operations on the reclamation or wharf authorised by these consents, and the consent holder must undertake port operations in accordance with the certified AQMP (including any certified variation).
233. Any variation to the AQMP must be subject to certification by the Council. The consent holder is to review the AQMP at no greater than three yearly intervals.

CULTURAL

Co-Design Process

234. To provide an on-going opportunity for Māori knowledge and tikanga / mātauranga Māori to be included into the design of the expansion of Northport, with the intention of aligning, to the extent practicable, western science and engineering with kaupapa Māori research and core Māori values, the Consent Holder must, subject to the establishment of the Tangata Whenua Relationship Group (RG) in accordance with condition 236, invite the RG to nominate one or two uri, as determined by the RG, to participate in:
- a) The detailed design of the physical works authorised by these consents, including but not limited to:
 - i) Reclamations;
 - ii) Marine structures, including wharves, tug berthing facilities and water taxi pontoon;
 - iii) The Sandbank Renourishment Area;
 - iv) The Pocket Park;
 - v) Stormwater infrastructure;
 - vi) Dredging activities; and
 - vii) Earthworks, and
 - b) the preparation of all management plans required by the conditions of these consents.
235. The Consent Holder must meet the actual and reasonable costs associated with giving effect to Condition 234.

Tangata Whenua Relationship Group

236. The Consent Holder must, not later than 6 months following commencement of these consents, provide a written offer to the relevant representative entities of tangata whenua groups of Poupouwhenua and Whangārei Te Rerenga Parāoa to establish and maintain a Tangata Whenua Relationship Group ('RG'), noting that:
- (a) For the purposes of these resource consents the 'relevant representative tangata whenua groups' are: Patuharakeke, Te Parawhau, and Ngātiwai;
 - (b) The entities nominated to represent the tangata whenua groups listed in clause (a) of this condition must be identified by tangata whenua. Tangata whenua must advise both the Consent Holder and the council as to whom their representative entities will be;
 - (c) The RG must be responsible for self-determination, including without limitation: the name by which it must be formally known, methods of decision-making, and rates of remuneration for members; and
 - (d) Other tangata whenua groups may be invited to join the RG where they have been endorsed by the majority of the members of the RG.

Advice Note: *There are existing groups exercising various roles aimed at improving the health of Whangārei Te Rerenga Parāoa, including for example the “Kaitiaki Roopu” which was established under previous resource consents granted to Northport for its port expansion. The RG is distinct from the existing Kaitiaki Roopu.*

237. Each of the above parties listed in Condition 236 who accepts the Consent Holder’s offer may nominate one representative and an alternate representative to the RG. If invited in writing by the RG, the Consent Holder may also nominate one representative and an alternative representative to the RG.

Functions of the RG

238. The functions of the RG are to:
- (a) Recognise and provide for the kaitiakitanga of Māori who have a kaitiaki relationship with Poupuwhenua and Whangārei Te Rerenga Parāoa, within the framework of these resource consents;
 - (b) Facilitate the involvement of Māori who have a kaitiaki relationship with Poupuwhenua and Whangārei Te Rerenga Parāoa in the exercise of these resource consents;
 - (c) Provide a forum for Māori who have a kaitiaki relationship with Poupuwhenua and Whangārei Te Rerenga Parāoa, to engage with the Consent Holder and the council regarding the exercise of these resource consents; and
 - (d) Promote the aspirations of its people, including:
 - i) Environmental restoration and/or betterment;
 - ii) Whānau health;
 - iii) Educational opportunities for tangata whenua;
 - iv) Cultural well-being; and
 - v) Economic and social well-being for tangata whenua.

Roles of the RG

239. The roles of the RG are to:
- (a) Identify initiatives to develop expertise and capacity building for mana whenua. These could include, for example, establishing educational scholarships, providing post-graduation research funding, identifying opportunities for professional training (e.g. Directors Institute course), apprenticeships, and/or port operator training (e.g. forklift licence), and/or proposing suitable candidates for employment opportunities.
 - (b) Nominate people with knowledge of mātauranga Māori to train as marine mammal observers;
 - (c) Nominate people with knowledge of mātauranga Māori to train as field technicians for collection of samples of water/substrate/shellfish as required by these consents or more generally for Northport’s operations;

- (d) Receive draft reports and information from the Consent Holder required pursuant to these resource consents, including but not limited to notification of any discovery of archaeological material;
- (e) Review and comment, as necessary, on the following (amongst other things): the draft CEMP; the draft EMMP; the draft MMMP; and the draft Capital DMP and draft Maintenance DMP;
- (f) Review and comment, as necessary, on the draft monitoring reports produced by the Consent Holder prior to them being submitted to the council to ensure the RG views are made known to council prior to any review;
- (g) Work collaboratively with the council and the Consent Holder to determine and implement appropriate procedures to control any adventive pests and weeds present within any disturbed area;
- (h) Take an active role in reviewing and reporting using the Cultural Indicators Hub ('CIH') as the primary reporting tool as defined in condition 240 below;
- (i) Receive from the Consent Holder notification of any receiving water quality limit exceedances; and consult with the council's Compliance Manager regarding any receiving water quality limit exceedances;
- (j) Provide advice on enhancing access to mahinga kai sites;
- (k) Receive requests from Māori who have a kaitiaki relationship with Whangārei Te Rerenga Parāoa for the undertaking of any cultural ceremonies relating to the exercise of these resource consents, including without limitation in the event of discovery of kōiwi; and for facilitating the provision of any such cultural ceremonies the RG reasonably deems to be appropriate; and
- (l) Identify, develop, establish and/or approve suitable studies or projects designed to improve water quality, coastal processes, environmental, ecological, and cultural health of the Whangārei Harbour entrance (including its shores) and northern Bream Bay.

Consent Holder's obligations

240. The Consent Holder's obligations in respect of the RG must be limited to:

- (a) Where requested by the RG, to provide a venue and/or Secretariat for RG meetings;
- (b) Explore and discuss with the RG opportunities to engage persons nominated by the RG to undertake roles as marine mammal observers and/or field technicians for collection of samples of water/substrate/shellfish as required by these consents or more generally for Northport's operations;
- (c) Identify external business opportunities for mana whenua where they arise, including in associated or ancillary businesses. Examples might be providing services to cruise ship operators and/or passengers; or preferential purchase of specimen plants for landscaping requirements;
- (d) Provide copies of the relevant draft management plans, reports and documentation required

by the conditions of this resource consent to the RG;

- (e) Consider and, if requested by the RG, provide a written or other agreed appropriate response to recommendations made by the RG, to the extent detailed in these conditions or otherwise agreed by the RG;
- (f) To make available any staff members or independent experts engaged by the Consent Holder to appear before the RG, with the costs of the experts' attendances and any necessary preparation to be met by the Consent Holder;
- (g) Subject to any operational or health and safety constraints, provide a reasonable opportunity for mana whenua to walk the Expansion Project Site before works commence to observe, categorise and discharge their obligations as kaitiaki;
- (h) Be involved in the development, implementation and monitoring of cultural indicators as contemplated by condition 249 below; and
- (i) Provide monthly email updates to the RG during construction works to advise of:
 - (i) Key progress milestones,
 - (ii) The outcomes of monitoring conducted in accordance with these resource consents, and
 - (iii) Any exceedances of relevant conditions of these resource consents.

RG Funding

241. In order for the RG to fulfil its functions and roles, as set out in conditions 238 and 239, the Consent Holder must fund the RG as follows:
- (a) Not later than 30 working days following the commencement of these consents the Consent Holder must pay to a suitable bank account nominated by the RG:
 - i. \$25,000.00 for the establishment of the RG, and
 - ii. \$25,000.00 for administration.
242. Thereafter, on the anniversary of the payments in condition 241 above, the Consent Holder must, for the duration of these consents, pay to the RG \$25,000.00 per annum for administration costs, providing the RG is established and operational. Subsequent annual administration payments are to be Index-Linked.
243. In addition to the payments required by conditions 241 and 242, upon the commencement of reclamation works, the Consent Holder must, for the duration of these consents, make available to the RG an amount of \$75,000.00 per annum for studies or projects that are demonstrated by the RG to be consistent with Condition 239(I). The Consent Holder will transfer to the RG funding for particular projects within 30 working days of receipt of a qualifying application. This funding is not Index-Linked, represents a maximum amount per annum, and does not compound if/when unused.

General

244. The Consent Holder must provide written confirmation to the council's Compliance Manager within two weeks of receiving acceptance of offers to participate in the RG pursuant to Condition 238.
245. The first RG meeting must be held as soon as practicable following establishment of the RG. The RG must determine how it conducts/administers its functions under these resource consents.
246. The Consent Holder must provide written verification to the Council and Whangarei District Council of all payments made in accordance with Conditions 240-242 within five working days of each payment being made.
247. Except where expressly provided in Condition 249(a), or where the context requires otherwise, all of the Consent Holder's obligations with respect to the RG under these resource consents are conditional on the RG being established in accordance with these conditions.

Cultural Monitoring Framework

Cultural Indicators Hub ('CIH') – overview

248. For the purposes of these conditions, the CIH is an online monitoring and reporting platform that:
- (a) Facilitates the visualisation of monitoring data and other information recorded by the consent holder during construction and operation of the expanded container port, as authorised by these consents;
 - (b) Demonstrates the performance of the expanded container port against any cultural indicators developed and implemented by mana whenua, incorporating mātauranga Māori as appropriate, and as further described in condition 249 below;
 - (c) Can be used as a tool for mana whenua to support the exercise of its kaitiakitanga; with authorised independent access to the online platform;
 - (d) Can be used to inform recommended changes to any management plans, including those specified in condition 239(e), as part of any annual update, or as part of any more comprehensive review; and
 - (e) Subject to restrictions requested by mana whenua, is otherwise publicly visible thereby providing real time information on the performance of the construction and operation of the expanded container port when measured against the conditions of consent.

Development of cultural indicators

249. The consent holder must, as early as possible but no less than 6 months prior to the date of the commencement of works authorised by these consents, invite the RG to develop cultural indicators that assess the effects of the dredging, reclamation and construction works authorised by these resource consents on Poupouwhenua and Whangārei Te Rerenga Parāoa. The cultural indicators are to be incorporated into the CIH described in Condition 248, provided that:
- (a) If the cultural indicators are not developed by the RG prior to the commencement of works

authorised by these consents, the CIH must be constructed in a manner that allows the cultural indicators to be added at a later date, and until that time the CIH must be operated and display other key information as described in condition 248 above;

- (b) The RG may review and amend the cultural indicators from time to time and the consent holder must update the CIH to incorporate any such amendments as soon as practicable following any new or amended cultural indicators.

Cultural Monitoring Framework - obligations

250. The Consent Holder must ensure all monitoring data as required by these consents and agreed by RG is visualised on the CIH.
251. The methodology of the cultural monitoring and assessment must be determined following consultation with the RG. Any assessments must be carried out by persons with knowledge of mātauranga Māori appointed by the RG, or by Suitably Qualified and Experienced person(s) appointed by the consent holder on the recommendation of the RG.
252. The cultural indicators referred to in condition 249 may include, but are not limited to, assessing changes in water quality, the health of taonga species and culturally significant flora and/or fauna, and the health of Poupouwhenua and/or Whangārei Te Rerenga Parāoa.
253. The addition to the CIH, the RG must be able to nominate an appropriate person(s) to undertake and provide a written report on the cultural indicators monitoring on an annual basis during construction of the Expansion Project. The written report will be submitted to Council on an annual basis, for their information.

Advice Note: Reasonable actual costs associated with commissioning external person(s) to establish and implement cultural indicators will be the responsibility of the consent holder, rather than the RG.

Advice Note: Nothing in these conditions 236-253 compels the consent holder to engage any person(s) for the delivery of monitoring.

Port noise (operational)

254. The Consent Holder must manage operational port noise in accordance with WDC Conditions 18-29. [insert WDC consent reference].

