Capital and Maintenance Dredging Reconsenting

Port of Tauranga Limited
Fast-track Approvals Act 2024
Substantive Application Report

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[redacted]

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October 2026

Port of Tauranga Limited

Fast-track Approvals Act 2024

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EXECUTIVE SUMMARY

The Application

This substantive application under the Fast-track Approvals Act 2024 (‘**FTAA**’) is being lodged by the Port of Tauranga Limited (‘**POTL**’) for a project listed in Schedule 2 of the FTAA, namely “Capital and Maintenance Dredging Reconsenting”.

Schedule 2 of the FTAA describes the Project as: “*Expand and maintain the navigation channels at the Port of Tauranga by removing dredging material from the coastal marine area and depositing the material at offshore sites’*. This application is consistent with that description.

The Project

The Project is to continue dredging to maintain the Port’s navigation channels, as well as the deepening of discrete areas within the existing channel through capital dredging. The Project’s activities are related to the renewal of Resource Consents 65806 and 65807, specifically:

- The disturbance of the seabed by maintenance and capital dredging and any associated discharges;
- The deposition of the dredged material to areas of the Coastal Marine Area (‘**CMA’)** both within and outside of Te Awanui (Tauranga Harbour) and any associated discharges; and
- The removal of some of the dredged material from the CMA.

Capital dredging will occur within the existing shipping channels and consist of the following:

- Deepening the approach to Berth 1 (approximately 3 metres (‘**m’**)) (part of the existing Resource Consents);
- Deepening an area of the Passing Lane to smooth the entrance corner (approximately 7 m) (not a part of the existing Resource Consents, but included in the application to be listed in Schedule 2); and
- Deepening the existing Sitting Basins (depths vary from 1 m to 7 m) (part of the existing Resource Consents).

Maintenance dredging at the Port is expected to almost entirely be undertaken by a Trailing Suction Hopper Dredge (‘**TSHD**’). Some isolated work with a Grab Dredger (‘**GD’)** or Back-Hoe Dredge (‘**BHD’)** may be undertaken in areas that cannot be reached by a small TSHD. This includes confined areas close to wharves. Due to the small areas and volumes associated with the capital dredging, the same size equipment used for the maintenance dredging would be used for the capital dredging.

The existing consents, that the approvals being sought would replace, allow up to 185,000 cubic metres (‘**m^3**’) to be dredged on average every year for maintenance purposes. However, climate variability and the potential for episodic extreme events to occur means that it is not feasible to extract the same volume every maintenance dredging campaign, to maintain the shipping channels. Therefore, POTL wishes to increase the allowable annual volume of material to be dredged to 250,000 m^3 averaged over 10 years, with a cap of 350,000 m^3 in any calendar year. This is expected to provide for the effects of climate variability on maintenance dredging. The existing consent allows up to 15 million m^3 of capital dredging to be deposited in the deposition grounds. In Stage 1, the Port dredged and deposited approximately 6 million m^3 of material. Stage 2, currently underway, is expected to involve a similar quantity. The remaining required capital dredging being requested is 800,000 m^3. Spoil generated from capital and maintenance dredging activities associated with this Project would continue to be disposed of in the existing spoil deposition sites (Sites A, B, C and H1 and H2) as illustrated on **Figure 3**. In addition to these volumes, this application includes the deposition of

1,500,000 m^3 of material dredged under the Stella Passage Resource Consent (this deposition was not included as part of the application for the Stella Passage project).

The application also seeks to enable POTL to extract up to 500,000 m^3 from the CMA for use on land and/or in reclamations. If the end use of this 500,000 m^3 of material requires further authorisations, POTL will seek them separately.

Location, Site and Existing Environment

Te Awanui is an expansive harbour between Matakana Island and the mainland made up of drying sand and mud flats interspersed with tidal channels that provide navigable water for smaller vessels. The south-eastern part of Te Awanui consists of shallow or drying banks of sand and shell, including channels only navigable by smaller vessels and the main shipping channel used for large commercial traffic by POTL. Major berths and port facilities are located along the Mount Maunganui Wharf, on the eastern side of Maunganui Roads (the shipping channel between Stella Passage and the Cutter Channel). There are additional berths and cargo handling facilities for containers and general cargo on the eastern edge of Sulphur Point. Although the Katikati Basin and the Tauranga Basin are connected around high tide, numerical modelling and analysis of sediment transport pathways indicates that there is little exchange of water and sediment between the two basins.

Relevant tangata whenua groups were identified using FTAA requirements, Treaty settlement information, Te Tari Whakatau, Te Kāhui Māngai, and input from the relevant councils. Those groups identified as Tauranga Moana, Tauranga Tangata were invited to prepare **Cultural Values** Reports (**'CVR'**) to assess cultural effects, identify potential mitigations, and inform the application before lodgement with the Environmental Protection Authority (**'EPA'**). Fifteen CVRs were received and informed the drafting of this application.

The values most commonly included in the CVRs were mauri, kaitiakitanga, mātauranga, kaimoana / mahinga kai mana, and whakapapa[1]. The interconnections between the values and the impacts on the iwi/hapū of Tauranga Moana come through clearly in the CVRs and feedback, with how the values, places and effects are described and outlined together. The interconnection theme also runs through the values in how they are often linked to broader matters than those just specific to the POTL's Project but are nonetheless tied together and related to the Project either directly or indirectly.

POTL uses Portable Pilot Units (**PPU**) that allow pilots to have information during adverse meteorological conditions, hours of darkness or due to the size of the larger vessels, in order to provide situation awareness information. The PPU assists those **navigating** the shipping channels by providing up to date bathymetry to the pilot and an accurate location and speed of the vessel in real time. These support Aids to Navigation including leads, prominent marks and cardinals in conformance with standard national and international conventions. The main navigation channel is easily distinguished from minor side channels at night by the differentiation of light phasing. The channel centrelines are marked with a transit of two prominent navigation marks, each lit with either a fixed or flashing light, and sectored directional lights.

Sediment movement is dynamic and highly influenced by storm surges and floods. The transport of coarse and medium sand is predominantly confined to tidal channels and the flood tidal delta, while finer sediment is moved in shallower areas. Most of the material dredged in previous dredging campaigns has consisted of sand sized particles with low proportions of silt and clay. The sediment

[1] See Appendix C1

encountered during maintenance dredging tends to consist of recently deposited material and is likely to contain a higher concentration of silts and clays, organic material and may contain contaminants.

Ambient airborne **noise** measurements inside Te Awanui during the day and at night are generally elevated, predominately made up of noise from vessel traffic and from commercial, recreation and port activities when mild weather exists. Wind contributes to the noise levels on the 'noisiest' days. Underwater noise in Te Awanui is relatively high, dominated by vessel noise, including engine noise from berthed ships, with background noise caused by wind, waves and tides (causing sediment entrainment), fish, marine mammals and snapping shrimp.

Water in Te Awanui generally has turbidity and Total Suspended Solids ('**TSS**') well below ecological effects thresholds. Water temperature is rarely above 20ºC or below 14ºC. pH at all sites never exceeds the maximum of 8.5 and minimum of 7.5 specified by guidelines, and the water is generally well oxygenated. Nutrient levels are low, except for at Tilby Point. Sediments are largely comprised of sands with estuarine sites having higher silt. Sediment samples indicated that metal/metalloids and organic toxicants are generally low with most well below applicable guideline levels.

Ecological features in Te Awanui include seabed soft sediment (in the channel and adjacent to existing wharves), hard-shore (reefs, wharves, and riprap), Te Paritaha pipi bed, seagrass adjacent to Whareroa marae, reef and soft sediment kaimoana, relocated boulder habitat from Tanea Reef, fish, and the Motuotau subtidal reef. In addition to the marine mammals described below, seagrass (*Zostera muelleri subsp. novazelandica*) is classified At Risk - Declining. Seagrass is a flowering marine plant located in sheltered coastal and estuary ecosystems that provides numerous ecosystem services, including habitat, food and nursery areas for a range of fish species, supporting increased biodiversity. Seagrass is ubiquitous in Te Awanui, located adjacent to Whareroa marae, upstream of the Tauranga harbour bridge, along the Ōtūmoetai shoreline, within the wider Waipu Estuary, plus small patches on Te Paritaha. The active Port area provides a suitable habitat for diverse and abundant fish.

Marine **mammals** are not resident in Te Awanui, but common dolphins, bottlenose dolphins, killer whales and New Zealand fur seals are seasonal visitors in the winter and spring. Whales are unlikely to travel into Te Awanui. Six species listed in the New Zealand Threat Classification System as 'Threatened' or 'At Risk' (bottlenose dolphin, killer whale, brydes whale, southern right whale, leopard seal and the false killer whale) are naturally present along the coast from the north end of Waihi Beach to a point just east of Maketu, including a 20 kilometre ('**km**') buffer offshore.

Te Awanui is of international significance for migratory and coastal **seabirds**. The tidal flats provide high tide roosts for many coastal foraging birds that forage on or within the water column and some of which nest within Te Awanui or the coastal islands. The Port land and structures also provide roosting and nesting habitat for:

- kororā/northern blue penguin (*Eudyptula minor iredalei*, At Risk - Declining; nesting in rock wall burrows/crevices at Mount Maunganui),
- tarāpunga/red-billed gull (*Chroicocephalus novaehollandiae scopulinus*, At Risk – Declining; nests/roosts on a rock wall at Mount Maunganui and periodically at the Sulphur Point sand pile),
- tarapirohe/black-fronted tern/ (*Chlidonias albostriatus*, Threatened – Nationally Endangered, Sulphur Point sand pile),
- kāruhiruhi/pied shag (*Phalacrocorax varius varius*, At Risk – Recovering; roosts/nests on wharfs and pylons piles), and
- karoro/southern black-backed gull (*Larus dominicanus dominicanus*, Not Threatened; roosts/nests on structures and roofs, and is a predator of eggs and chicks of other species).

Three **notifiable organisms** (a species that has a history of habitat invasion around the world, is known to significantly impact indigenous ecosystems, and is considered capable of successfully inhabiting Aotearoa New Zealand coastal waters) namely, Asian kelp (*Undaria pinnatifida*), the Clubbed tunicate (*Styela clava*) and the Mediterranean fanworm (*Sabella spallanzanii*) have been recorded in Te Awanui. In addition to this, Asian brown mussel (*Perna perna*) and Asian shore crab (*Hemigrapsus sanguineus*) which are specified on Biosecurity New Zealand's list of priority pest and diseases of biosecurity have also been recorded in Te Awanui.

Te Awanui is treasured for its natural values, shelter (within the Harbour), accessibility, ability to be used for a wide variety of **recreation** activities (including commercial recreation), and the quality of the waves on the exposed coast, and is therefore used extensively for swimming and diving, boating, fishing and shell fishing, beach activities, and surfing.