Advice Note: The Port Noise Standard (NZS 6809:1999 Acoustics – Port Noise Management and Land Use Planning) encapsulated in the WDC conditions applies cumulatively for port activities on land and in the CMA.

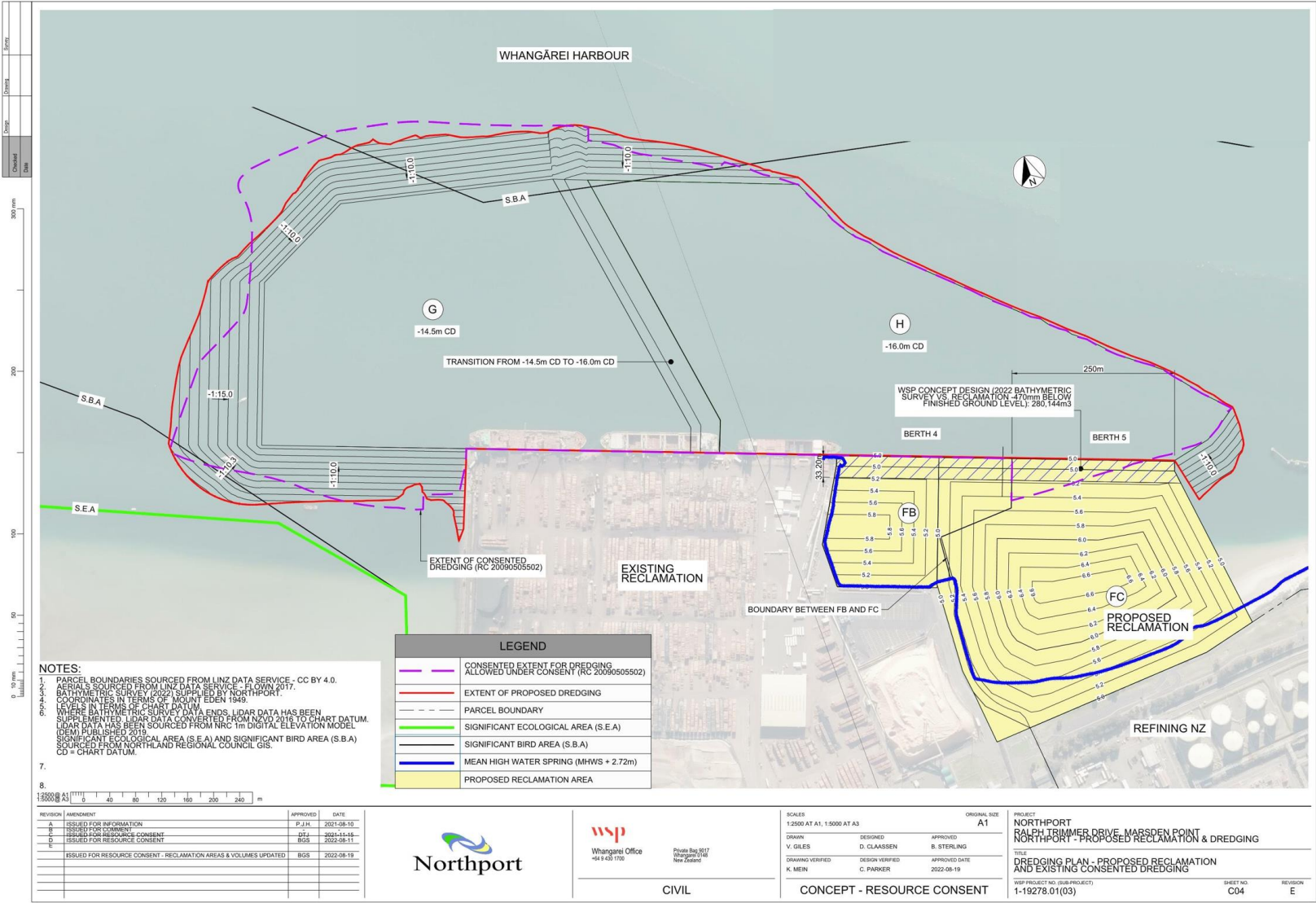
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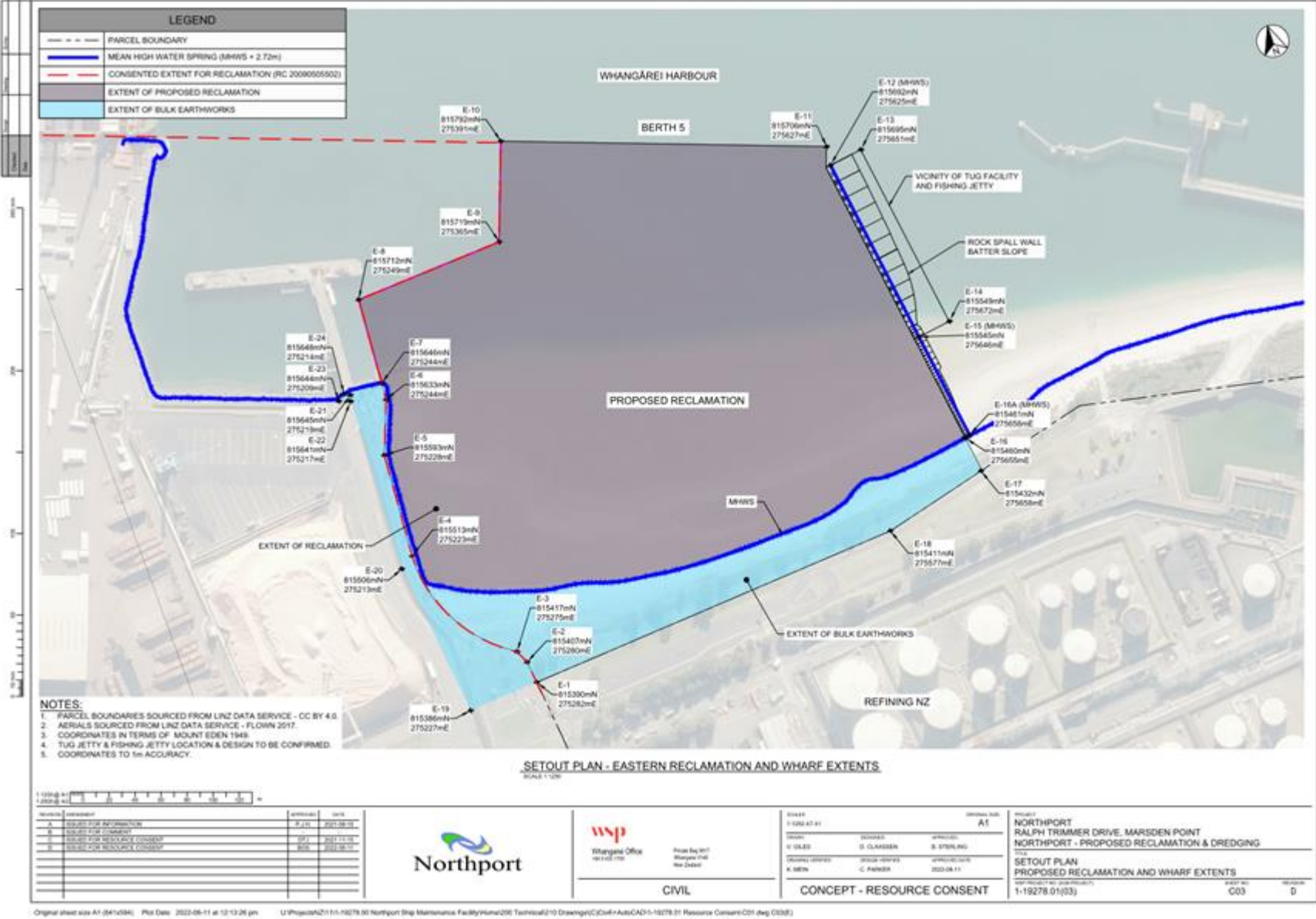
AUT[XXXXX] (Reclamation)

All other consents

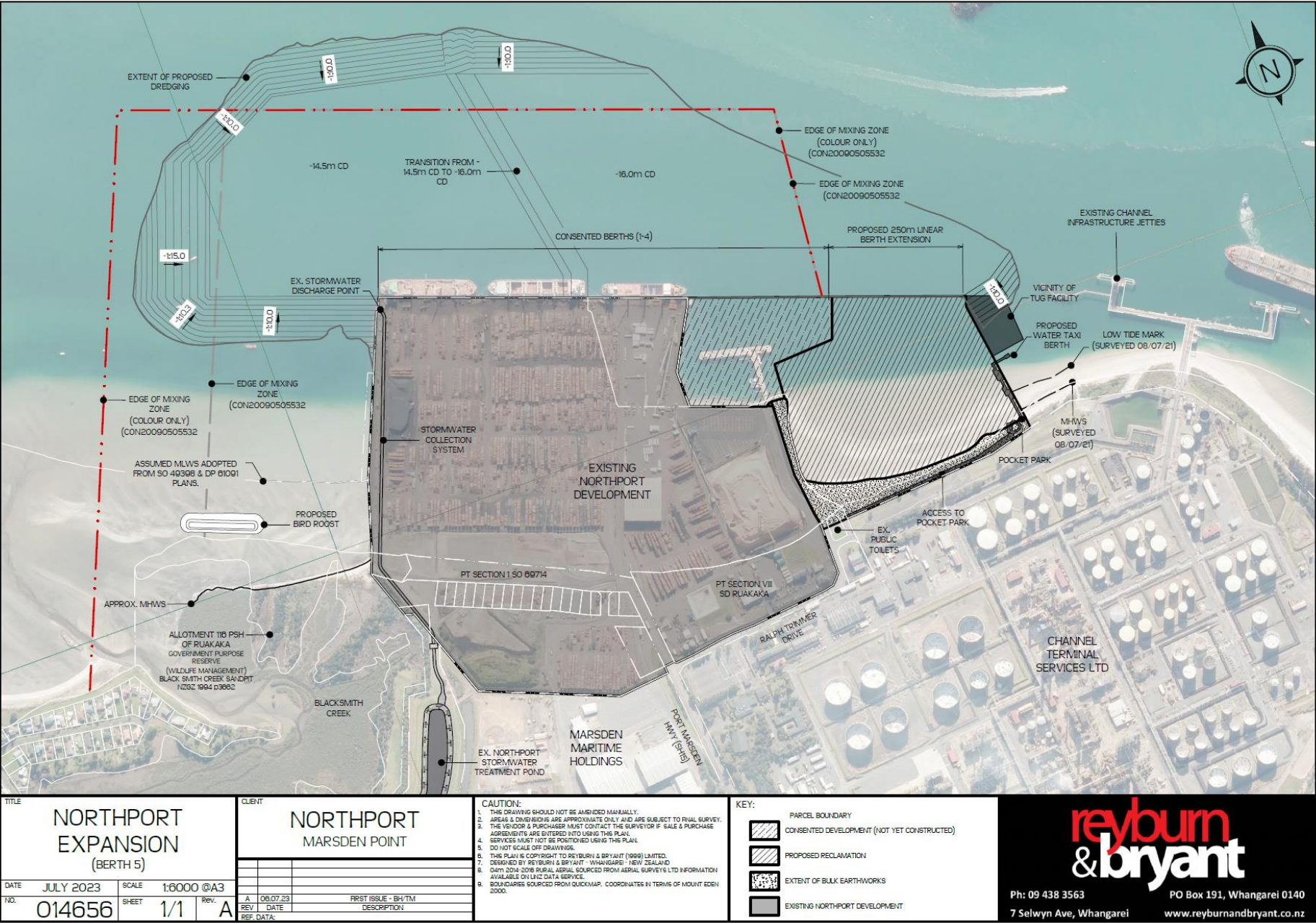
APPENDIX 1: PLANS



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APPENDIX 2: OPERATIONAL STORMWATER MONITORING PROGRAMME

The consent holder must undertake the monitoring as follows:

1. WATER QUALITY OF DISCHARGES FROM THE STORMWATER SETTLEMENT AND STORAGE POND SYSTEM, AND ANY PROPRIETARY SYSTEM(S)/DEVICES

1.1 Routine Water Monitoring for Discharges to Whangarei Harbour

The stormwater system(s) and discharges must be monitored in accordance with **Table 1** below.

If any of the following determinands in the stormwater being discharged to the coastal marine area exceed the Action Values specified in **Table A**, the consent holder will notify the Council within two weeks of receiving the sample result and investigate the source of the contaminant and advise the Council as to the findings of the investigation and any management response.

Table A

Determinands	Action values: Concentration in milligrams per cubic metre
Total Aluminium	5
Total copper	13
Total lead	44
Total zinc	150
PAHs	
– Acenaphthene	58
– Anthracene	0.1
– Benzo(α)anthracene	0.18
– Benzo(α)pyrene	0.1
– Floranthene	10
– Fluorene	30
– Napthalene	500
– Phenanthrene	6
– Pyrene	0.25

Note: ANZECC for PAH, 99% protection level as recommended in Section 8.3.7.7 and also CEQG (Canadian aquatic guidelines). For aluminium, ANZECC 8.3.7 Marine guidelines recommend 0.5 mg/m as an indicative low reliability figure.

Values in **Table A** are intended to act as an early warning to identify if concentrations are increasing relative to previously documented monitoring values/trends and warrant investigation notwithstanding that they may be well below levels of environmental concern taking into account mixing and dilution.

TABLE 1: SCHEMATIC MONITORING DIAGRAM –

Location	Sampling Frequency	Parameters	Notes
Point(s) of discharge	First discharge per season, and two other discharge events each year		Advise Council when ponds reach design discharge level for the first time each year prior to discharge occurring
	One sample per day (operational hours) until discharge has ceased. First sample to be taken as close as possible to when discharge first occurs	TSS, VSS, NTU/FTU and pH	T and DO are considered not useful in this situation
	Taken with first sample from first discharge event only	Al, Cu, Pb, Zn, PAH, and resin acids. Total N and Total P to be included if fertiliser products have been stored on site in the previous season	Resin acids, Total N and P concentrations will be assessed against available literature and previous concentrations to determine potential for adverse effects. All parameters to be assessed for any increasing trends over time. If the resin acid results for the first discharge of the season are below any applicable ANZECC effect threshold after theoretical mixing, resin acids need not be further analysed in that season
Pond Influent	To be done with “ <i>First discharge per season</i> ” referred to above	T, pH, DO, TSS, Cu, Pb, Zn, resin acids, phenols, PAH, VSS	Test to be used as an indication of pond effectiveness under different conditions eg size of storm, contributing area
Stormwater Canals, western/eastern arms	One off	<u>Sediment samples:</u>	Samples to be taken at: Join of arms, 100m upstream on eastern arm, 100m upstream on western arm
		Cu, Pb, Zn, PAH	Test to be used to determine any disposal issues for sediment
		<u>Water:</u> Winter months (when ponding in canals following rainfall)	Both sediment and water samples to be representative based on 3 sub-samples from different points of each arm composited for analytical purposes

		pH, Cu, Pb, Zn, resin acids, phenols, PAH	
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1.2 Pumping Hours

The consent holder must measure the pumping hours, the date, the time, and the quantity of water when discharge to Whangarei Harbour occurs from canal and pond-based stormwater system.

Advice Note: *The size of the canal and pond-based stormwater discharge pipe and the proposed capacity of the pumps limit the pumped discharge rate to approximately 2,520 cubic meters per hour.*

2 REPORTING

- 2.1 The consent holder must forward to the Council's Compliance Manager by 31 August each year an annual report for the previous period 1 July to 30 June detailing the results of the monitoring required by Section 1 of this monitoring programme and an assessment of compliance with the conditions of consent.

3 FIELD MEASUREMENTS, RECORDS, SAMPLE COLLECTION, SAMPLE TRANSPORT, DETECTION LIMITS, AND LABORATORY REQUIREMENTS

3.1 Records

A record of rainfall conditions preceding and during sampling must be kept. This record must be based on a nearby rainfall recording site agreed by the Council.

3.2 Sample Collection

All samples collected as part of this monitoring programme must be collected using standard methods and approved containers.

3.3 Sample Transport

All samples collected as part of this monitoring programme must be transported in accordance with standard procedures and under chain of custody to the laboratory.

3.4 Detection Limits

The detection limits for the analysis of metals in sediment and water samples collected must be equivalent to, or better than, those specified below:

Metal	Sediment samples (milligrams per kilogram)	Water samples (milligrams per cubic meter)
total copper	2	1.0
total lead	0.4	0.2
total zinc	4	2.0
total arsenic	2	N/A
total cadmium	0.1	N/A
total chromium	2	N/A

3.5 Laboratory Requirements

All samples collected as part of this monitoring programme must be analysed at a laboratory with registered quality assurance procedures (see definition below), and all analyses must be conducted using standard methods.

Registered quality assurance procedures are procedures that ensure that the laboratory meets good management practices and would include registrations such as ISO 9000, ISO Guide 25, and Ministry of Health Accreditation.

APPENDIX 3: ENVIRONMETRICS REPORT

APPENDIX 4: MANGANESE POINT LINE PLAN

APPENDIX 5: UNDERWATER NOISE MEASUREMENT PLAN

PROPOSED WDC CONDITIONS: NORTHPORT LIMITED (UPDATED/FINAL VERSION 16 MAY 2024)

PORT EXPANSION, SH15, MARSDEN POINT (Construction)

To undertake the following activities at or near Ralph Trimmer Drive, Marsden Point:

- Construction of a public access from the existing car park at the end of Ralph Trimmer Drive (to be replaced) through to a proposed reserve and related amenities at the eastern edge of the proposed reclamation.
- Construction of port facility above MHWS including earthworks.

Note: All location coordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection (unless expressly stated otherwise).

SUBJECT TO THE FOLLOWING CONDITIONS

DEFINITIONS:

“Building”	means a temporary or permanent moveable or immovable physical construction that: <ul style="list-style-type: none">(a) is partially or fully roofed, and(b) is fixed or located on or in land, but(c) excludes any motorised vehicle or other mode of transport that could be moved under its own power.
“Certification”	Has the meaning set out in Condition 8:
“Council”	means Whangārei District Council or its successor;
“Commencement of these consents”	means the date the last of the consents applied for by Northport for its Expansion Project commences according to s 116 of the RMA;
“Expansion Project”	means the Northport expansion to the east of the existing consented and/or constructed port for the purposes of constructing, operating, and maintaining a container terminal as authorised by these consents (and associated regional consents), and all associated activities and works;
“Major Structure”	means any: <ul style="list-style-type: none">(a) vehicle used as residential activity, excluding temporary activities.(b) network system exceeding 1.5m in height above ground level or 3m² ground coverage.(c) fence or wall, or combination of either, greater than 2m in height above ground level. Where there is less than a 1m separation distance

between any separate fence or wall, or combination of either, then their height must be measured from the lowest ground level of to the highest point of either.

- (d) tank or pool exceeding 35,000 litres.
- (e) structure greater than 2.2m in height above ground level or greater than 9m² ground coverage, including outdoor stockpiles or areas of storage, but excluding amateur radio configurations.

“Pocket Park”

means the public park (recreational open space) area near the south-eastern corner of the Expansion Project site, as shown in Boffa Miskell “Proposed Concept Plan”, BM220519-201 (Revision B, 25.7.22); and

“Port Activities”

means the use of land and/or Buildings for port related activities, including but not limited to:

- (a) port and ancillary port activities;
- (b) cargo handling, including the loading, unloading, storage, processing and transit of cargo;
- (c) debarking;
- (d) fumigation;
- (e) transport, storage and goods handling activities;
- (f) maritime passenger handling/services;
- (g) construction, maintenance and repair of port operations and facilities;
- (h) port administration;
- (i) refuelling/fuel handling facilities;
- (j) activities associated with surface navigation, berthing;
- (k) maintenance or repair of a reclamation or drainage system;
- (l) marine and port accessory structures and services;
- (m) repair and maintenance services and facilities ancillary to port activities;

“Practical Completion”

in relation to the reclamation, means the date that the completed reclamation (or any part thereof) is available for Port Activities;

“RMA”

means the Resource Management Act 1991;

“Suitably Qualified and Experienced”

means a person or persons with a recognised qualification and/or relevant experience relevant to the topic being assessed.

“Tangata Whenua Relationship Group”

means the group to be established pursuant to Northland Regional Council resource consent [insert NRC consent ref]

GENERAL:

1. Works/activities authorised by these consents must be undertaken in general accordance with the application received by Council on 6 October 2022 and all supporting information, including the following documents and plans (including as amended through the application and hearing process). If there is any conflict between the relevant documents/plans and these conditions of consent, these conditions of consent prevail.

AEE reports

- Marshall Day Acoustics Ltd '*Northport Container Terminal Expansion Noise Assessment*' (Rp 002 R07 20200547) dated 29 September 2022.
- Enviser Ltd '*Draft Construction Environmental Management Plan*' (Enviser ref. 1116) dated October 2022.
- MetOcean Solutions '*Effects of Proposed Reclamation and Dredging Layout on Hydrodynamics*' dated August 2022.
- Tonkin and Taylor Ltd '*Coastal Process Assessment*' (ref. 1017349 v3) dated September 2022.
- Coast and Catchment Ltd '*Assessment of Ecological Effects*' Report number 2021-24 dated September 2022.
- Boffa Miskell Ltd '*Coastal Avifauna Assessment*' Rev. G dated 3 October 2022.
- Cawthron Institute '*Potential Effects of the Proposed Northport reclamation on Marine Mammals in the Whangarei Harbour Region*' Report no. 3652 dated September 2022.
- Brown NZ Ltd '*Assessment of Landscape, Natural Character and Amenity Effects*' dated September 2022.
- Clough and Associates Ltd '*Archaeological Assessment*' dated June 2022.
- WSP Ltd '*Concept Design Report*' Ref. 6-DV652.00 Rev. C dated August 2022.
- Rob Greenaway and Associates '*Recreation Effects Assessment*' dated September 2022.
- Hawthorn Geddes Ltd '*Stormwater Pond Assessment Report*' HG ref. 12377 Rev. 3 dated 10.8.22.
- Pattle Delamore Partners Ltd '*Air Quality Assessment*' Ref. A03566800R001 dated 5.8.22.
- Market Economics Ltd '*Economic Assessment*' Ref. NPL 001.20 dated September 2021.
- Patuharakeke Te Iwi Trust Board '*Interim Cultural Effects Assessment*' dated November 2021.
- Styles Group '*Assessment of Underwater Noise Effects*' dated 2 August 2022.
- Northport '*Navigation Safety Report*' dated September 2022.
- WSP Ltd '*Traffic Impact Assessment*' Ref. 1-19278.01/00006 dated 30.08.22.
- 4Sight Ltd '*Intertidal Ecology Report*' dated May 2018.

RFI responses

- Response to information request dated 25 October 2022.
- Response to information request dated 21 February 2023.
- Response to information request dated 13 July 2023.

Plans/drawings

- WSP Ltd '*Design Drawings*' 1-19278.01(03) – Sheets C01 (Rev. D), C02 (Rev. D), C03 (Rev. D), and C04 (Rev E).