The Project area contains three Outstanding Features and Landscapes listed in the Regional Coastal Environment Plan (**'RCEP'**). Three regionally significant surf breaks are within the immediate area of proposed dredging and disposal. The natural character values for Stella Passage have been determined to be very low to moderate. Maunganui Roads, the Harbour entrance and the deposition sites have, however, been determined to have moderate to very high natural character values for water quality, ecology, habitats and marine mammals. The Project area also contains some areas that have high landscape, perceived natural character and amenity values. These include Mount Maunganui Main Residential Area (ocean), Pilot Bay, Mauao, Otūmoetai, Te Paritaha o Te Awanui and Panepane Point. At nighttime, Stella Passage remains visually defined by the lighting at the Port. Looking offshore from Main and Mount Maunganui Beaches, the nighttime seascape and night sky of the Pacific Ocean contrast markedly with the lighting found down Marine Parade and behind it. Ships also sit offshore at nighttime, and these 'islands' of light contrast with the 'dark sky' nature of most of the actual sea area. The nighttime landscape value is high for the Mount Maunganui residential areas (ocean) and Mauao, perceived natural character is high for Mount Maunganui's residential areas (ocean) and Amenity rating is high for Mount Maunganui residential areas (ocean) Pilot Bay and Mauao.

The POTL handles 51% of total value and 40% of gross weight of New Zealand merchandise exports each year. In the year ending June 2025, Tauranga had the largest number of ship visits of any port in the country for freight. Tauranga has the largest area of port operating land and largest container terminal area of any port in New Zealand. POTL and Northport are the only ports that currently accommodate ships of a 14.5 m draught.

Tauranga City has experienced higher than national rates of growth in population, total, per capita income, and total job numbers. POTL is a substantial presence in the context of Tauranga's economy with the infrastructure supporting other industries to create their own value. For the year ending in March 2024, POTL employed 279 people (excluding contractors), which would account for about 7% of the transport and logistics sector of employment within Tauranga and about 0.3% of national employment that year. Taking contractors into account, POTL's direct labour generation in the local economy could be more than double that recorded. POTL's 2024 annual report records operating revenues of $417 million and operating expenses of $219 million. POTL's declared profit of $117 million and its employee expenses of $54 million equate to 1.5% of Tauranga's Gross Domestic Product (**'GDP'**).

Consultation

Mahea NZ Limited (**'Mahea'**) was engaged by POTL to develop and implement a tangata whenua engagement strategy. Engagement began in October 2025. The engagement strategy was designed to go beyond the minimum FTAA requirements. This approach gave tangata whenua the opportunity to shape how they wished to be engaged, including input on timeframes, resourcing, information sharing, and ongoing access to POTL management and technical specialists. Key themes raised by iwi and hapū representatives during engagement included:

- The need for the relationship between POTL and mana whenua to be vastly improved.
- The need to be involved from the onset of the process and have information provided early.
- Requested opportunities for discussions with technical experts and to commission own experts.
- Commitment sought from POTL to amending the application and conditions, should this be required.
- Clarity regarding how CVRs will be used.
- Timelines have been a challenge, especially Fast-track timelines. It was noted that adequate time is required for discussions once POTL has received CVRs.
- The need for the cultural integrity of the Harbour to be maintained. Concerns were raised about the impact on kaimoana and taonga species, erosion, the impact on cultural activities in and around the Harbour, and the cultural relationships with the moana.

The Bay of Plenty Regional Council (**'BOPRC'**) and the Tauranga City Council (**'TCC'**) are local authorities. Both have been notified of, and consulted, regarding this application.

Benefits

The benefits of the proposed capital and maintenance dredging lie in it enabling the efficient functioning of the Port and the impact of the Port's functions on the economy. There is a significant opportunity cost of the dredging consents not being granted. Given Port of Tauranga's market share of New Zealand cargo, any inability to provide access for the ships wishing to berth at Tauranga would be very significant for the Port, the wider region and the New Zealand economy as a whole.

Capital and maintenance dredging is crucial to create and maintain the depth and width in the shipping channels to allow access at all stages of the tide by the largest ships currently visiting the Port, and those expected to predominate in future trade.

Without the Project:

- Large ships initially, and subsequently smaller ones, will be constrained in safely accessing the Port, particularly if arriving or departing well-laden. Constraints may initially be limited to access during periods on either side of high tide reducing the speed of ship turnaround, and ultimately access may not be possible at any time for some ships;
- The delays in access for ships will result in delays in moving produce in or out of the Port, restricting the timeliness and value of goods moved;
- Annual volumes of exports through the Port will reduce;
- The Port would be unable to improve compliance with regulatory imperatives around reducing environmental impacts of emissions per tonne-km, both greenhouse gas emissions that affect global atmosphere and climate, and emissions of pollutants that affect local air quality and water quality.

The consequential **economic** effects of not consenting the Project are:

- Annual GDP across New Zealand would be reduced[2];
- A reduction in the positive direct economic impacts (incomes for local businesses, employees and contractors supplying dredging services), leading to a reduction in productivity, profitability and

[2] NZEIR 2023 modelling estimated that under a capacity constraint of 1.3 million TEU, no wharf extension would result in a $749 million GDP in 2032 Of this decrease, Tauranga would account for $50 million. (Appendix M page 12). If the current capacity constraint was 1.4 million TEU, the annual GDP across New Zealand would be lower by $485 million, a difference in impact of $264 million. The smaller the current capacity of the wharf, the greater the difference the wharf expansion would make to economic activity.

ability to invest in future business expansion, and resulting in adverse effects on community wellbeing;
- Flow on adverse effects , as a result of future port capacity constraints, on the dairy sector, fruit and vegetable sector, meat producers, wine and oil products, with a significant loss of labour income for the dairy industry nationwide;
- Increased transport, warehousing and other costs from having to divert Upper North Island cargo away from the Waikato and Bay of Plenty to other ports; and
- Increased costs for shipping companies, which will be passed on through higher freight fees for customers transporting goods through the Port.

Dredging of the Port, could, over the long term, potentially be affected by **coastal erosion, coastal inundation, earthquakes, tsunamis or volcanic ash filling the channels**. Flexibility in the volume of maintenance dredging and association deposition of material that has been included in the Project would provide for an increase in intensity and frequency of severe weather events, but it is not possible to include provisions for dredging after a natural disaster. This would need to be dealt with separately at the time, should it be required.

This Project also includes a mechanism to mitigate coastal erosion of beaches in the vicinity of the Port, by, in consultation with the Tauranga City Council ('**TCC**') and **BOPRC**, depositing suitable material at sites designed to provide **replenishment of sand to the beaches**. This approach has been effective in maintaining and restoring some of New Zealand's most popular beaches for several decades and thus, contributes to the social fabric of the communities that live proximate to the coastline, or who travel to it as part of their recreation.

Assessment of Environmental Effects

This Project is a re-consent. The monitoring of effects over many years of capital and maintenance dredging under existing Resource Consents has informed the assessment of effects for this application. The environmental effects are therefore well known and understood.

POTL received fifteen CVRs from sixteen groups. These reports outlined **tangata whenua values**, concerns, aspirations, proposed mitigations, and helped shape this substantive application. An analysis was undertaken to identify key values, themes and mitigations. The CVRs themselves should be referred to for the full descriptions of the effects, proposed mitigations and for the rationale (where one is provided) for why the 214 mitigation measures are proposed. Recurring themes and recommendations include:

- Iwi and hapū involvement in the process and monitoring, including co-development of monitoring plans;
- Cultural indicators and cultural monitoring including Mātauranga Māori monitoring;
- Additional cumulative effects assessments;
- Adaptive management in response to adverse effects identified by monitoring;
- Restoration and enhancement funds;
- Measures to ensure health and abundance of kaimoana;
- Shorter term of consent and frequent reviews;
- The need for iwi/Hapū commissioned experts; and
- A specific cultural landscape assessment and landscaping mitigation plan.

Typical dredging activities may result in adverse impacts on **turbidity** and **morphodynamics** during the excavation of the seabed; during the disposal of the extracted sediment; and during the post-dredging or recovery period.

During the excavation phase, the main potential impacts are excavation of benthic biota, and the release of potential contaminants into the water column including suspended sediment (turbidity) and dissolved or absorbed materials such as heavy metals, hydrocarbons and pesticides. The impacts during the excavation phase are dependent on the production rate of the dredge (larger volumes of sediment moved per unit time generally produce larger impacts), and the type of dredge. Mitigation

of the impacts of suspended sediment plumes during extraction involve reducing the production rate of fine sediment within the overflow discharge and controlling the direction the plume can travel after leaving the source region by the dredge.

During the disposal phase, the main potential impacts are burial of benthic biota, and the release of potential contaminants into the water column including suspended sediment (turbidity) and dissolved or absorbed materials such as heavy metals, hydrocarbons and pesticides. Assessment of the impacts of previous dredging activities at the Port show that the adverse impacts are confined within the boundaries of the disposal grounds, and that there is a rapid recovery post-dredging (dependent on the total burial depth). Numerical modelling indicates that the disposal plumes will be confined within the disposal sites, provided the sediment is released sufficiently far from the boundaries. Numerical modelling indicates most sediment is deposited on the seafloor within a 100 m radius of the release point.

Both excavation and disposal phase impacts are generally transient. During the post-dredging or recovery phase, the main potential impacts are:

- changes to the tidal circulation and sediment transport within and outside the Harbour;
- changes to the behaviour of depth- dependent phenomena, such as waves and storm surges; and
- changed patterns of erosion and accretion; and dispersal of sediment from the disposal site.

The impacts during the post-dredging phase are predominantly determined by the changes made to the morphology (mostly the tidal channels), and the subsequent changing currents. Numerical modelling of the proposed capital dredging predicts little change in the tidal characteristics, and a reduction in tidal velocities for the dredged areas of the shipping channels proportional to the increased cross-sectional area. The modelling also shows no detectable changes to tidal characteristics and tidal velocities beyond the immediate area of the dredged channels.

Erosion at Panepane is primarily driven by natural storm and wave processes associated with climatic variability, resulting in episodic loss of beach and dune sediments and their redistribution into adjacent channels and the harbour system.

If maintenance dredging is not undertaken, ongoing sediment infill would progressively reduce channel depth and width, constraining vessel drafts and manoeuvrability to the point where a large proportion of vessels would be restricted to high tide or unable to safely access the port.

Dr de Lange's recommended mitigations for reducing turbidity (detailed above) have been adopted and incorporated as a part of a dynamic turbidity monitoring and reduction strategy in the proposed consent conditions. Dr de Lange's findings have further been used to inform other expert reports.

Computer modelling predicted **airborne noise** impacts from the Project both in the CMA and on nearby land that were assessed against the appropriate noise standards. The assessment and predictions demonstrate that the Project can be managed to comply with relevant Noise Standards. This, however, requires works in the Cutter Channel to be undertaken during the daytime period unless a Noise Management Plan (**'NMP'**) that demonstrates how the works can comply with the construction noise limits that apply is submitted to and certified by the BOPRC.

The modelling of **underwater noise** was undertaken to inform the effects on the marine environment using international guidelines for noise effects on marine mammals. Maintenance and capital dredging within the Port Zone will expose marine mammals to acoustic-related disturbances within a limited range from the TSHD vessel actively dredging. The noise will not be high enough to cause auditory injuries or hearing loss. Any behavioural effects or reduced ability to perceive natural acoustic signals used for communication, navigation, predator avoidance or foraging would be temporary and restricted to within 5.5 km of the active dredge. The change in soundscape generated by the dredging is expected to be negligible in habitats outside the Port Zone – especially when considering that the Automatic Identification System (**'AIS'**) data that it is based upon does not include all vessel traffic. No underwater noise mitigation or monitoring has been identified as necessary to manage these effects.

Dr Stewart identified that dredging and disposal of sediment can impact the following main aspects of **water quality**:

- increased turbidity from the resuspension of fine particles into the water column;
- release of contaminants within the sediment leading to potential eutrophication or toxic effects for benthic species, people and other marine species; and
- changes in the temperature, pH, salinity or dissolved oxygen (**'DO'**) in the water column.

Sediment collected for this assessment from the dredge sites has toxicants present at low concentrations indicative of low toxicity (below Australian and New Zealand Guidelines for Fresh and Marine Water Quality (**'ANZG'**) 2018 Default Guideline Values (**'DGVs'**)) and this is consistent with receiving environment sites in Te Awanui. Further, shellfish toxicant concentrations are well within safe consumption limits. Therefore, the risk of toxicants entrained in the dredged sediment and leaching into the water column in concentrations above water quality guidelines is extremely low, with the effects on water quality likely to be negligible.

Water temperature, pH, salinity, and DO were measured by POTL upstream, downstream and alongside the vessel during the dredging and disposal process showing negligible effects for these parameters.

Turbidity data were collected from the active dredge zone 500 m upstream of the dredging vessel (control) and 200 m downstream, (the mixing zone) during maintenance dredging campaigns from October 2015 to July 2022. Although a statistically significant difference between upstream and downstream turbidity during the maintenance dredging was found, the occurrence is infrequent. For the majority (93%) of the time, the dredging procedure was found to have been undertaken in a manner that resulted in turbidity of the dredge plume at concentrations below Australian and New Zealand Environment and Conservation Council (**'ANZECC'**) (2000) default trigger levels, and, as such, effects are less than minor. For the times (7%) when turbidity exceeds ANZECC (2000) default trigger levels, effects are likely to be transient but minor.

In summary, based on the conservative management limit approach of spot measurements in the active plume, the environmental limit has never been exceeded, while the level 1 and 2 limits were only exceeded on rare occasions. However, there are unlikely to be any exceedances of any limits outside the active plume and once 6 hourly averaging is taken into account. In order to monitor and manage turbidity, POTL maintains six continuous turbidity monitoring stations in the Harbour during dredging campaigns. These provide a datapoint every 15 seconds and are used to inform the dredging process by monitoring against set triggers. This monitoring process is proposed to continue for the Project. Turbidity limits for the dredging process have been set at three conservative management limits (based on a rolling average over 6 hours):

1) Level 1 of 15 Nephelometric Turbidity Units (**'NTU'**). If breached an investigation will be undertaken to find the source.

2) Level 2 of 20 NTU. If breached the dredging process will be changed until below this level.

3) Environmental limit of 35 NTU. If exceeded, no further dredging should occur.

The primary effects on **marine ecology** from the dredging are related to an increase in the concentration of suspended sediment (primarily from overflow discharge from the dredge), the deposition of sediment on soft sediment and rocky reef habitats, and the mortality of benthic invertebrates within the dredging area and disposal area.

Dr De Luca's assessment concluded that:

- The effect of dredging on **benthic invertebrates** in the existing dredge locations will be low at Southern Harbour scale, and communities will reset every time the benthic sediment is dredged. Level of effect without mitigation is low and mitigation is not required.
- The effect of **suspended sediment** on marine ecology at the dredge location is low and temporary, with a less than minor effect and no mitigation required.
- **Contaminant availability** is low and temporary, with a less than minor effect on marine ecology and no mitigation required.
- The effect of dredging on **fish** at the location of dredging is negligible, with a less than minor effect and no mitigation required.
- The effect of dredging on **Te Paritaha pipi** is low, with a less than minor effect and no mitigation required.

The effects of deposition of dredge spoil on:

- **Soft sediment benthic invertebrate communities** is low, with a less than minor effect and no mitigation required.
- **Subtidal reef communities** is low, with a less than minor effect and no mitigation required.

Dr De Luca concludes that the cumulative effects of dredging and disposal of dredge material is low, with a **less than minor effect** and no mitigation is required. Dr De Luca has, however, recommended reef biota monitoring every two years and surveys of pipi communities at Te Paritaha every six months (in May and November). POTL has included this ecological monitoring in draft conditions.

Dr Helen McConnell assessed the effects on **marine mammals**. Seven potential effects were identified: noise and vibrations, habitat modification, ship strike, exposure to contaminants, marine debris, artificial lighting, and cumulative effects.

Dr McConnell determined that although the underwater dredging noise would be able to be heard by mammals up to 8 km away, the likelihood of adverse effects on mammals from noise is low. She recommends compliance with the Marine Mammal Protection Regulations 1992 (**'MMPR'**) and there is a draft condition included relating to this recommendation.

Mammals are tolerant of turbidity and typically don't rely heavily on vision for foraging and navigation. Dredging of sediment also removes benthic habitat associated with benthic biota that can be a source of food for some marine mammal species. The disturbance of the seabed, therefore, has the potential to impact the quality and availability of benthic prey, which can thereby impact the health of the marine mammals that feed on them. This is, however, expected to be negligible because mammals are expected to move away from the disturbed areas.

The likelihood of vessel strikes with mammals during dredging is low due to the relatively slow speeds that the vessels will be travelling. Compliance with the MMPR will further reduce this risk. The magnitude of potential effects is negligible.

Dredging can resuspend sediments, which has the potential to stir up contaminants in the marine environment. Dr McConnell considers the likelihood of adverse effects on marine mammals from chemical contaminants during the proposed dredging activities to be very low and the magnitude of predicted effects to be negligible.

Although Dr McConnell considers the likelihood of marine debris effects from the proposed activity to be very low and the magnitude of effects to be negligible, she does recommend good waste management practices which have been incorporated into draft conditions.

Dr McConnell concludes that the likelihood of artificial lighting effects on marine mammal species is very low and the predicted magnitude is negligible.

No cumulative effects on mammals were identified.

Dr Della Bennet assessed the effects of the Project on **avifauna**. She concluded that:

- Modification of foraging areas due to any suspended sedimentation from dredging activities, including offshore disposal of dredged material, should be minor as it is believed that the sediment mixes and settles reasonably quickly.
- Increased noise can impact bird populations through physical damage (hearing loss), increased stress, and an alteration to behaviour (such as attraction, tolerance, aversion and flight). Dr Bennet concludes that because the noise character and intensity will be similar to current Port activities, the impact of noise from dredging will be '*significantly less than that caused by commercial and recreational harbour traffic*'.
- Estuary birds live and forage within the estuarine environment and are therefore impacted by the health of the ecosystem, including toxicity. However, Dr Bennet indicates that bioaccumulation of contaminants can take weeks, months or years depending on the contaminant in question and the concentration of contaminants. Further, birds have some capability to excrete contaminants. It is Dr Bennet's opinion that, based on Dr De Luca's contaminant studies of pipi flesh, the risk to estuary birds from contaminants is less than minor.

Kororā/northern blue penguins were assessed in more depth as they do not have the ability to avoid dredging activity when moving between roosting sites within the Harbour and foraging sites outside of the Harbour.

Overall, Dr Bennet found that the proposed activities will have **less than minor** effects on avian biodiversity in the Harbour and surrounding marine environments.

Dredge vessels arriving from outside region constitute a **biosecurity risk**, especially if the vessels' region of origin has marine non-indigenous species (**'NIS'**) of concern not currently present within the Bay of Plenty. Dredge spoil disposal could also act as a pathway for the inadvertent transfer of marine NIS from the dredge location to the spoil disposal grounds.

Draft conditions include that biosecurity risks from any vessels arriving from overseas are expected to be minimised by the Craft Risk Management Standard's long-stay requirements that dictate vessels must be ostensibly free of biofouling, and that for any vessels arriving from other locations within Aotearoa New Zealand, the BOPRC's Regional Pest Management Plan requires that they have no more than a slime layer and / or barnacles on their hull. The draft conditions include provisions to enable compliance via vessel-specific biofouling management plans. POTL proposes to manage risks from vessel movements and dredge spoil disposal in an integrated way through the development of a Dredge Management Plan (**'DMP'**) that will include specific biosecurity measures. Monitoring of marine pests is undertaken by, amongst others, the BOPRC, and the conditions make provision for additional risk assessments being required if an increased risk of pests being brought in is identified. The residual marine biosecurity risk after mitigation is expected to be minor or less than minor.

A **Navigational Safety** Assessment by Navigatus has found that overall, the capital and maintenance dredging proposed does not represent a notable change to the status-quo in terms of navigational safety; either for large commercial vessels with a marine pilot embarked or for other maritime users of the Harbour. The overall effect of the changes in relation to navigational safety is assessed to be less than minor. No mitigation is recommended or included in the draft conditions.

Based on desktop review, review of technical reports (marine ecology, navigation safety and coastal geomorphology and hydrodynamics) and stakeholder interviews, the effects on **recreation** opportunities, despite potential conflicts caused by the high and growing levels of recreational and commercial boating activity in Te Awanui being reported, have been assessed as no more than minor in nature.

The Current State Assessment identified that the **landscape**, **natural character** and **amenity** effects associated with POTL's ongoing dredging and deposition operations, are limited and appropriate from a statutory standpoint. Overall, the Project, which is reconsenting of the current dredging, is therefore considered to be acceptable and appropriate, given the location, context, scale, and limited intensity. Although the very limited capital dredging now proposed would have a physical impact on specific parts of Te Awanui, together with part of the existing entrance channel off Mauao, these activities would generate biophysical, perceived natural character, landscape and amenity effects that are unlikely to alter the core characteristics and values of Te Awanui and its terrestrial

margins, or Mount Maunganui's wider coastal environment and landscape. Instead, it is anticipated that the effects of the future operations proposed by POTL would be small-scale, quite isolated, and of a very low to negligible order, overall.

Conditions

The applicant proposes draft conditions that include provisions to:

- Recognise and provide for the relationship of Iwi and Hapū with Te Awanui;
- Set quantities and locations for dredging and deposition of material;
- Provide for beach replenishment;
- Require notification of relevant parties;
- Manage waste and avoid pollution;
- Manage airborne noise, especially at night;
- Monitor water and sediment quality, especially turbidity;
- Avoid the introduction of high-risk pest species; and
- Manage interaction with marine mammals and reporting on any mammal sightings.