- Boffa Miskell Ltd – ‘Pocket Park Concept Plan’ – BM220519-201 and BM 220519-200 (Rev B).
 - Reyburn and Bryant – ‘Northport Expansion (Berth 5) – O14656 (Rev. A).
 - Northport – ‘Relocated Tug Facility Eastern End – Concept Plan’ (R0) dated September 2022.
2. A copy of these consents and the most up-to-date certified versions of all management plans required by these consent conditions must be kept on site at all times and made available to persons undertaking activities authorised by these consents.
 3. Within ten (10) working days of the section 245(5) certificate being issued for the reclamation the consent holder must provide a copy of the certificate to the Council.
 4. All monitoring/sampling required under these consents must be undertaken by or under the supervision of a Suitably Qualified and Experienced person(s).
 5. At least thirty (30) working days in advance of the date of the commencement of works authorised by these consents, the consent holder must contact the Council to arrange for a site meeting with the consent holder’s contractor(s) and the Council compliance officer prior to commencement of construction works. The details to be provided at the meeting, and then in writing no more than five (5) working days after the meeting, must include:
 - (a) The intended date of the commencement of works and a programme for the works.
 - (b) A draft programme for the CEMP and any other design plan, engineering plan, report or management plan required to be submitted for certification under these conditions (if not already provided).
 - (c) The intended date for providing the final design drawings to demonstrate how the works are in general accordance with the conditions of these consents, including **Appendix 1**.
 - (d) The nominated Consent Holder contact and contractor representative (or equivalent) for the works
 - (e) Any intended staging of the works
 - (f) A list of the proposed Suitably Qualified and Experienced Persons and Chartered Engineers proposed to be used in preparation of any design plans, engineering plan(s), report or management plan requiring Council certification.

Complaints

6. The consent holder must maintain a Complaints Register for the purpose of recording and dealing with any complaints that are received by the consent holder in relation to the exercise of these resource consents. The Complaints Register must record, where this information is available:
 - (a) Name of complainant, if provided to the consent holder;
 - (b) The date and time of the complaint;
 - (c) A description of the complaint;
 - (d) The location of the issue raised;
 - (e) Weather conditions at the time of complaint, including a description of wind speed and wind direction when the complaint occurred (if relevant).

- (f) Any possible cause of the issue raised;
 - (g) Any investigations that the consent holder undertook in response to the complaint; and
 - (h) Any corrective action taken to address the cause of the complaint, including the timing of that corrective action; and
 - (i) Any feedback provided to the complainant.
7. The consent holder must provide a copy of the complaints register to the Council within five working days of receiving a request to do so from the Council.

Certification

8. Where any condition requires the consent holder to submit design plans, engineering plans, a report or management plan to the Council for “**certification**” it must mean the process set out in the following paragraphs (a) to (d) and the terms “certify” and “certified” must have the equivalent meanings:
- (a) The consent holder supplies design plans, engineering plans, reports, or a management plan to the Council, and the Council assesses the documentation submitted. The certification process for design plans, engineering plans, management plans and reports required by conditions of this consent must be confined to confirming that the plans or reports give effect to their purposes, consent condition requirements, and schedule requirements, and contain the required information;
 - (b) Should the Council determine that the documentation supplied in accordance with (a) above achieves the requirements of the relevant condition(s), the Council must issue a written confirmation of certification to the consent holder;
 - (c) If the Council’s response is that it is not able to certify a design plan, engineering plan, management plan or report, it must provide the consent holder with reasons and recommendations for changes to the plan or report in writing. The consent holders must consider any reasons and recommendations of the Council and resubmit an amended design plan, engineering plan, management plan, or report for certification;
 - (d) A design plan, engineering plan, management plan or report cannot be subject to a third-party approval. The Council in deciding whether to certify the design plan, engineering plan, management plan or report, however, may also obtain advice from other qualified person(s).
9. The process in Condition 8 must be repeated until the Council is able to provide written confirmation that the requirements of the applicable condition(s) have been satisfied.
10. The consent holder must comply with the certified management plan or report at all times.

Review under s128 of the RMA

11. The Council may serve notice on the consent holder of its intention to review the conditions of these consents pursuant to Section 128 of the RMA either:
- (a) Annually during the month of March, for any one or more of the following purposes:

- (i) To require the adoption of the Best Practicable Option to remove or reduce any adverse effect on the environment; or
 - (ii) To deal with any change(s) to the materials handled through the Port Terminal; or
 - (iii) To respond to any new technology, standards or monitoring parameters relevant to the environmental monitoring undertaken in accordance with these consents.
- (b) At any time, for the following purpose:
- (i) To deal with any adverse effects on the environment which may arise from the exercise of the consents and which it is appropriate to deal with at a later stage, including effects identified in the consent holders monitoring results or reports from activities authorised by these consents and/or as a result of Council's state of the environment monitoring in the area.
12. The consent holder must meet all reasonable costs of any such review.

Stakeholder and Communications Management Plan

13. The consent holder must prepare and implement a SCMP not later than 12 months prior to commencement of construction works authorised by this consent. The purpose of the SCMP is to set out a framework for how the consent holder will communicate with the community, stakeholders and affected parties for the duration of construction, and the operation of the Expansion Project.
14. The SCMP must set out, prior to construction, how the consent holder will:
- (a) Identify the stakeholders for communication;
 - (b) Inform the community of project process and likely commencement of construction works and programme;
 - (c) Engage with the community and stakeholders to foster good relationships and provide opportunities for learning about the project;
 - (d) Utilise the project website to provide updates to the community;
 - (e) Communicate with tangata whenua regarding construction of the project;
 - (f) Respond to queries and complaints; and
 - (g) Provide updates on progress with management plans.
15. The SCMP must set out the framework for how, during construction and operation, the consent holder will:
- (a) Engage with stakeholders such as Channel Infrastructure, Seafuels, affected landowners, tangata whenua, community groups, local businesses and representative groups, residents' organisations, other interested groups or individuals, network utility operators, Northland Regional Council and associated local authorities, Waka Kotahi, and the Council;
 - (b) Inform the Whangarei district community of construction progress, including proposed hours of work;

- (c) Inform the Whangarei district community of ongoing dredging;
 - (d) Engage with the communities to foster good relationships and to provide opportunities for learning about the project;
 - (e) Provide information of key project milestones; and
 - (f) Make each management plan publicly available once a management plan is finalised, and for the duration of project works.
16. The consent holder must prepare the SCMP in consultation with the following parties and submit the final SCMP for certification with the CEMP:
- (a) The Council;
 - (b) Whangarei District Council; and
 - (c) Iwi/hapū.

LAPSING OF CONSENTS

17. This resource consent will lapse twenty (20 years) after commencement.

DESIGN AND CONSTRUCTION OF RECREATIONAL FEATURES AND TRANSPORT INFRASTRUCTURE

Engineering Plan Approval

18. Prior to the commencement of construction authorised by these consents the consent holder must provide a detailed set of engineering plans to the Council for approval. The plans must be prepared in accordance with Council's Engineering Standards (2020 Edition or most relevant version at the time) and are to include:
- (a) Earthworks plans showing the finished interface between proposed Berth 5 and the adjoining esplanade reserve. Plans should demonstrate how public access (which offers a maximum 1:12 gradient for people with all levels of mobility) has been facilitated to the residual beach area to the east;
 - (b) Design details of the construction of the Pocket Park private accessway, including the connection to Ralph Trimmer Drive, including a typical cross section, long section, culverts, drainage flow paths and overland flow;
 - (c) Pocket Park and associated recreational features, including at least 26 car parks, street lighting, and a new public toilet as generally depicted on the Boffa Miskell "Proposed Concept Plan" BM220519-201 (Revision B, 25.7.22) at **Appendix 2**; and
 - (d) Design details of reticulated network connections for sewer and water for the Pocket Park facilities (public toilet and water fountain).
19. All work on the approved engineering plans in Condition 18 is to be carried out to the satisfaction of the Council (noting the timeframe in Condition **Error! Reference source not found.** for completion of the Pocket Park). Compliance with this condition must be determined by;

- (a) Site inspections undertaken as agreed in Council's engineering plan approval letter/ Inspection and Test Plan;
 - (b) Results of all testing, video inspection records of all wastewater and stormwater reticulation, PE pipeline pressure testing and weld data logging results;
 - (c) PS4 and approval of supporting documentation provided by the developer's representative/s including evidence of inspections by those persons, and all other test certificates and statements required to confirm compliance of the works as required by Council's QA/QC Manual and the Council's Engineering Standards (2020 Edition or most relevant version at the time); and
 - (d) PS3 "Certificate of Completion of Development Works" from the Contractor.
20. No construction works authorised by each of the engineering plans in Condition 18 are to commence until the relevant engineering plan has been approved.
21. The consent holder must submit certified RAMM data for all new/upgraded roading infrastructure prepared by a suitably qualified person in accordance with Council's Engineering Standards (2020 Edition or most relevant version at the time) to the satisfaction of the Development Engineer or their delegated representative.
22. The consent holder must ensure that spoil from the site must not be tracked out onto Council or State Highway Road formations.
23. All damage to street footpaths, stormwater kerb and channels, road carriageway formation, street berm and services by the demolition and construction works associated with the Consent Holder's activities must be reinstated in accordance with Council's Engineering Standards (2020 Edition or most relevant version at the time). Any reinstatement works must be undertaken at the expense of the consent holder and be completed to the approval of the Council within six (6) months of practical completion.
- Advice note:** *It is the consent holders responsibility to obtain any necessary non-RMA approvals to undertaken repair works within the road reserve.*
24. The consent holder must ensure the assets listed in Condition 23 above remain in good working order while the consents are being exercised.

Pocket Park – Maintenance

25. At least three (3) months prior to the commencement of construction authorised by these consents the consent holder must prepare and submit a Pocket Park Maintenance Management Plan for certification by the Council. The purpose of this plan is to detail ongoing maintenance requirements and responsibilities for the Pocket Park, and to ensure recreational value is maintained for the public.
26. The Pocket Park Maintenance Management Plan must be prepared with opportunity for input from the Council Infrastructure Planning and/or Parks Department (or equivalent at the time) and the Tangata Whenua Relationship Group formed under Condition XX of the NRC , where appropriate.

Landscape Planting

27. At least three (3) months prior to the commencement of construction authorised by these consents the consent holder must prepare a Landscape Planting Plan for the Expansion Project, including the Pocket Park, for certification by the Council.

The Plan must be prepared by a Suitably Qualified landscape architect and be for the purpose of detailing amenity planting associated with the construction of Berth 5, public coastal structures (water taxi and swimming steps), and the Pocket Park (including the access to Ralph Trimmer Drive). The Plan must be designed to reflect the coastal landscape and natural character values of the Whangārei Harbour entrance and Bream Bay area and must contain, at a minimum:

- (a) Details of security fencing, lighting, and landscaping measures to avoid a utilitarian feel, particularly along the Pocket Park access to Ralph Trimmer Drive;
- (b) Measures to address Crime Prevention Through Environmental Design risks and encourage opportunities for passive surveillance;
- (c) Replacement planting of multi-stemmed pohutukawa trees (*Metrosideros excelsa*) along the eastern edge of the revetment, between the Pocket Park and water taxi jetty, at a minimum density of one tree per 10m; and
- (d) Details of how specimen trees have been incorporated into the design, where appropriate, as replacements for the Public Trees removed from the coastal margins of the esplanade reserve.

Advice note: *Public Trees are defined “as any tree or trees located on a road reserve, park or reserve administered by Whangārei District Council greater than 6m in height or with a girth (measured 1.4m above the ground) greater than 600mm.*

28. The Landscape Planting Plan must include at a minimum:

- (a) A schedule of the species to be planted, including the name, numbers, location, spacing and size of plant species at time of planting, planting density, details on the timing of plantings, and details of any existing vegetation to be retained;
- (b) Proposed site preparation and plant establishment measures; and
- (c) Ongoing maintenance and monitoring requirements, including any recommended ongoing pest and weed controls.