Statutory Assessment

Schedule 5 clause 17(1) of the FTAA sets out that the matters for decision-makers to consider and assess as the purpose of the FTAA, Parts 2,3,6 and 8 to 10 of the Resource Management Act 1991 (**'RMA'**) and the relevant provisions of any other legislation that directs decision-making under the RMA.

The **purpose of the FTAA** "*is to facilitate the delivery of infrastructure and development projects with significant regional or national benefits*." The benefits of the proposed capital and maintenance dredging lie in enabling the effective functioning of the Port and the impact of the Port's functions on the economy. There is a significant opportunity cost of the consents not being granted. The Project therefore facilitates the delivery (i.e. the continued use) of infrastructure with significant regional and national benefit and secondarily facilitates delivery of development projects with significant regional or national benefits (such as the Stella Passage project), which could not be utilised without this dredging.

Policy PZ 1 of the **RCEP** recognises that the Port is pivotal to the regional economy and a significant component of the national economy, and that its continued operation is of national significance. Policy PZ 2 of the RCEP recognises that the provision for the development of additional shipping capacity, including capital dredging, in appropriate locations is important to the continued efficient operation of the Port, and includes an outline development plan for the Port in Schedule 9. Policy PZ 4 recognises that maintenance dredging within the Port Zone is necessary for the continued operation of the Port and is appropriate where it is to provide for the purpose of the Port Zone. Policies PZ 8 and DD 11 recognise the benefits of beach replenishment and Policy DD 12 provides criteria for the selection of deposition sites for dredging material, which the Project's deposition sites comply with.

Natural character and Outstanding Natural Features and Landscapes (**'ONFL'**) are listed as a matter of national significance in Section 6(a) of the RMA. Policy 13 of New Zealand Coastal Policy Statement (**'NZCPS'**) enacts this provision of the RMA. The Bay of Plenty Regional Policy Statement (**'RPS'**) lists Mauao and the Tauranga Southern Harbour as having a high and very high level of natural character attributes respectively. The RPS contains several objectives and policies that address the preservation of natural character values and the protection of outstanding natural landscapes. Te Awanui, Matakana Island, Mauao and Motuotau Island are identified as outstanding natural features and landscapes (section 6(b) of the RMA). Particular regard has therefore been given to maintaining amenity values (section 7(c) of the RMA) in terms of landscape, natural character and noise.

The Site contains ten significant habitats of indigenous fauna (section 6(c) of the RMA). Particular regard has been given to the intrinsic value of ecosystems (section 7(e) of the RMA), including their biological and genetic diversity, and the essential characteristics that determine an ecosystems integrity, form, functioning and resilience. Experts have found that:

- the effects of dredging and deposition on marine ecology values would be less than minor;
- underwater noise and vibrations would have a minor effect, while habitat modification, ship-strikes, exposure to contaminants, marine debris, artificial lighting would have negligible effects on marine mammals and cumulative effects on marine mammals would also be negligible; and
- the proposed activities will have less than minor effects on avian biodiversity in the Harbour and surrounding marine environments.

The Project will have no adverse effects on the public access to and along the CMA (Section 6(d) of the RMA). Beach replenishment from strategically located disposal sites will, in fact, improve the condition and therefore accessibility of the Mount Maunganui beaches.

Dredging of the Port, could, over the long term, potentially be affected by coastal erosion, coastal inundation, earthquakes or tsunamis (Section 6 (h) of the RMA). While flexibility in the volume of maintenance dredging and associated deposition of material has been included in the Project to provide for the variability of weather events, providing for natural disasters is not possible.

The NZCPS sets out national objectives and policies to achieve the purpose of the RMA as it relates to the coastal environment.

The National Policy Statement ('**NPS**') for Freshwater Management sets direction for the management of freshwater. This includes receiving environments for freshwater, including the CMA (to the extent that it is affected by freshwater). In our opinion, the Project is consistent with Policies 4, 5, 14 and 15 of the NPS for Freshwater Management.

The Project is consistent with the National Environmental Standard (**'NES'**) for Air Quality, and no other NES's are applicable.

Assessments against the BOPRPS, RCEP and Tauranga City Plan (**'TCP'**) have found that, with the mitigation and management captured in the draft conditions, the Project is consistent with the relevant provisions.

The POTL has taken the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu and other taonga into account (RMA s6(e) and NZCPS Objective 3) through extensive consultation and commissioning CVRs. This has resulted in the relationship of iwi and hapū with Te Awanui being recognised and provided for in the draft consent conditions through:

- Regular strategic planning meetings;
- The review of draft management plans;
- The review of the results of ongoing monitoring;
- Providing opportunities for ceremonies to be carried out prior to capital dredging;
- Funding to allow tangata whenua to set priorities over time, including mauri monitoring, cultural indicators, kaimoana restoration, independent investigations, restoration initiatives, and other cultural programmes as matters emerge; and
- Regular consent conditions reviews.

POTL has also committed to providing funds for ongoing projects that benefit the health of Te Awanui, or that directly benefit iwi and hapū that have a relationship with Te Awanui, and towards education and research scholarships for iwi and hapū that have a relationship with Te Awanui.

Te Kuia Rock has been identified as a taonga (RMA s6(f)), and POTL has, through draft conditions, committed to ensuring that a minimum distance of 100 m is maintained between any dredging activity and Te Kuia Rock.

No Protected Customary Rights (**'PCR'**) (RMA s6(g) and NZCPS Objective 3) have been identified.

Particular regard has been given to kaitiakitanga (RMA s7(a) and NZCPS Objective 3) which has resulted in the provision of an opportunity for the Tauranga Moana Iwi Customary Fisheries Trust to provide a cultural monitor to be present during all capital dredging operations in order to identify any cultural artifacts that may be uncovered during dredging, checking that dredged material is deposited at the correct sites, checking that rubbish is collected, and reporting back to the advisory group established under the resource consent.

This, in our opinion, means that the proposed dredging and disposal of dredged material will avoid any inappropriate adverse effects on matters of national importance, subject to protection under Section 6 of the RMA. The Project also responds positively to the other matters that must be given regard to under Section 7 of the RMA.

Conclusion

The Port is already an infrastructure asset of national significance, and the Project is consistent with the FTAA's purpose. The Project is listed in Schedule 2 to the FTAA as a project with significant regional and national benefits. Capital and maintenance dredging is crucial to create and maintain the depth and width in the shipping channels to allow safe access at all stages of the tide by all ships and will be managed by a robust suite of proposed consent conditions. An inability to maintain the shipping channels through dredging will eventually result in vessels not able to call at the Port of Tauranga, and the impact of this on the region and country would be significant.

This report, the attached technical assessments, and other attached documentation canvas the scope of the considerations that the FTAA requires to be undertaken. Our view is that the application material demonstrates that the Project:

- Is significant at regional and national levels, such that forgoing the Project would entrench substantial and compounding opportunity costs resulting from constraints on import and export activity through the Port;
- Complies with the policies, and will contribute to achieving the objectives, of the relevant policy statements and plans; and
- The adverse environmental effects of the Project are assessed – from a Western science perspective - as low to very low, in many cases before any mitigation is applied. Many of the mitigation measures recommended are proven, by their successful use in previous Port dredging. As such, the Project will safeguard the life-supporting capacity of air, water, soil, and ecosystems.
- Impacted Tangata Whenua parties are best placed to identify the cultural effects of the Project on their values. Their CVAs are accepted as credible and reliable and portray a considered and genuine view. Generally, Tangata Whenua are fundamentally opposed to the Project and identify adverse cultural effects associated with it. However, POTL has prepared a suite of conditions that are intended to respond to the cultural effects identified by Tangata Whenua parties.
- The Project avoids any inappropriate adverse effects on matters of national importance subject to protection under Section 6 of the RMA. The Project also responds positively to the other matters that must be given regard to under Section 7 of the RMA.
- The adverse impacts do not meet the threshold in s85(3) such that there is no discretion to decline the application.

On this basis, approval of the Project is consistent with, and would give effect to, the purpose of the FTAA.

1. AUTHORISED PERSON DETAILS

Application form – Part 1

1.1. APPLICATION INFORMATION

Project name:	Capital and Maintenance Dredging Reconsenting
Reference:	Listed Project – Fast-track Approvals Act 2024 ('**FTAA**') Schedule 2
Project Description	Expand and maintain the navigation channels at the Port of Tauranga by removing dredging material from the coastal marine area and depositing the material at offshore sites[3]

1.2. AUTHORISED PERSON(S) INFORMATION

Authorised person:	Port of Tauranga Limited
Key contact name:	Dan Kneebone
Key Contact Organization NZBN:	9429039540300
Key Contact Organisation name:	Port of Tauranga Limited
Key contact person phone:	[redacted]
Key contact person e-mail:	[redacted]
Emails for service:	[redacted]
Postal Address:	Port of Tauranga Limited Private Bag 12504 Tauranga Mail Centre Tauranga 3143 New Zealand

[3] Exact description in Schedule 2 of the FTAA

1.3. AGENT FOR AUTHORISED PERSON INFORMATION

Agent organisation NZBN:	9429038445620
Agent organisation name:	Enspire Consulting Limited
Agent contact name	Terry Calmeyer
Agent Phone:	[redacted]
Agent e-mail address:	[redacted]
E-mail address for service	[redacted]

Please direct correspondence from the EPA to: Authorised Person and agent

1.4. FINANCIAL CONTACT INFORMATION

Finance organisation NZBN	9429041580806
Finance organisation name:	Port of Tauranga Limited
Address:	Private Bag 12504, Tauranga Mail Centre
Finance name:	Dan Kneebone
Finance phone:	[redacted]
Finance email:	[redacted]

1.5. STRUCTURE OF THIS REPORT

This document is structured as follows:

Section 2: General pre-lodgement requirements (Sections 42 and 43), including Treaty Obligations and records the details of persons affected by the activity and **consultation** undertaken with them (Schedule 5, Clause 8(1)(f));

Section 3: Description of the Project;

Section 4: Types of approvals sought;

Section 5: A description of **the Site at which the activity is to occur** (Schedule 5, Clause 5(1)(b));

Section 6: Benefits

Section 7: An assessment of the actual and potential **environmental effects** on the environment, alternatives for significant adverse effects, and mitigation measures (Schedule 5, Clause 6(1)(a), 6(1)(b) and 6(1)(e));

Section 8: Draft conditions;

Section 9: **Statutory Assessment,** including an assessment against the Resource Management Act 1991 ('**RMA**'), including section 104 considerations, and relevant **planning documents** (Schedule 5 Clause 5(2)(1)(f) and (g)); and

Section 10: Concluding remarks.

A list of acronyms and abbreviations is included in **Appendix A**, Environmental Protection Authorities ('**EPA**') Checklist A and Checklist J are included in **Appendix B** and records of consultation are in **Appendix C**.

In preparing this document, we have relied on information that is contained within technical reports prepared as a part of this resource consenting process. These are listed in the Table of Contents above.

2. GENERAL PRE-LODGEMENT REQUIREMENTS

Application form - Part 2: General pre-lodgement requirements

2.1. BACKGROUND

This Substantive Application Report (**'SAR'**) has been prepared on behalf of the Port of Tauranga Limited (**'POTL'** or **'the Applicant'**) in support of proposed capital dredging in discrete locations (**Figure 1**), maintenance dredging (**Figure 2**), the associated deposition of dredged material in the Coastal Marine Area (**'CMA'**) (**Figure 3**) and replenishment of beaches with dredged material (**'the Project'**). These activities are needed to support continued operation of the Port of Tauranga (**'the Port'**), which is located in the Bay of Plenty.

The application is lodged by the authorised person, and the substantive application is provided in accordance with the requirements under sections 42 and 43 of the Fast-track Approvals Act 2024 (**'FTAA'**), Schedule 5 and the relevant provisions of the Resource Management Act 1991 (**'RMA'**).

Application form Part 4: Subpart 1 and section 46(2)(b) of the FTAA

Capital and Maintenance Dredging Reconsenting at the Port is one of the "listed projects" identified in Schedule 2 of the FTAA.

Port of Tauranga Limited	Capital and Maintenance Dredging Reconsenting	Expand and maintain the navigation channels at the Port of Tauranga by removing dredging material from the coastal marine area and depositing the material at offshore sites	Coastal marine area (being adjacent to the Port of Tauranga) within and outside Tauranga Harbour (being the shipping channels and associated disposal grounds for dredged sediment)

The application relates solely to a listed project (section 46(2)(b)), and there are no differences between the application and the project description in Schedule 2 (section 46(2)(b)).

Section 43(1)(b)(i) must explain how the project to which the application relates is consistent with the purpose of this Act.

The purpose of the FTAA "*is to facilitate the delivery of infrastructure and development projects with significant regional or national benefits*." The benefits of the proposed capital and maintenance dredging lie in enabling the effective functioning of the Port and the impact of the Port's functions on the economy. As detailed in **Section 6**, there is a significant opportunity cost of the consents not being granted. The Project therefore facilitates the delivery (i.e. the continued use) of infrastructure with significant regional and national benefit and secondarily facilitates delivery of development projects with significant regional or national benefits.

These matters are discussed in more detail in **Sections 2.5**, **6**, **9.2** and **10** of this report.