Advice Note: *Any planting will be designed and maintained to meet the security requirements of Maritime Security Act 2004.*

29. Within 12 months of Practical Completion, all planting required by the certified Landscape Planting Plan in Condition 27 above must be implemented in accordance with the details of that Plan. All planting must be undertaken to the satisfaction of the Council.
30. Wherever practicable, all specimens must be eco-sourced from within the Waipu Ecological District, as identified by the Department of Conservation’s Protected Natural Areas Programme.

Mair Road Improvement Works (Augier Condition)

31. At least three (3) months prior to the commencement of construction authorised by these consents the consent holder must provide to the Council for Certification a Mair Road Improvements Plan (MRIP).

The objective of the MRIP is to investigate potential improvements to the Mair Road carpark, beach access, and surrounding reserve area, to provide further mitigation of the effects of the port expansion project on the coastal access and recreation values of East Beach and the adjacent public park.

The MRIP must include details of the following matters:

- a. Landowner (Department of Conservation) consultation/approvals.
 - b. Any related resource consents or other statutory approvals;
 - c. The estimated costs to implement the improvement works;
 - d. A programme and process to seek tangata whenua feedback on the improvement works;
 - e. A programme and process to seek public feedback on the improvement works;
32. Within three (3) months of Certification of the MRIP by the Council, the Consent Holder must begin implementing the MRIP.
33. Within twelve (12) months of confirmation of works to be undertaken in accordance with Condition 32, the Consent Holder must update the Council on progress of those works. If the works are not completed at that time, the consent holder must again update the Council on completion. All costs associated with designing, implementing, and reporting on the MRIP must be met by the Consent Holder.

CONSTRUCTION

Accidental discovery protocol

34. In the event of discovery of archaeological material during construction (e.g. intact shell midden, hangi, or storage pits relating to Māori occupation; or cobbled floors, brick or stone foundations, or rubbish pits relating to 19th century European occupation), work in the immediate vicinity must cease. Heritage NZ Pouhere Taonga, tangata whenua representatives and the Council must be notified as soon as reasonably practicable.
35. Work must not recommence in the immediate vicinity of the discovery until either: it has been determined that no Heritage New Zealand Pouhere Taonga approval(s) are required; or that any necessary Heritage New Zealand Pouhere Taonga approval(s) have been obtained.
36. In the event of koiwi tangata (human remains) being uncovered, work in the immediate vicinity of the remains must cease. Mana Whenua, Heritage NZ Pouhere Taonga, NZ Police and the Council must be contacted so that appropriate arrangements can be made.

Advice Note: The Heritage New Zealand Pouhere Taonga Act 2014 makes it unlawful for any person to destroy, damage or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand Pouhere Taonga.

Construction noise

37. Expansion Project construction noise from activities on land must not exceed the noise limits in Table One:

Table One: construction noise limits

RESIDENTIAL ZONES AND DWELLINGS IN RURAL AREAS:

Upper limits for construction noise received in residential zones and dwellings in rural areas

Time of week	Time period	Noise limits (dB)	
		L _{Aeq}	L _{AFmax}
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	70	85
	1800-2000	45	75
	2000-0630	45	75
Sundays and public holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75

INDUSTRIAL OR COMMERCIAL AREAS:

Upper limits for construction noise received in industrial or commercial areas on all days

Time period	Noise limits (dB L _{Aeq})
0730-1800	70
1800-0730	75

38. Construction noise must be measured and assessed in accordance with New Zealand Standard NZS 6803:1999 "Acoustics – Construction Noise".

Advice Note: Northland Regional Council resource consents for the Expansion Project include noise limits for construction noise from activities within the coastal marine area.

Construction Traffic Management Plan

39. At least three (3) months prior to the commencement of Expansion Project construction works, the consent holder must submit a Construction Traffic Management Plan (CTMP) to the Council for

certification. The objective of the CTMP is detail the procedures, requirements and standards necessary for managing traffic effects during construction of the Expansion Project so that safe facilities for local movements by all relevant transport modes are maintained throughout the construction period. The CTMP must include:

- (a) The estimated numbers, frequencies, routes and timing of construction traffic movements;
 - (b) Any restriction on construction traffic routes, including Marsden Point Road;
 - (c) Methods required to manage vehicular traffic and/or to manage traffic congestion;
 - (d) Methods to manage the effects of temporary traffic management activities on general traffic;
 - (e) Measures to manage the safety of all transport users;
 - (f) Site access routes and access points for heavy vehicles,
 - (g) The size and location of parking areas for plant, construction vehicles and the vehicles of workers and visitors;
 - (h) Identification of detour routes and other methods for the safe management and maintenance of all users on existing roads;
 - (i) Methods to maintain vehicle access to property where practicable, or to provide alternative access arrangements when it will not be;
 - (j) Methods to maintain public access to Marsden Bay beach during construction, and signage to inform the public about beach access;
 - (k) The management approach to loads on heavy vehicles, including covering loads of fine material, the use of wheel-wash facilities at site exit points and the timely removal of any material deposited or spilled on public roads;
 - (l) Methods that will be undertaken to communicate traffic management measures to affected road users such as residents/public/emergency services; and
 - (m) Measures to ensure the safe disembarking/embarking of passengers on cruise vessels.
40. The CTMP must be prepared by a Suitably Qualified and Experienced person and in accordance with Council's requirements for CTMPs (as applicable) and New Zealand Guide to Temporary Management (April 2023) (or equivalent at the time). The CTMP must be prepared in consultation with Waka Kotahi and Council.
41. The CTMP must be certified in writing by the Council prior to construction works authorised commencing, and the consent holder must undertake all activities authorised by these consents in accordance with the certified CTMP (including any certified variation).
42. Any variation to the CTMP must be subject to certification by the Council.

Construction and Environmental Management Plan

43. At least three (3) months prior to the commencement of construction authorised by these consents, the consent holder must submit a Construction and Environmental Management Plan (CEMP) to the Council for certification. The objectives of the CEMP are:
- (a) To detail the environmental monitoring and management procedures to be implemented during the Expansion Project's construction phase to ensure that appropriate environmental management practices are followed and adverse construction effects are minimised to the extent practicable; and
 - (b) To ensure construction effects of the Expansion Project are in accordance with the assessments accompanying the resource consent applications.
44. The CEMP must include the following sections:
- (a) Construction phase roles and responsibilities protocols;
 - (b) Environmental Risk Assessment;
 - (c) Dust;
 - (d) Construction Noise;
 - (e) Traffic, including to demonstrate how the relevant conditions will be satisfied;
 - (f) Archaeology;
 - (g) Hazardous Substances;
 - (h) Public access, including to demonstrate how condition 49 will be satisfied;
 - (i) Erosion and Sediment Control; and
 - (j) Communications Protocols and Complaints Procedures.
45. The CEMP must be prepared by a Suitably Qualified and Experienced person, with advice from relevant technical experts, and be in general accordance with the draft CEMP provided as part of the resource consent application (Enviser, Draft Construction and Environmental Management Plan, October 2022).
46. The CEMP must be certified in writing by the Council prior to construction works authorised by these consents first commencing, and the consent holder must undertake all activities authorised by these consents in accordance with the certified CEMP (including any certified variation).
47. The CEMP may be submitted in stages to reflect the design and construction programme. If staging is proposed and any matters in Condition 44(c-i) are not relevant, a statement must be provided of why management of these effects are not relevant to the particular stage of works.
48. Any variation to the CEMP must be subject to certification by the Council.

Public access during construction

49. Public walking access from Ralph Trimmer Drive to the residual Marsden Bay beach area must be maintained during construction except for short durations where health and safety requires restriction.

Advice note: See also public access section of the CEMP.

Pavement damage to Ralph Trimmer Drive during construction

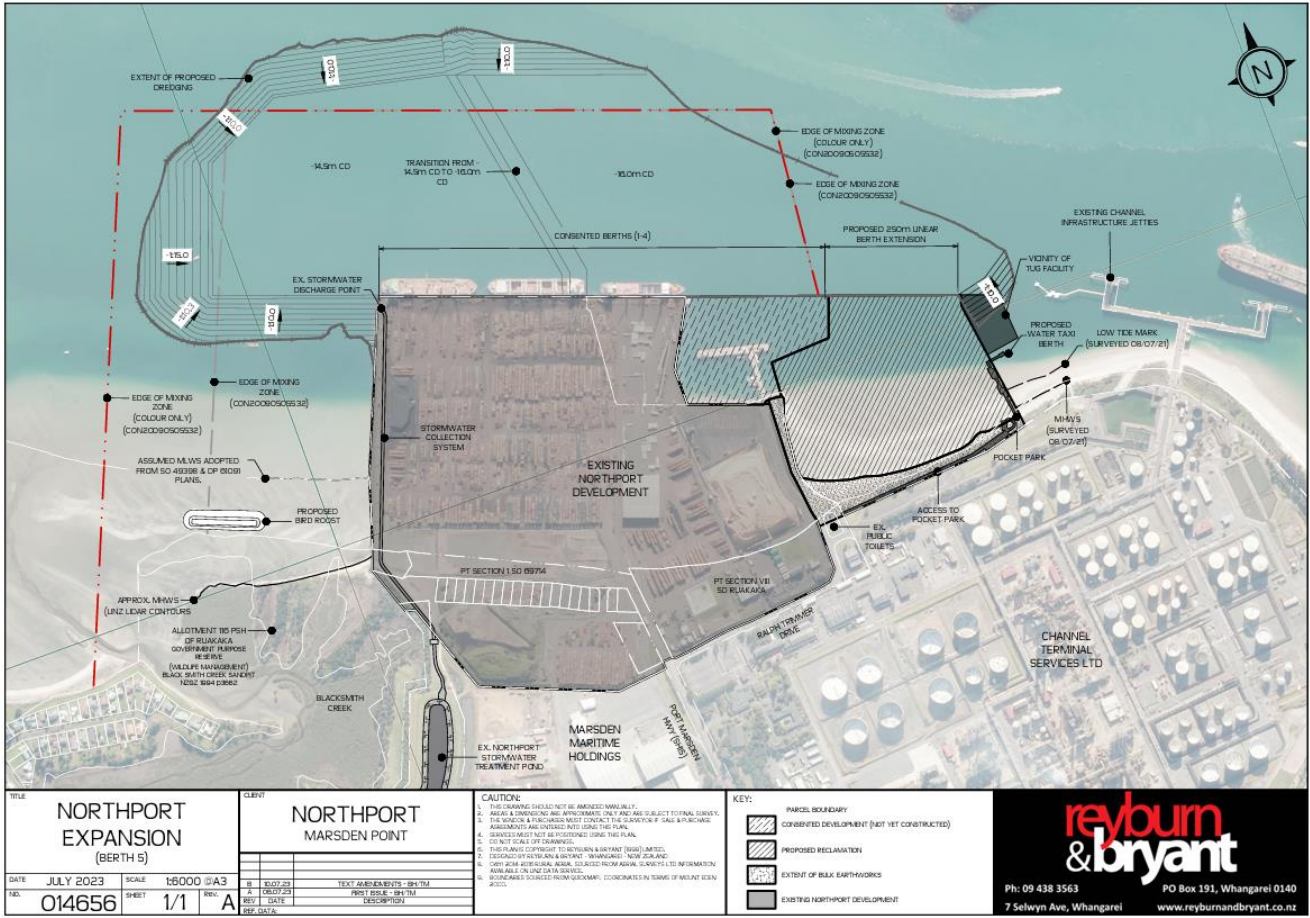
50. At least three (3) months prior to construction works commencing, the consent holder must engage a Suitably Qualified and Experienced roading engineer to prepare a pre-construction conditional baseline assessment of the entirety of Ralph Trimmer Drive for certification by Council. The purpose of the assessment is to document the standard of the road corridor, footpath, kerb and channel, and associated stormwater infrastructure prior to construction works commencing.
51. Within six (6) months of Practical Completion, the consent holder must engage a Suitably Qualified and Experienced roading engineer to undertake a post-construction conditional assessment of the entirety of Ralph Trimmer Drive for certification by Council. Where the post-construction condition assessment identifies that Ralph Trimmer Drive has deteriorated as the result of construction works relating to the Expansion Project, the consent holder must, at its own cost, rectify the damage or pay the equivalent amount to the Council. *Any reinstatement works required by this condition must be undertaken at the expense of the consent holder and be completed to the approval of the Council within six (6) months of practical completion.*

PUBLIC ACCESS

52. The construction of the Pocket Park required by Condition 19 must be completed within 12 months of Practical Completion.
53. Prior to Practical Completion, provide written evidence to the Council to demonstrate that public access to and along the Pocket Park has been formalised by an appropriate legal mechanism.
54. Restricted access from Ralph Trimmer Drive to Marsden Bay must occur for no longer than eighteen (18) months total.