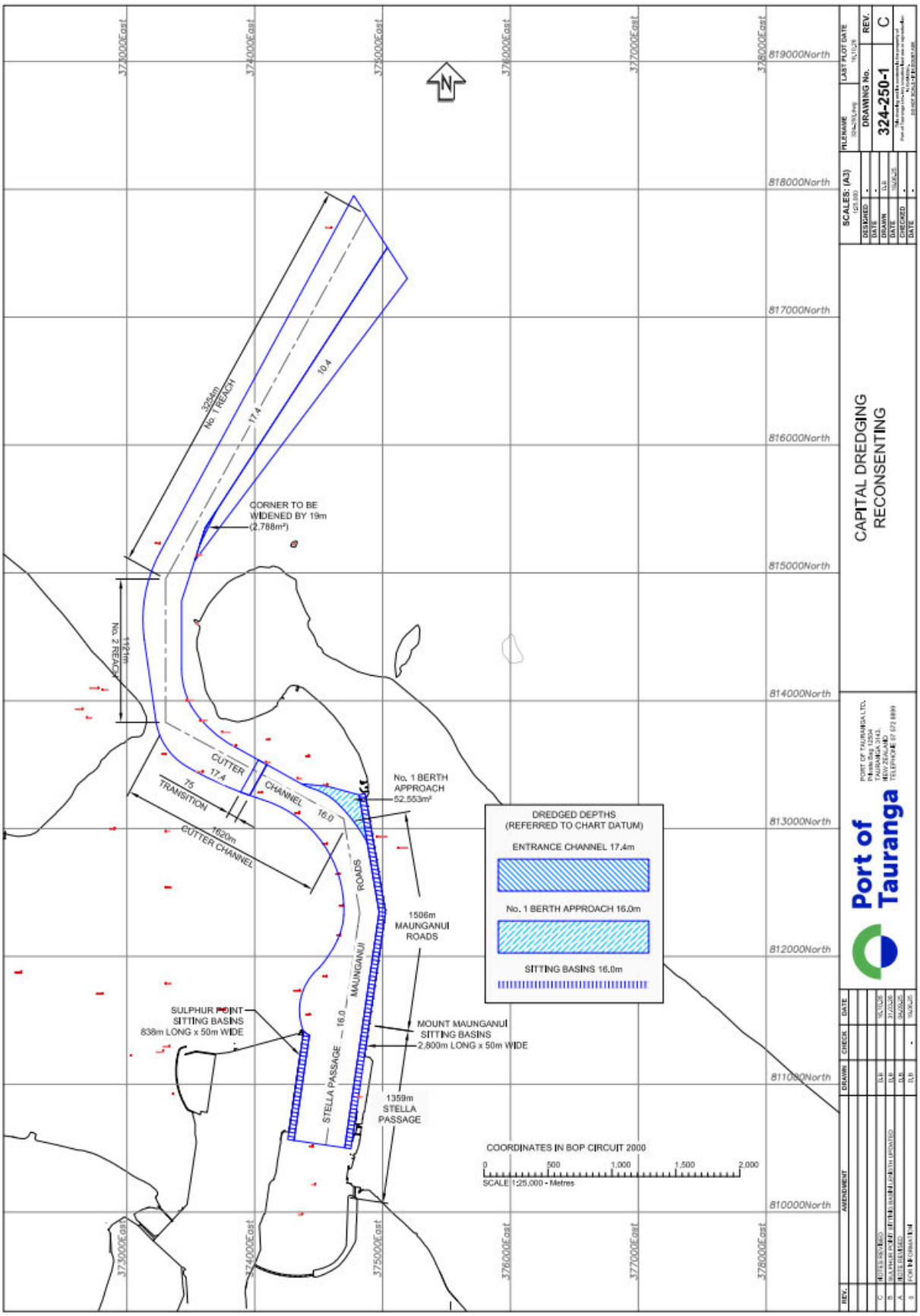


Figure 1: Location of capital dredging

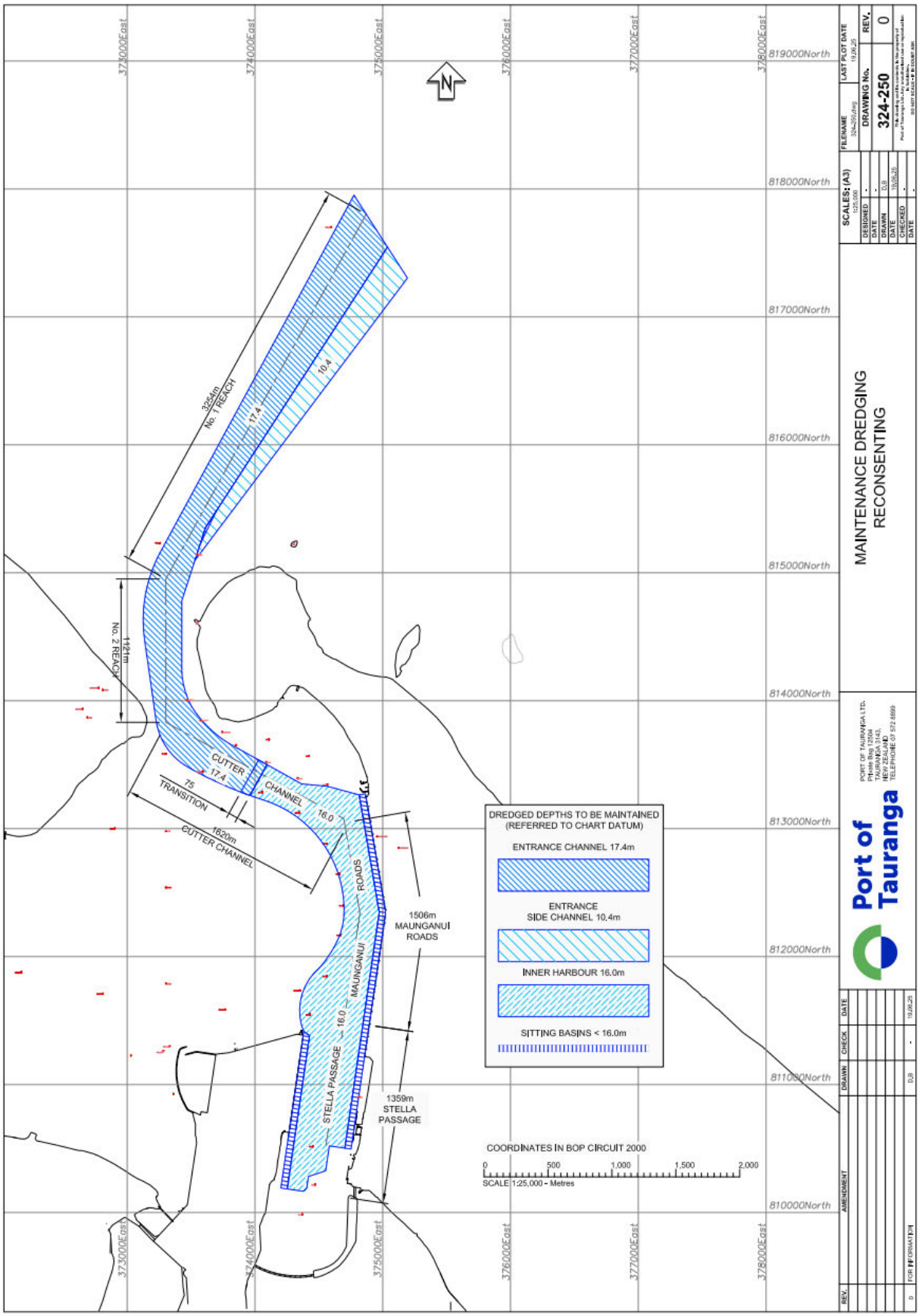


Figure 2 Location of maintenance dredging

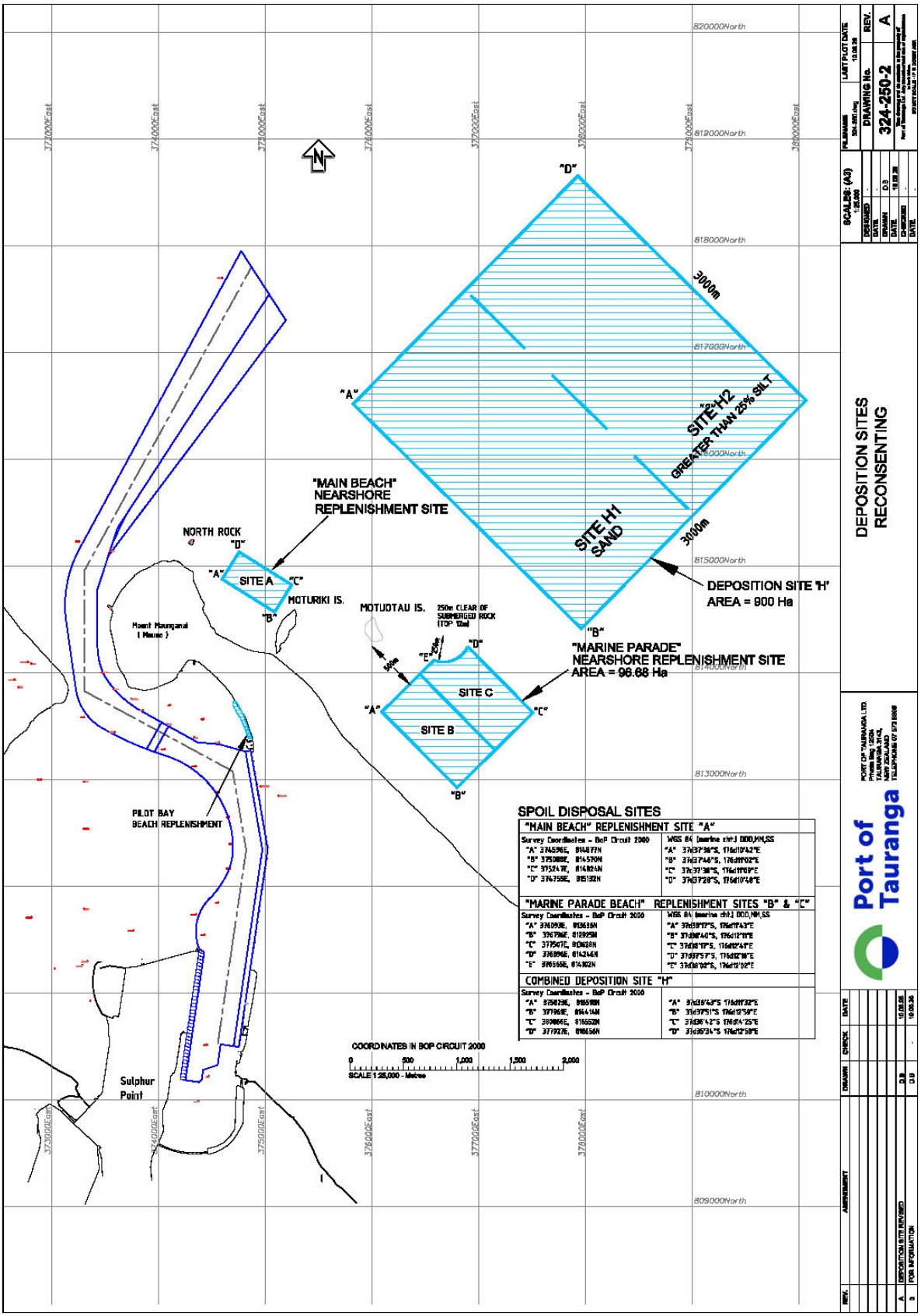


Figure 3: Deposition sites

Section 43(2)(c) (as amended and effective from 31 March 2026): *the information that the applicant provided to the Minister when applying to have the project listed as a listed project and an explanation of how the substantive application is within the scope of the listed project.*

POTL's application to be listed (**Listing Application**) is available on the Ministry for the Environment website.[4] This substantive application compares with the Listing application as follows:

- The applications have the same Project location and Site;
- The applications have the same Project details;
- The applications list the same approvals from the same authorities as being sought, and no other third-party approvals are needed;
- The Listing Application included Stage 2 of the capital dredging, being completed, the deepening in the main shipping channel and the widening for the swinging basin. These components of capital dredging are no longer included in this substantive application because they are currently being undertaken under the existing Resource Consents, and will be complete by the end of 2026 or early 2027;
- The applications identify the same affected parties. The Applicant intends to continue to undertake beach replenishment with dredging material, as an activity which is subsidiary to the Project.

2.2. INELIGIBLE ACTIVITIES

Application form – Part 2, Subpart 1 Ineligible activities and section 5 (section 43(1)(c)) of the FTAA

Section 5 of the FTAA addresses ineligible activities which cannot be authorised under the FTAA. In this respect, the Project:

- Is not located on identified Māori land;
- Is not located in a customary marine title ('CMT') area;
- Is not located in a protected customary rights area;
- Is not located on Māori customary land or land set apart as a Māori reservation;
- Is not an aquaculture activity or an activity that is incompatible with aquaculture activities;
- Does not include the need for an access arrangement under section 61 of the Crown Minerals Act 1991;
- Will not be prevented under section 165J, 165M, 165Q, 165ZC, or 165ZDB of the RMA;
- Is not located on land held, managed and administered under the Conservation Act 1987;
- Is not located within a national reserve, or land held under the Reserves Act 1977;
- Is not a prohibited activity under the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 or prohibited activity under the RMA;
- Is not a decommissioning-related activity described in section 38(3) of the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012; and
- Is not for the purposes of an offshore renewable energy project.

This substantive application is, therefore, not an ineligible activity.

2.3. PRIORITY PROJECT

Application form – Part 2, Subpart 2: Priority Project and section 8 (section 43(1)(h)) of the FTAA

Capital and Maintenance dredging reconsenting is not a priority project under section 43(1)(h) of the FTAA.

2.4. CONSULTATION AND NOTIFICATION

Application form – Part 2, Subpart 4: Listed projects and section 29(1)(a) of the FTAA

[4] Capital and Maintenance Dredging Reconsenting Project | Ministry for the Environment

This application has been lodged after 31 March 2026. Amendments to Sections 29(1) and 11 of the FTAA came into force on 31 March 2026.

Amended section 29(1) requires applicants to consult with the groups referred to in section 11(1)(a) and notify in writing groups referred to in section 11(1)(b).

Section 11(1)(a) states:

consult—

> *(i) any relevant applicant groups with applications for customary marine title under the Marine and Coastal Area (Takutai Moana) Act 2011; and*
>
> *(ii) ngā hapū o Ngāti Porou, if the project area is within or adjacent to, or the project would directly affect, ngā rohe moana o ngā hapū o Ngāti Porou; and*

Section 11(1)(b) states:

notify in writing—

> *(i) the relevant local authorities; and*
>
> *(ii) any relevant iwi authorities, hapū, and Treaty settlement entities, including—*
>
> > *(A) iwi authorities and groups that represent hapū that are parties to relevant Mana Whakahono ā Rohe or joint management agreements; and*
> >
> > *(B) the tangata whenua of any area within the project area that is a taiāpure-local fishery, a mātaitai reserve, or an area that is subject to bylaws or regulations made under Part 9 of the Fisheries Act 1996; and*
>
> *(iii) the relevant administering agencies; and*
>
> *(iv) if the proposed approvals for the project are to include an approval described in section 42(4)(f) (land exchange), the holder of an interest in the land that is to be exchanged by the Crown; and*

(c) give the persons and groups referred to in paragraph (b) 20 working days to respond to the notice.

(1A) The applicant must not lodge the referral application until each 20-working-day period given under subsection (1)(c) has expired.

2.4.1. Applicants for customary marine titles under the Marine and Coastal Area (Takutai Moana Act) 2011

FTAA Section 11(1)(a)(i)

Applicants for CMT and Protected Customary Rights (**'PCR'**) under the Marine and Coastal Area (Takutai Moana) Act 2011 (**'MACA'**) are listed in **Table 1**. We used the Te Kete Kōrero a Te Takutai Moana mapping tools to identify applications that overlap with the Project area.

Table 1: Applicants for customary marine title under the MACA

Applicant	Application type	MAC number
Hauraki Māori Trust Board	Not stated	MAC-01-03-001
Ngāti Maru	Not stated	MAC-01-03-006
Ngāti Tamatera	Not stated	MAC-01-03-011
Ngā Hapū o Matakana	Not stated	MAC-01-05-005
Ngā Hapū o Ngāi Te Rangi	CMT and PCR	MAC-01-05-006
Ngāi Tamarawaho	PCR	MAC-01-05-009
Ngāti Hē	Not stated	MAC-01-05-013

Applicant	Application type	MAC number
Ngāti Pukenga	CMT and PCR	MAC-01-05-015
Ngā Hapū o Ngāti Ranginui Settlement Trust	Not stated	MAC-01-05-016
Pomare Paora Trust	CMT & PCR	MAC-01-05-020
Te Whānau a Mokomoko	Not stated	MAC-01-05-024
Waaka and Holloway Whānau	Not stated	MAC-01-05-025
Waitaha Iwi	CMT & PCR	MAC-01-06-005

Additionally, Ngā Pāpaka ō Rangataua is a collective group of applicants in the Tauranga area who have been granted CMT but do not have orders in place as yet and as such remain an applicant group for the purposes of MACA. The collective includes Ngā Pōtiki ā Tamapahore, Ngāi Tukairangi, Ngāti Tapu, Ngāti Hē and Ngāti Pūkenga. POTL sought to consult with this group prior to lodging the application.

The groups listed in **Table 1** and mentioned above received a letter dated 8 October 2025 signalling the start of the engagement process, the e-mail pànui in June 2026 and a formal notification letter in June 2026 (See **Appendix C1**). No responses have been received at the time of lodgement.

2.4.2. Ngā hapū o Ngāti Porou

FTAA Section 11(1)(a)(ii)

The areas that are recognised under the Ngā Rohe Moana o Ngā Hapū o Ngāti Porou Act 2019 are located along the eastern coast of the north island and are therefore not relevant to the Project.

2.4.3. Relevant Local Authorities

FTAA Section 11(1)(b)(i)

The relevant local authorities, in this case, are the Bay of Plenty Regional Council (‘**BOPRC**’) and the Tauranga City Council (‘**TCC**’).

Bay of Plenty Regional Council

The BOPRC was notified of the substantive application under section 11(1)(b)(i) the FTAA on the 23rd June 2026. Records of consultation with BOPRC are provided in **Appendix C2**. A meeting with BOPRC took place on the 9th June 2026. At this meeting an overview of the application was presented, and the Fast-track process was discussed. Draft expert reports were provided to BOPRC for review.

Tauranga City Council

The TCC was notified of the substantive application under section 11(1)(b)(i) the FTAA on the 23rd June 2026. Two meetings with TCC took place; on the 22nd of June 2026 and on the 1st of July 2026. The first meeting was with staff from the Council’s Environmental Planning team (which administers resource consent applications that are lodged with the Council and its response to applications made in accordance with the FTAA) and the second one was with the Spaces and Places Team.

At the 1st meeting, personnel from Enspire presented an overview of the Project and discussed the activities that could affect TCC (mostly replenishment of sand on beaches). The 2nd meeting focused on the beach replenishment of Pilot Bay Beach and the associated relationship between TCC and POTL.

TCC also responded by letter dated 24 June 2026 which confirmed that based on their understanding of the Project, no resource consents are required under the Tauranga City Plan. Records of consultation with TCC are provided in **Appendix C3**.

2.4.4. Treaty settlement entities

FTAA Section 11(1)(b)(ii) Schedule 5 Clause 5(1)(b)(i) and Checklist A

There are six Treaty Settlements which overlap the Site which are listed below. Further commentary on the relevant principles and provisions as they relates to the Project are provided as **Appendix X**.

Ngāi Te Rangi and Ngā Pōtiki[5]

This Statutory Acknowledgement refers to the coastal area between the Waiorooro Stream and Maketu (**Figure 4**). The Statutory Acknowledgement requires consent authorities, the Environment Court and the New Zealand Historic Places Trust to have regard to the Statutory Acknowledgement. Relevant consent authorities must also forward summaries of resource consent applications within, adjacent to or directly affecting the statutory area and to copy a notice of resource consent application to the governance entity.

The Ngāi Te Rangi and Ngā Potiki deed of settlement was signed in December 2013. The Ngāi Te Rangi and Ngā Pōtiki Claims Settlement Bill is awaiting a second reading.

[5] https://whakatau.govt.nz/te-tira-kurapounamu-treaty-settlements/find-a-treaty-settlement/ngai-te-rangi-and-nga-potiki[LM1.1], and Deed5F: https://whakatau.govt.nz/assets/Treaty-Settlements/FIND_Treaty_Settlements/Ngai-Te-Rangi-and-Nga-Potiki/DOS_documents/Ngai-Te-Rangi-and-Nga-Potiki-Deed-of-Settlement-14-Dec-2013.pdf



Figure 4: Ngāi Te Rangi and Ngā Pōtiki Area of Interest from the Deed of Settlement.

Ngāti Pūkenga[6]

The Ngāti Pūkenga Claims Settlement Act 2017 area is located east of the Site (**Figure 5**). See **Table 2** for relevant provisions.

[6] https://whakatau.govt.nz/te-tira-kurapounamu-treaty-settlements/find-a-treaty-settlement/ngati-Pūkenga

Deed6F: https://whakatau.govt.nz/assets/Treaty-Settlements/FIND_Treaty_Settlements/Ngati-Pūkenga/DOS_documents/Ngati-Pūkenga-Deed-of-Settlement-7-April-2013.pdf

Legislation: https://www.legislation.govt.nz/act/public/2017/0039/latest/whole.html



Figure 5: Ngāti Pūkenga Area of Interest from Deed of Settlement

Ngāti Ranginui[7]

No Statutory Acknowledgements were created under the Ngā Hapū o Ngāti Ranginui Claims Settlement Act 2025 (**Figure 6**). See **Table 2** for relevant provisions.

[7] https://whakatau.govt.nz/te-tira-kurapounamu-treaty-settlements/find-a-treaty-settlement/ngati-ranginui

Deed7F: https://whakatau.govt.nz/assets/Treaty-Settlements/FIND_Treaty_Settlements/Ngati-Ranginui/DOS_documents/Ngati-Ranginui-Deed-of-Settlement-21-June-2012.pdf

Legislation: https://www.legislation.govt.nz/act/public/2025/0024/latest/LMS949924.html8F

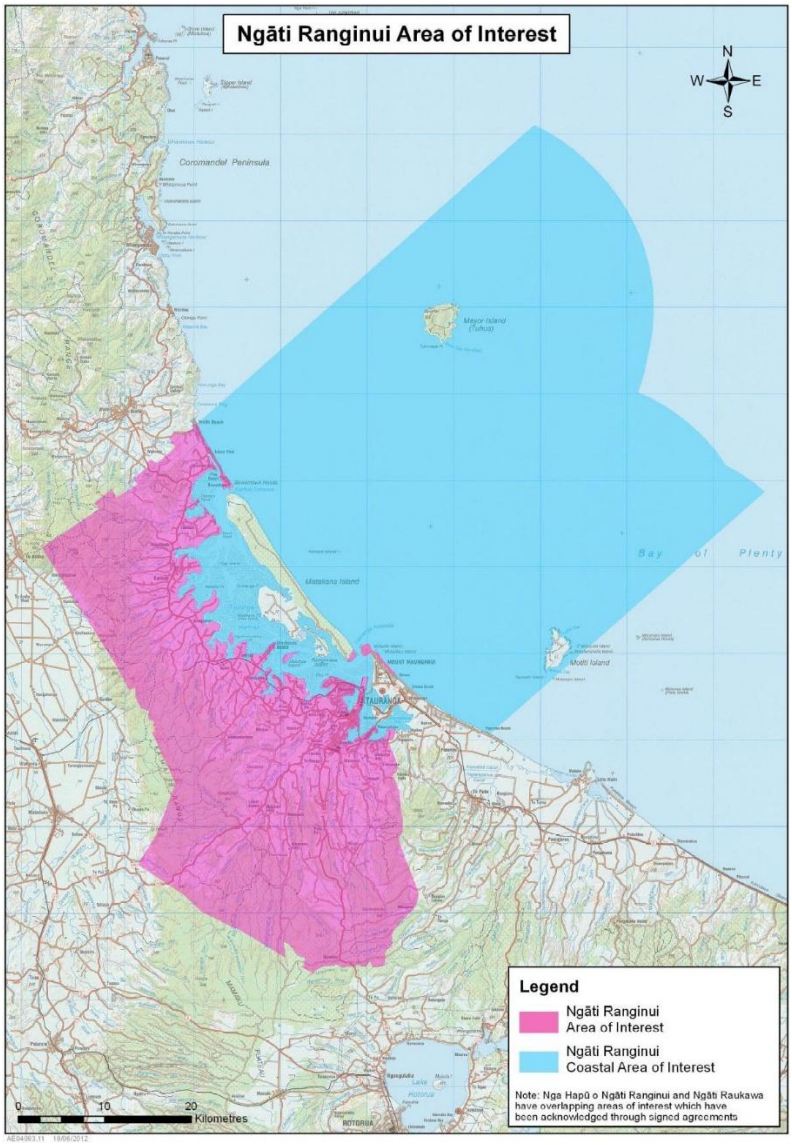


Figure 6: Ngāti Ranginui Area of Interest from Deed of Settlement

Nga Hapu o Ngati Ranginui Settlement Trust provided a Cultural Values Report ('**CVR**') Report dated 1 May 2026 (included in **Appendix F**) in relation to POTL's application. The Ngā Hapū o Ngāti Ranginui Settlement Trust is the post-settlement governance entity for Ngāti Ranginui. Note that the Trust is one of three representative entities for Ngāti Ranginui. The other entities are the Ngāti Ranginui Iwi Society Inc (or the Runanga) and the Ngāti Ranginui Fisheries Trust. The Ngāti Ranginui Iwi Society Inc and the Ngāti Ranginui Fisheries Trust submitted their own CVRs.

Nga Hapu o Ngati Ranginui Settlement Trust are of the opinion that the POTL dredging consent is not appropriate for the Fast-track process and should, instead, proceed through the normal RMA resource consenting process.

Section 11 of the Ngā Hapū o Ngāti Ranginui Claims Settlement Act 2025 defines the hapū of Ngāti Ranginui as each of the following hapū and meaning the collective group composed of individuals who are descended from a tupuna or ancestor of Ngā Hapū o Ngāti Ranginui and includes those individuals; and includes any whānau, hapū, or group to the extent that it is composed of those individuals:

(a) Ngāi Tamarāwaho

(b) Ngāi Te Ahi:

(c) Ngāti Hangarau:

(d) Ngāti Ruahine:

(e) Ngāti Taka:

(f) Ngāti Te Wai:

(g) Pirirākau:

(h) Wairoa hapū, including Ngāti Kahu, Ngāti Pango, and Ngāti Rangi

Ngāti Ranginui and several hapū listed above were engaged in the Project as describe in Section 2.4.5.

Waitaha[8]

The Waitaha Claims Settlement Act 2013 contains a statutory acknowledgement that refers to the area within the CMA between Point Maketū and Mauao (**Figure 7**). The purposes of this statutory acknowledgement under section 27 of the Waitaha Claims Settlement Act 2013 are to:

(a) Require relevant consent authorities, the Environment Court, and Heritage New Zealand Pouhere Taonga, to have regard to the statutory acknowledgement, in accordance with sections 28 and 30; and

(b) Require relevant consent authorities to give summaries of resource consent applications to the trustees in accordance with section 32; and

(c) Enable the trustees of Te Kapu o Waitaha and any member of Waitaha to cite the statutory acknowledgement as evidence of the association of Waitaha with the relevant statutory areas, provided for in section 33.

[8] https://whakatau.govt.nz/te-tira-kurapounamu-treaty-settlements/find-a-treaty-settlement/waitaha

Deed9F: https://whakatau.govt.nz/assets/Treaty-Settlements/FIND_Treaty_Settlements/Waitaha/DOS_documents/Waitaha-Deed-of-Settlement-20-Sep-2011.pdf

Legislation: https://www.legislation.govt.nz/act/public/2013/0038/latest/DLM4732308.html#DLM4732475



Figure 7: Waitaha Statutory Acknowledgement

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Ngāi Tai ki Tāmaki are the original inhabitants and Iwi of Tāmaki Makaurau. The Iwi is based in Maraetai, Te Waitematā and Tikapa Moana, and exercises mana whenua and mana moana interests across Auckland and the Hauraki Gulf.

10 https://whakatau.govt.nz/te-tira-kurapounamu-treaty-settlements/find-a-treaty-settlement/ngai-tai-ki-tamaki

Deed: https://whakatau.govt.nz/assets/Treaty-Settlements/FIND_Treaty_Settlements/Ngai-Tai-ki-Tamaki/DOS_documents/Ngai-Tai-ki-Tamaki-Deed-of-Settlement-7-Nov-2015.pdf

Ngāi Tai ki Tāmaki defers to Tauranga Moana iwi for RMA matters within Western Bay of Plenty District Council and BOPRC.



Figure 8: Ngāi Tai ki Tāmaki Area of Interest from Deed of Settlement.

Tauranga Moana Iwi Collective[11]

(Ngāi Te Rangi, Ngāti Pukenga, Ngāti Ranginui), signed January 2015. The Collective Redress Deed is not a settled Act and therefore not an enacted settlement, it is still under negotiation. At the time of writing, the publicly available documents on Te Tari Whakatau (Office of Treaty Settlements) do not show any relevant Statutory Acknowledgements.

Summary of relevant provisions in Treaty Settlements

Table 2 identifies the relevant provisions in each enacted treaty settlement and summarises these provisions as they relate to the Project area. A more detailed analysis is included in **Appendix X**.