APPENDIX 1: PLAN

DRAFT



APPENDIX 2: POCKET PARK PLAN

DRAFT

PROPOSED WDC CONDITIONS: NORTHPORT LIMITED (UPDATED/FINAL VERSION 16 MAY 2024)

PORT EXPANSION, SH15, MARSDEN POINT (Operations)

To undertake the following activities at or near Ralph Trimmer Drive, Marsden Point:

- Port activities on the proposed reclamation and wharves, and on those parts of the proposed port development area above Mean High Water Springs (including activities on the reserve area and associated amenities).

Note: All location coordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection (unless expressly stated otherwise).

SUBJECT TO THE FOLLOWING CONDITIONS

DEFINITIONS:

“Building”	means a temporary or permanent moveable or immovable physical construction that: <ul style="list-style-type: none">(a) is partially or fully roofed, and(b) is fixed or located on or in land, but(c) excludes any motorised vehicle or other mode of transport that could be moved under its own power.
“Council”	means Whangārei District Council or its successor;
“Current Port Noise Contour Map”	means the map showing predicted incident port noise levels required to be prepared and updated pursuant to Condition 25(e).
“Commencement of these consents”	means the date the last of the consents applied for by Northport for its Expansion Project commences according to s 116 of the RMA;
“Expansion Project”	means the Northport expansion to the east of the existing consented and/or constructed port for the purposes of constructing, operating, and maintaining a container terminal as authorised by these consents (and associated regional consents), and all associated activities and works;
“Major Structure”	means any: <ul style="list-style-type: none">(a) vehicle used as residential activity, excluding temporary activities.(b) network system exceeding 1.5m in height above ground level or 3m² ground coverage.(c) fence or wall, or combination of either, greater than 2m in height above ground level. Where there is less than a 1m separation distance

between any separate fence or wall, or combination of either, then their height must be measured from the lowest ground level of to the highest point of either.

- (d) tank or pool exceeding 35,000 litres.
- (e) structure greater than 2.2m in height above ground level or greater than 9m² ground coverage, including outdoor stockpiles or areas of storage, but excluding amateur radio configurations.

“Pocket Park”

means the public park (recreational open space) area near the south-eastern corner of the Expansion Project site, as shown in Boffa Miskell “Proposed Concept Plan”, BM220519-201 (Revision B, 25.7.22); and

“Port Activities”

means the use of land and/or Buildings for port related activities, including but not limited to:

- (a) port and ancillary port activities;
- (b) cargo handling, including the loading, unloading, storage, processing and transit of cargo;
- (c) debarking;
- (d) fumigation;
- (e) transport, storage and goods handling activities;
- (f) maritime passenger handling/services;
- (g) construction, maintenance and repair of port operations and facilities;
- (h) port administration;
- (i) refuelling/fuel handling facilities;
- (j) activities associated with surface navigation, berthing;
- (k) maintenance or repair of a reclamation or drainage system;
- (l) marine and port accessory structures and services;
- (m) repair and maintenance services and facilities ancillary to port activities;

“Practical Completion”

in relation to the reclamation, means the date that the completed reclamation (or any part thereof) is available for Port Activities;

“RMA”

means the Resource Management Act 1991;

“Suitably Qualified and Experienced”

means a person or persons with a recognised qualification and/or relevant experience relevant to the topic being assessed.

GENERAL:

1. Works/activities authorised by these consents must be undertaken in general accordance with the application received by Council on 6 October 2022 and all supporting information, including the following documents and plans (including as amended through the application and hearing process). If there is any conflict between the relevant documents/plans and these conditions of consent, these conditions of consent prevail.

AEE reports

- Marshall Day Acoustics Ltd '*Northport Container Terminal Expansion Noise Assessment*' (Rp 002 R07 20200547) dated 29 September 2022.
- Enviser Ltd '*Draft Construction Environmental Management Plan*' (Enviser ref. 1116) dated October 2022.
- MetOcean Solutions '*Effects of Proposed Reclamation and Dredging Layout on Hydrodynamics*' dated August 2022.
- Tonkin and Taylor Ltd '*Coastal Process Assessment*' (ref. 1017349 v3) dated September 2022.
- Coast and Catchment Ltd '*Assessment of Ecological Effects*' Report number 2021-24 dated September 2022.
- Boffa Miskell Ltd '*Coastal Avifauna Assessment*' Rev. G dated 3 October 2022.
- Cawthron Institute '*Potential Effects of the Proposed Northport reclamation on Marine Mammals in the Whangarei Harbour Region*' Report no. 3652 dated September 2022.
- Brown NZ Ltd '*Assessment of Landscape, Natural Character and Amenity Effects*' dated September 2022.
- Clough and Associates Ltd '*Archaeological Assessment*' dated June 2022.
- WSP Ltd '*Concept Design Report*' Ref. 6-DV652.00 Rev. C dated August 2022.
- Rob Greenaway and Associates '*Recreation Effects Assessment*' dated September 2022.
- Hawthorn Geddes Ltd '*Stormwater Pond Assessment Report*' HG ref. 12377 Rev. 3 dated 10.8.22.
- Pattle Delamore Partners Ltd '*Air Quality Assessment*' Ref. A03566800R001 dated 5.8.22.
- Market Economics Ltd '*Economic Assessment*' Ref. NPL 001.20 dated September 2021.
- Patuharaake Te Iwi Trust Board '*Interim Cultural Effects Assessment*' dated November 2021.
- Styles Group '*Assessment of Underwater Noise Effects*' dated 2 August 2022.
- Northport '*Navigation Safety Report*' dated September 2022.
- WSP Ltd '*Traffic Impact Assessment*' Ref. 1-19278.01/00006 dated 30.08.22.
- 4Sight Ltd '*Intertidal Ecology Report*' dated May 2018.

RFI responses

- Response to information request dated 25 October 2022.
- Response to information request dated 21 February 2023.
- Response to information request dated 13 July 2023.

Plans/drawings

- WSP Ltd 'Design Drawings' 1-19278.01(03) – Sheets C01 (Rev. D), C02 (Rev. D), C03 (Rev. D), and C04 (Rev E).
 - Boffa Miskell Ltd – 'Pocket Park Concept Plan' – BM220519-201 and BM 220519-200 (Rev B).
 - Reyburn and Bryant – 'Northport Expansion (Berth 5) – O14656 (Rev. A).
 - Northport – 'Relocated Tug Facility Eastern End – Concept Plan' (R0) dated September 2022.
2. A copy of these consents and the most up-to-date certified versions of all management plans required by these consent conditions must be kept on site at all times and made available to persons undertaking activities authorised by these consents.
 3. Within ten (10) working days of the section 245(5) certificate being issued for the reclamation the consent holder must provide a copy of the certificate to the Council.
 4. All monitoring/sampling required under these consents must be undertaken by or under the supervision of a Suitably Qualified and Experienced person(s).

Complaints

5. The consent holder must maintain a Complaints Register for the purpose of recording and dealing with any complaints that are received by the consent holder in relation to the exercise of these resource consents. The Complaints Register must record, where this information is available:
 - (a) Name of complainant, if provided to the consent holder;
 - (b) The date and time of the complaint;
 - (c) A description of the complaint;
 - (d) The location of the issue raised;
 - (e) Weather conditions at the time of complaint, including a description of wind speed and wind direction when the complaint occurred (if relevant).
 - (f) Any possible cause of the issue raised;
 - (g) Any investigations that the consent holder undertook in response to the complaint; and
 - (h) Any corrective action taken to address the cause of the complaint, including the timing of that corrective action; and
 - (i) Any feedback provided to the complainant.
6. The consent holder must provide a copy of the complaints register to the Council within five working days of receiving a request to do so from the Council.

Certification

7. Where any condition requires the consent holder to submit design plans, engineering plans, a report or management plan to the Council for "**certification**" it means the process set out in the following paragraphs (a) to (d) and the terms "certify" and "certified" have the equivalent meanings:

- (a) The consent holder supplies design plans, engineering plans, reports, or a management plan to the Council, and the Council assesses the documentation submitted. The certification process for design plans, engineering plans, management plans and reports required by conditions of this consent must be confined to confirming that the plans or reports give effect to their purposes, consent condition requirements, and schedule requirements, and contain the required information;
 - (b) Should the Council determine that the documentation supplied in accordance with (a) above achieves the requirements of the relevant condition(s), the Council must issue a written confirmation of certification to the consent holder;
 - (c) If the Council's response is that it is not able to certify a design plan, engineering plan, management plan or report, it must provide the consent holder with reasons and recommendations for changes to the plan or report in writing. The consent holders must consider any reasons and recommendations of the Council and resubmit an amended design plan, engineering plan, management plan, or report for certification;
 - (d) A design plan, engineering plan, management plan or report cannot be subject to a third-party approval. The Council in deciding whether to certify the design plan, engineering plan, management plan or report, however, may also obtain advice from other qualified person(s).
8. The process in Condition 7 must be repeated until the Council is able to provide written confirmation that the requirements of the applicable condition(s) have been satisfied.
9. The consent holder must comply with the certified management plan or report at all times.

Review under s128 of the RMA

10. The Council may serve notice on the consent holder of its intention to review the conditions of these consents pursuant to Section 128 of the RMA either:
- (a) Annually during the month of March, for any one or more of the following purposes:
 - (i) To require the adoption of the Best Practicable Option to remove or reduce any adverse effect on the environment; or
 - (ii) To deal with any change(s) to the materials handled through the Port Terminal; or
 - (iii) To respond to any new technology, standards or monitoring parameters relevant to the environmental monitoring undertaken in accordance with these consents.
 - (b) At any time, for the following purpose:
 - (i) To deal with any adverse effects on the environment which may arise from the exercise of the consents and which it is appropriate to deal with at a later stage, including effects identified in the consent holders monitoring results or reports from activities authorised by these consents and/or as a result of Council's state of the environment monitoring in the area.
11. The consent holder must meet all reasonable costs of any such review.

Stakeholder and Communications Management Plan

12. The Consent Holder must continue to comply with the following requirements of the Stakeholder and Communications Management Plan (SCMP) approved under Conditions 13-16: of [Insert WDC consent reference]
- (a) Procedures for responding to queries and complaints; and
 - (b) Engaging with stakeholders such as Channel Infrastructure, Seafuels, affected landowners, tangata whenua, community groups, local businesses and representative groups, residents' organisations, other interested groups or individuals, network utility operators, Northland Regional Council and associated local authorities, Waka Kotahi, and the Council;
 - (c) Informing the Whangarei community of any proposed maintenance dredging;
 - (d) Engaging with the community to foster good relationships and to provide opportunities for learning about the port;
 - (e) Making each management plan relating to ongoing port operations publicly available once a management plan is finalised.

Advice note: The SCMP prepared under Conditions 13-16 of the WDC land use consent for port construction [insert WDC consent reference] may contain a separate section relating to port operations only, covering matters (a)-(e) above.

LAPSING OF CONSENTS

13. This resource consent will lapse twenty (20 years) after commencement, except the consents for port activities that are subject to Section 116(2) of the RMA for which the lapse date is five (5) years after the commencement of those resource consents.

Advice Note: Pursuant to section 116(2)(b) of the RMA any district resource consent relating to an area of the coastal marine area that is proposed to be reclaimed must not commence until the proposed location of the activity has been reclaimed and a certificate has been issued under section 245(5) in respect of the reclamation.

CONSENT SURRENDERS

14. Within three (3) months of the date of Practical Completion of the Expansion Project reclamation, the consent holder will give notice of the surrender of the following resource consents:
- (a) RC36355.1 (Berth 1 and 2); and
 - (b) Decision #11 – Whangārei District Council: Land Use Consent No. 1 (Berth 3 and 4) (no known consent reference number).

Advice Note: The surrender of the above resource consents will consolidate, including for monitoring and enforcement purposes, resource consents and conditions applying to the expanded Northport.

Pocket Park – Maintenance

15. The consent holder must maintain the Pocket Park in perpetuity in accordance with the Maintenance Management Plan certified by Condition 25 of the WDC land use consent for port construction [insert WDC consent reference].

Landscape Planting

16. The consent holder must maintain the landscape planting in perpetuity in accordance with the approved Landscape Planting Plan in Condition 27 of the WDC construction consent [insert WDC consent reference]
. If any plants fail or are removed, they must be replaced as soon as practicable and prior to the end of the following planting season (April – October) with an equivalent specimen.

PORT OPERATION

Port Activities – location

17. From the first commencement of any of these resource consents, Port Activities may occur on any land within the area shown in the figure at **Appendix 1**

Operational noise

Application

18. Upon Practical Completion of the Expansion Project reclamation, Conditions 19 to 29 apply to all Port Activities within the area shown in the figure at **Appendix 1**.

Advice Note: In accordance with Condition 18, the consent holder is required to provide written notice to the Council of its intention to surrender the existing Berth 1 and 2 and Berth 3 and 4 resource consents relating to port noise. This will consolidate, including for monitoring and enforcement purposes, the operational port noise resource consents and conditions applying to the expanded Northport, meaning that a single resource consent and single set of conditions will apply to all Northport operational port noise.

Port noise limits

19. Noise from Port Activities within the areas shown in the figure at **Appendix 1** must be measured and assessed in accordance with NZS 6809:1999 Acoustics – Port Noise Management and Land Use Planning.
20. Noise from Port Activities within the areas shown in the Figure at **Appendix 1**, when received on land, must not exceed the levels shown in the Future Port Noise Contour Map in **Appendix 3** which reflects limits of 58 dB L_{dn} (5-day) in the Settlement Zone in Reotahi and 54 dB L_{dn} (5-day) in the Residential zone in Marsden Bay.

Advice Note: The noise contours in the Future Port Noise Contour Map were interpolated between grid points calculated at 10m intervals and 1.5m above ground level. Topographical contours and building outlines were sourced from LINZ (2017) and assumed a generic building height of 4.5m.

Port noise mitigation

21. Where the measured or predicted incident port noise level shown on the Current Port Noise Contour Map (required under Condition (e) exceeds 55 dB L_{dn} (5-day) at the external façade of a habitable space in a residential unit existing at the Commencement of these consents, the consent holder must offer to the landowner the option to install (at the consent holder's cost) mechanical ventilation and cooling. The Current Port Noise Map is informed by a periodic review as part of the Port Noise Management Plan detailed in Condition 25(e). Any works must:
- (a) Achieve an indoor design noise level no greater than 40 dB L_{dn} (5-day) in all habitable rooms of the residential unit when the windows and doors are closed;
 - (b) Satisfy clause G4 of the New Zealand Building Code;
 - (c) Provide occupant-controlled ventilation that provides at least six (6) air changes per hour, or occupant controlled cooling that can maintain the inside temperature of the habitable room below 25°C;
 - (d) Provide relief for equivalent volumes of spill air; and
 - (e) Locate any outdoor heat pump condenser unit at least 5m from the direct external entrance to a living area.
22. Mechanical ventilation and cooling noise within dwellings identified in Condition 21 must be measured in accordance with AS/NZS 2107:2016 "Acoustics- Recommended design sound levels and reverberation times for building interiors". The mechanical ventilation and cooling design noise levels in habitable spaces must not exceed the following on the low-speed setting:
- (i) 30 dB L_{Aeq} in bedrooms, and
 - (ii) 40 dB L_{Aeq} in all other habitable spaces.
23. If the offer under Condition 21 is accepted by the landowner, the mechanical ventilation/cooling, must be installed at the expense of the consent holder as soon as practicable and no later than 18 months of the offer being accepted.

Advice Note: *The consent holder's obligations extend only to installation of the mechanical ventilation or cooling. To avoid doubt, the consent holder is not responsible for ongoing maintenance.*

24. Acceptance of the offer under Condition 21 may be made by the landowner within 24 months of the offer.

Port Noise Management Plan

25. At least three (3) months prior to the commencement of any Expansion Project Port Activities (excluding Expansion Project construction) a Port Noise Management Plan must be prepared in accordance with the requirements in Section 8 of NZS 6809:1999 Acoustics – Port Noise Management and Land Use Planning and submitted to the Council for certification. The Port Noise Management Plan must contain the following information:
- (a) The Port Noise Management Plan objectives and methods to achieve the objectives, including:
 - (i) To ensure the consent holder complies with the noise limits in Condition 20;

- (ii) To provide a framework for the measurement, monitoring, assessment, and management of port noise levels;
 - (iii) To identify and adopt the best practicable options for the management of noise effects;
 - (iv) To engage with the community and manage noise complaints in a timely manner, including through participation in a Port Noise Liaison Committee to be established as a sub-committee of the existing Community Liaison Group;
- (b) Noise modelling, continuous noise monitoring, auditing, and reporting procedures to be undertaken and funded by the consent holder;
- (c) Practices that will be used to manage noise effects, including procedures for achieving noise reduction through port operational procedures and staff and contractor training;
- (d) Procedures to receive and respond to complaints, and to maintain a register of all complaints received, the details of the complaints, and any action taken to investigate and/or resolve the complaints;
- (e) The Current Port Noise Contour Map;
- (f) Identification of all properties where Condition 21 applies;
- (g) Details of the Port Noise Liaison Committee required under Condition 25(a)(iv) including:
 - (i) The functions and processes of the Committee, including to consider all noise issues arising from the port and to ensure that mitigation functions identified in the Port Noise Mitigation Plan are carried out;
 - (ii) The members for the Committee and their roles, with Committee seat invitations being required to be made as follows:
 1. Two representatives of the port operator;
 2. Two port user representatives (with invitations to be made to two different port users);
 3. One representative of Northland Regional Council;
 4. One representative of Whangārei District Council;
 5. One community representative for Reotahi;
 6. One community representative for Albany Road;
 7. One representative of the Ruakākā Parish Residents & Ratepayers Association;
 8. One representative of the Whangārei Heads Citizens Association;
 9. One representative of Patuharakeke Te Iwi Trust Board; and
 10. One representative of Ngātiwai Trust Board;
 11. One representative of Te Parawhau Hapu.
 - (iii) Details of the secretarial and logistical support to the Committee which must be provided and fully funded by the consent holder;

- (iv) The frequency of Committee meetings, which must be annually at a minimum, and procedures for calling an emergency meeting of the Committee;
 - (v) Procedures for recording minutes of the Committee, which must be made publicly available;
 - (vi) Procedures for consideration by the consent holder of any recommendations by the Committee; and
 - (h) Where applicable, any recommendations made by the Port Noise Liaison Committee, and any actions by the consent holder to implement those recommendations (this requirement must not apply to the first Port Noise Management Plan produced).
26. The Port Noise Management Plan, including the appended Current Port Noise Contour Map, must be reviewed annually (at a minimum). An annual report must be prepared for the Port Noise Liaison Committee that:
- (a) Details any changes to the Port Noise Management Plan and Current Port Noise Contour Map resulting from the revision; and
 - (b) Provides a record of:
 - (i) All acoustic mitigation works undertaken in the preceding twelve (12) months, including records of offers of mitigation that have been refused or not responded to; and
 - (ii) Any physical monitoring undertaken and the results of that monitoring.
27. The Port Noise Management Plan must be certified in writing by the Council prior to Expansion Project activities (excluding Expansion Project construction works) commencing. The consent holder must undertake all activities in accordance with the certified Port Noise Management Plan.
28. Any material variation to the Port Noise Management Plan, including as a result of a revision under Condition 26, must be subject to certification by the Council.
29. The first Port Noise Management Plan must be in general accordance with the draft Port Noise Management Plan provided as part of the resource consent application (*Marshall Day Acoustics: Northport Port Noise Management Plan, Rp 001 20170776, 3 August 2022*).

Operational lighting

30. From the first commencement of any of these resource consents, within the area shown in the figure at **Appendix 1**:
- (a) Artificial lighting required for health and safety purposes will not exceed the following standards:
 - (i) 15 Lux at the boundary of a road reserve; and
 - (ii) 10 Lux at the boundary of any other allotment not within the ownership of the consent holder.
 - (b) Subject in each case to (a) above, the consent holder must ensure that:

- (i) new flood lighting luminaires installed use LED (Light Emitting Diode) or LEP (Light Emitting Plasma) lamps or any other advanced technology lamps;
 - (ii) all lighting poles have recessive colour finishes;
 - (iii) where practicable, lighting is directed below the horizontal plane;
 - (iv) the colour temperature of lamps used for new flood lighting are no more 4000°K; and
 - (v) new flood lighting luminaires are designed so that the principal output is, as far as practicable, directed to within the container terminal and adjoining wharfs or to land that is zoned Port Zone.
31. The consent holder must engage a Suitably Qualified and Experienced lighting engineer to design/review new flood lighting installed at Northport.

Operational lighting management plan

32. At least three (3) months prior to Practical Completion, the consent holder must prepare an Operational Lighting Management Plan (“OLMP”) for certification by the Council. The objectives of the OLMP is to minimise visual impacts and impacts on avifauna from the use artificial lighting during night-time Port operations authorised by this consent, having regard to Condition 30 and the requirements of the Avifauna Management Plan required by the regional consent conditions [insert NRC consent reference]. The OLMP must:
- (a) Detail the positions and technical specifications of all exterior light sources and indicate the means by which compliance with the relevant Whangārei District Plan artificial lighting standards are to be achieved; and
 - (b) Include comments of the Community Liaison Group on the plan and the consent holder’s response to these.

Operational transport

Crash Monitoring Assessment

33. No later than 12 months following Practical Completion, the consent holder must engage an independent Suitably Qualified and Experienced Person to undertake a “Crash Monitoring Assessment”, utilising Waka Kotahi’s Crash Analysis System (CAS).

Thereafter the consent holder must undertake a Crash Monitoring Assessment biennially (every two years) for twenty years. The purpose of the Crash Monitoring Assessment is to determine a trend in crashes to identify any safety concerns (based on 7-days (Monday-Sunday), measured over 5-year periods) along SH15 from SH1 to Ralph Trimmer Drive, including at all intersections.

The “Crash Monitoring Assessment” must include details of:

- (a) The number and type of crashes, identifying those involving speed, such as loss of control and turning crashes, including where sight lines are only just met, with a focus on fatal and serious crashes;
- (b) Vehicle type, weather, date/time of the crash (where such information is available); and

- (c) Any mitigation recommended to address safety concerns.
34. The consent holder must provide a copy of the Crash Monitoring Assessment to Council, Waka Kotahi NZ Transport Agency, and the road controlling authority within one month of its completion.

SH15 Traffic Monitoring Report

35. No later than 18 months following Practical Completion, the consent holder must prepare a SH15 Traffic Monitoring Report, utilising the telemetry traffic data collected continuously on SH15 by Waka Kotahi, if available.

Advice Note: *The telemetry station site is located on SH15, just north-east of Bens View Road.*

Thereafter, the consent holder must undertake a SH15 Traffic Monitoring Report either:

- (a) Annually until replaced by the Northport Traffic Monitoring Report if the telemetry traffic data collected continuously on SH15 by Waka Kotahi is available to the consent holder; or
- (b) Once every three years until replaced by the Northport Traffic Monitoring Report, if the consent holder is required to collect traffic data (which is to be collected at the same location as the Waka Kotahi Telemetry site).

The purpose of the SH15 Traffic Monitoring Report is to identify if traffic volumes on SH15 at the telemetry site exceed either one of the following:

(i) 970 vph two-way; or

(ii) 670 vph one way;

for three or more days in any calendar month.

The consent holder must submit a copy of each SH15 Traffic Monitoring Report to the Council and Waka Kotahi NZ Transport Agency and the road controlling authority within one month of its completion.

Northport Traffic Monitoring Report

36. If the SH15 Traffic Monitoring Report required by Condition 35 shows that either of the traffic volumes on SH15 at the telemetry site are exceeded, the consent holder must continuously measure the volume of all port traffic at or near all the Northport entry and exit points during peak times as specified in Condition 37 Table Two: *Northport Peak Traffic Volumes*, and report on these volumes in the Northport Traffic Monitoring Report.

The Northport Traffic Monitoring Report is to be prepared six monthly or until all the intersections listed in Condition 37 Table Two: *Northport Peak Traffic Volumes* have received the recommended mitigation, as detailed within the Intersection Assessment Report required by Condition 39.

The consent holder must submit a copy of each Northport Traffic Monitoring Report to the Council, Waka Kotahi NZ Transport Agency, and the road controlling authority within one month of its completion.

Northport Traffic and Peak Times

37. If the Northport Traffic Monitoring Report identifies that port traffic exceeds the volumes set out in Table Two: *Northport Peak Traffic Volumes*, the consent holder must, within ten working days, Advise the

Council, Waka Kotahi NZ Transport Agency and the road controlling authority of the exceedance and which of the following options it is proceeding with:

- (a) Reduce and maintain all port traffic below the Peak Trigger Volumes in Table Two; or
- (b) Engage a Suitably Qualified and Experienced person to undertake and prepare an Intersection Assessment Report as per Condition 39.

Table Two: Port Traffic Trigger Volumes

Intersection	Northport Inbound AM Peak Hour Trigger Volumes	Northport Outbound AM Peak Hour Trigger Volumes	Northport Inbound PM Peak Hour Trigger Volumes	Northport Outbound PM Peak Hour Trigger Volumes
SH15/Marsden Bay Drive	700	200	300	600
SH15/Marsden Point Road	700	200	200	700
SH15/One Tree Point Road	300	200	200	300

Advice Note: For the purpose of these consents, the AM Peak hours are between the hours of 0630-0830 and the PM peak hours are between the hours of 1600-1800, weekdays excluding public holidays.

38. If the Consent Holder has elected to reduce and maintain all port traffic below the levels in Condition 37 Table 2: *Northport Peak Traffic Volumes*, then within two months of the initial exceedance, the consent holder must provide written notice to Council, Waka Kotahi NZ Transport Agency, and the road controlling authority that identifies either that:
- (i) Traffic volumes are compliant with the limits specified in Table 2 above; or
 - (ii) Traffic volumes remain in excess of the limits specified within Table 2 above measured during a continuous five-day weekday count.

If, within six months, the Consent Holder cannot reduce and maintain traffic volumes to the limits specified in Table 2: *Northport Peak Traffic Volumes*, then it must action Condition 39.

Intersection Assessment Report

39. If required by conditions 37 or 38, the Consent Holder must engage a Suitably Qualified and Experienced person to undertake and prepare an Intersection Assessment Report.

The purpose of the Intersection Assessment Report is to investigate safety and operational concerns and identify mitigation measures to address those safety and operational concerns at the intersection(s) for which the trigger volumes in Condition 37 Table 2: *Northport Peak Traffic Volumes* have been exceeded.

The report must include:

- (a) Traffic data collected at the relevant intersection(s) including traffic movements during peak and interpeak periods.
 - (b) Intersection modelling methodologies and expected operation of these intersections, including Level of Service (LOS), queueing, and delays for 3 traffic volume scenarios:
 - (i) Using the observed data; and
 - (ii) Two future scenarios (reflecting appropriate design years reflecting port expansion timing), that include expected Northport traffic growth and other traffic growth.
 - (c) Safe System assessments for the relevant intersection(s) listed in Table 2.
 - (d) Recommended mitigation to address safety and operational concerns to achieve:
 - (i) LOS-D or better on each approach to the intersection (for scenarios that include existing traffic conditions and future scenarios that include all existing and anticipated port traffic generated by activities authorised by these consents); and
 - (ii) A degree of saturation for turning movements no higher than 95%
40. A copy of the Intersection Assessment Report is to be submitted to the Council, Waka Kotahi NZ Transport Agency, and the road controlling authority within three months of:
- (i) Condition 37(b) being notified to the Council, Waka Kotahi NZ Transport Agency and the road controlling authority as the selected option; or
 - (ii) Condition 38 being activated.
41. Until the recommended mitigation detailed within the Intersection Assessment Report (required by Condition 39) is implemented at the intersection(s), or as otherwise agreed by Council, Waka Kotahi NZ Transport Agency and the road controlling authority, all port traffic at peak times must be kept below the volumes outlined in Condition 37 Table 2: *Northport Peak Traffic Volumes*.

Active modes connection (Augier condition)

42. In the event that a future cycling route between Ruakaka and Marsden Cove gains funding for detailed design and/or implementation, the consent holder must:
- (a) If this consent has commenced, within 24 months of funding being publicly announced, investigate and implement an active modes connection from Northport to the new cycling route, except that the Northport connection is not required to extend beyond Mair Road.
 - (b) If funding is announced prior to this consent commencing, within 24 months of the consent commencing, investigate and implement an active modes connection from Northport to the new cycling route, except that the Northport connection is not required to extend beyond Mair Road.

The active modes connection is not required to be on land owned by the consent holder.

BUILDINGS, STOCKPILES AND MAJOR STRUCTURES

43. Upon Practical Completion of the Expansion Project reclamation, within the area shown in **Appendix 1**:

- (a) Building height and Major Structure height (excluding public utilities, light towers, silos, aerials, tanks, cargo handling equipment, cranes, and shipping containers) must not exceed 20m above ground level.
- (b) The height of public utilities, light towers, silos, aerials, tanks, and cargo handling equipment (excluding cranes and shipping containers) must not exceed 60m above ground level.
- (c) The operational height for cranes must not exceed 85m above ground level.
- (d) The height of shipping container stacks must not exceed 30m above ground level.
- (e) The height of stockpiles must not exceed 20m above ground level.

Advice Note: The definitions of “Building” and “Major Structure” in these resource consents are based on the current corresponding definitions in the Whangārei District Plan (Operative in Part 2022).

PUBLIC ACCESS

44. The consent holder must provide public recreational access to and across the Pocket Park, except as required to ensure operational or public safety, or in an emergency response scenario.

Advice Note: Revocation of the esplanade reserve for the Pocket Park must have Council resolution prior to construction.

45. The consent holder must continue to provide public access to the existing fishing jetty on the western edge of the reclamation from Papich Road.

LANDSCAPE PLANTING

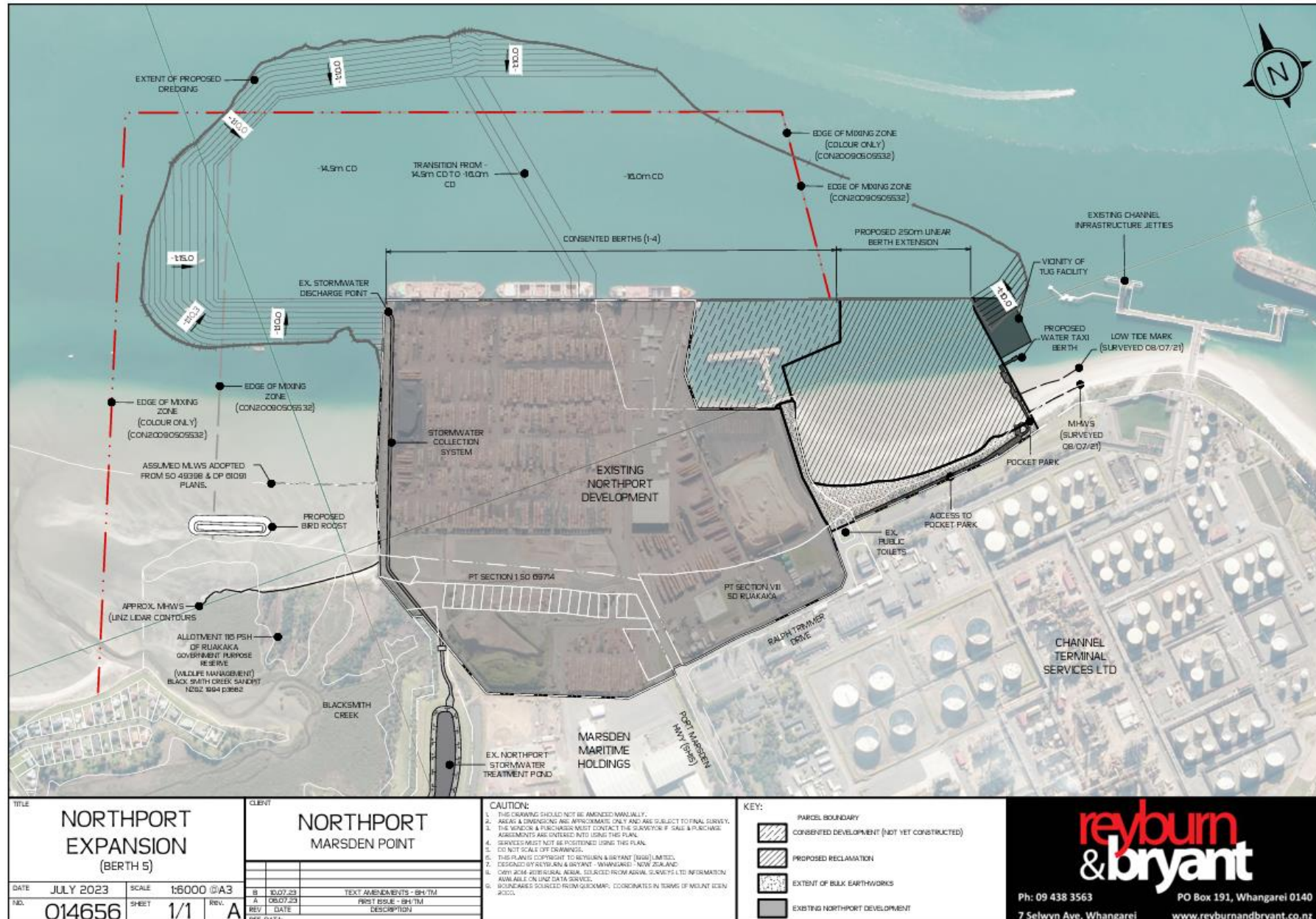
46. The consent holder must continue to maintain the landscape planting shown on the Stephen Brown Landscape Architecture Plan dated December 1999 and as amended on the Boffa Miskell Plan dated 31/01/2002 (copies of plans attached as **Appendix 2**) but excluding the Pohutukawa planting on the eastern side of the reclamation (area shown outlined in red on the plan in **Appendix 2**) which is to be removed.

Advice Note: Any planting will be designed and maintained to meet the security requirements of Maritime Security Act 2004.

APPENDIX 1: PLAN

DRAFT

Sensitivity: General



Conditions proposed by Northport (WDC) (05.12.23)

APPENDIX 2: LANDSCAPE PLANTING PLANS

DRAFT

APPENDIX 3: FUTURE PORT NOISE MAP

DRAFT

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