11 https://whakatau.govt.nz/te-tira-kurapounamu-treaty-settlements/find-a-treaty-settlement/tauranga-moana

Deed10F:https://whakatau.govt.nz/assets/Treaty-Settlements/FIND_Treaty_Settlements/Tauranga-Moana/Tauranga-Moana-Iwi-Collective-Deed-21-Jan-2015.pdf

Legislation: The Tauranga Moana Iwi Collective Redress Bill awaiting second reading.

Table 2: Summary of relevant provisions in Treaty Settlements

Treaty Settlement	Section	Theme
Waitaha Claims Settlement Act 2013	7(6)	The Crown wishes to work toward a stronger relationship with Waitaha in the future.
	Schedule 1	Statutory Acknowledgement over the CMA from Maketu to Mauao.
Ngāti Pūkenga Claims Settlement Act 2017	8(4)	The Crown acknowledges that the confiscation/raupatu at Tauranga Moana unjustly extinguished the title of Te Tāwera and Ngāti Pūkenga in the land within the confiscation district, and breached Te Tiriti o Waitangi/the Treaty of Waitangi and its principles.
	8(6)(b)	The Crown acknowledges that it failed to acknowledge the ancestral claim of Ngāti Pūkenga at Tauranga Moana
	8(7)(a)	The Crown acknowledges that the confiscation/raupatu deprived Ngāti Pūkenga of access to natural resources and opportunities for development at Tauranga Moana
	8(19)	The Crown acknowledges that Ngāti Pūkenga describe Tauranga Moana as significant taonga and a source of spiritual and material wellbeing. The Crown further acknowledges that environmental degradation has been a source of distress to Ngāti Pūkenga because of its adverse impacts on (among other things) Tauranga Moana and the quantity and quality of species that are of importance to Ngāti Pūkenga.
	9	The Crown apologises to Ngāti Pūkenga, their ancestors and their descendants and hopes to form a new relationship that is founded on respect for te Tiriti o Waitangi/the Treaty of Waitangi and its principles
Ngā Hapū o Ngāti Ranginui Claims Settlement Act 2025	8(17)(a)	The Crown acknowledges the significance of Tauranga Moana harbours to Ngā Hapū o Ngāti Ranginui as a physical and spiritual resource over which Ngāti Ranginui hapū acted as kaitiaki.
	8(17)(b)	The Crown acknowledges that the development of the Port has resulted in environmental degradation of Tauranga Moana, which remains a source of great distress to the hapū of Ngāti Ranginui.
Ngāi Tai ki Tāmaki deed of settlement	No specific mentions of Tauranga Moana or the Port of Tauranga were identified in the Deed of Settlement. However, it is noted that the Deed represents a settlement which has yet to be passed and therefore additional information may be included in the future.	
Ngāi Te Rangi and Ngā Potiki deed of settlement	8(7)	The historical account records that the Port and Harbour works were developed using land that was compulsorily acquired from Ngāi Te Rangi.

Treaty Settlement	Section	Theme
	8(8)	The historical account states that some of the projects developed through compulsory acquisition resulted in the environmental degradation of Tauranga Moana and a reduction in biodiversity and food resources.
	9(9)	The Crown acknowledges that it purchased the sacred site of Mauao and offshore islands at a time of great economic hardship for Ngāi Te Rangi and Ngā Pōtiki and that during negotiations for these land purchases, the Crown frequently used monopoly powers and aggressive tactics including exploiting food shortages and purchasing from minors.
	9(11)(b)	The Crown acknowledges that the loss of most of their coastal lands has reduced Ngāi Te Rangi and Ngā Pōtiki's access to coastal urupā, kainga, food-gathering areas and associated resources.
	9(14)	The Crown acknowledges that it compulsorily acquired over 4000 acres of land from Ngāi Te Rangi and Ngā Pōtiki under public works legislation, including Panepane. These takings have given rise to serious grievance that is still felt today. Further, the Crown acknowledges that it failed to protect the interests of the owners in relation to Whareroa lands taken for 'better utilisation' and knowingly took more land than was required for public work and failed to consult the owners about the amount taken.
	9(15)	The Crown acknowledges that public works, including the Port have had enduring negative effects on the lands, resources and cultural identity of Ngāi Te Rangi and Ngā Pōtiki.
	9(18)(a)	The Crown acknowledges the significance of Tauranga Moana Harbour to Ngāi Te Rangi and Ngā Pōtiki as a physical and spiritual resource.
	9(18)(b)	The Crown acknowledges that the development of the Port has resulted in the environmental degradation of Tauranga Moana and the reduction of biodiversity and food resources, which remain a source of great distress to Ngāi Te Rangi and Ngā Pōtiki.
	10(d)	The Crown apologises for its acts and omissions that led to the loss of so much land of Ngāi Te Rangi and Ngā Pōtiki. Particularly, the Crown acknowledges Ngāi Te Rangi's loss of Mauao and the loss of coastal lands of both Ngāi Te Rangi and Ngā Pōtiki.
	10(e)	The Crown apologises for the marginalisation that Ngāi Te Rangi and Ngā Pōtiki have suffered as Tauranga expanded and the resultant loss of opportunities for development which caused social and economic harm.

Treaty Settlement	Section	Theme
	10(f)	The Crown wishes to establish a relationship based on a platform of mutual respect and cooperation with Ngāi Te Rangi and Ngā Pōtiki.
Tauranga Moana Iwi Collective Deed	2.1	The parties to the Collective Redress (being Ngāti Pūkenga, Ngāi Te Rangi and Ngāti Ranginui) are a moana-centric people with an enduring association with Tauranga Moana that is fundamental to their identity and wellbeing, both culturally and materially.
	2.6	Tauranga Moana includes Te Awanui, which has been altered and suffered deterioration over time.
	2.7	The Deed considers that relationship building means going beyond statutory compliance issues and includes building awareness, understanding, agreement and commitment within a relationship that gives confidence to the parties that their values, principles and perspectives have been included in the decision-making process.
	2.8	Tauranga Moana Iwi seek to achieve the restoration, protection and maintenance of the health and wellbeing of the people around Tauranga Moana, direct involvement in policy and decision-making involving Tauranga Moana, use of the full range of tools available under existing and any newly developed regulatory frameworks, and consistent good-faith engagement on relevant issues.
	2.9	For the Crown, arrangements in respect of Tauranga Moana should meet Treaty of Waitangi obligations and be informed by the reports of the Waitangi Tribunal, be consistent with the principle of public access within the marine and coastal area, preserve democratic local decision-making and action by and on behalf of communities, provide an effective role for iwi and hapū, promote sustainable management, improve and protect the health of the moana and the connected health of whānau, hapū and iwi, provide for customary interests and accommodate cultural diversity, be characterised by arrangements that are fit for purpose and durable.
	2.11	The Crown and Tauranga Moana iwi agree that the collective legislation will establish a statutory committee called the Tauranga Moana Governance Group and provide for the preparation, review, amendment and adoption of a Tauranga Moana framework document Ngā Tai ki Mauao.
	2.16	Following the passage of this legislation, the Crown agrees to follow a prescribed consultation methodology with the Tauranga Moana Iwi Collective for developing any future Tauranga Moana redress.
	2.21	Tauranga Moana is recognised as critical for its natural character, ecology, cultural importance, recreational values and economic benefits that connect it to the

Treaty Settlement	Section	Theme
		character, lifestyles, culture and wellbeing of the Western Bay of Plenty and its communities.
	2.27	Following the passage of this Act, if requested by the Tauranga Moana Collective, the Crown will facilitate a discussion between Tauranga Moana Iwi and local authorities to identify opportunities for Tauranga Moana iwi to contribute to decision-making under the Local Government Act 2002 including whether joint working parties could be established in relation to relevant functions and powers for activities and plans within Tauranga Moana.
	4	Establishes and lays out the provisions for a joint management agreement between TCC and the trustees of the Mauao Trust for the administration of the Mauao Historic Reserve.
Treaty of Waitangi (Fisheries Claims) Settlement Act 1992: Deed: Te Arawhiti - Fisheries Settlement	The Fisheries Settlement provides redress to Māori for historical fisheries claims through commercial fisheries assets and benefits, while also providing for the recognition of non-commercial traditional and customary fishing rights and interests and Māori participation in fisheries management and conservation.	

2.4.5. Tauranga Moana, Tauranga Tāngata

Relevant tangata whenua groups were identified using FTAA requirements, Treaty settlement information, Te Tari Whakatau, Te Kāhui Māngai, and input from the relevant councils. Those groups identified as *Tauranga Moana, Tauranga Tangata*[12] (listed in **Table 3**) were invited to prepare CVRs to assess cultural effects, identify potential mitigations, and inform the application before lodgement with the EPA.

Table 3: Tauranga Moana, Tauranga Tangata groups

Iwi	Group type	Entity/Hapū Name
Ngāi Te Rangi	Iwi	Ngāi Te Rangi Settlement Trust
	Iwi	Te Runanga o Ngāi Te Rangi Iwi Trust
	Iwi	Ngā Hapū o Ngāi Te Rangi
	Collective	Ngā Hapū o Matakana
	Hapū	Ngāti Tapu Hapū Trust
	Hapū	Ngāi Tukairangi Hapū Trust
	Hapū	Ngāti Kuku Hapū Trust

[12] See Appendix A to Appendix C1: Identifying iwi and hapū groups

Iwi	Group type	Entity/Hapū Name
	Hapū	Ngāti Hē Hapū Trust
	Collective	Ngā Hapū ō Ngā Moutere Trust
	Hapū	Te Whanau a Tauwhao ki Otawhiwhi Trust
	Marae	Whareroa Marae Committee
	Marae	Whareroa Marae Reservation Trust
Ngāti Ranginui	Iwi	Ngā Hapū ō Ngāti Ranginui Settlement Trust
	Iwi	Ngāti Ranginui Iwi Society Inc
	Iwi	Ngāti Ranginui Fisheries Trust
	Hapū	Ngāi Te Ahi Settlement Trust
	Hapū	Ngāti Ruahine Hapū Trust
	Hapū	Ngāi Tamarāwaho Tribal Authority Trust
	Hapū	Ngāti Hangarau Hapū Trust
	Marae	Huria Marae Committee
Ngāti Pukenga	Iwi	Te Tāwharau o Ngāti Pūkenga PSGE
	Iwi	Ngāti Pūkenga Iwi ki Tauranga Trust
Ngā Pōtiki	Iwi	Ngā Pōtiki ā Tamapahore Trust
Waitaha	Iwi	Te Kapu ō Waitaha Trust
	Collective	Tauranga Moana Iwi Customary Fisheries Trust
	Collective	Tauranga Moana Iwi Collective Limited Partnership
	Collective	Tauranga Moana Advisory Group
	Collective	Mauao Trust
	Collective	Ngā Tai ki Mauao
	Port and mana whenua	Ngā Matarae Trust

In early May 2026, POTL received eleven CVRs from twelve groups (see **Appendix F**). These reports outlined tangata whenua values, concerns, aspirations, and proposed mitigations, and helped shape POTL's substantive application. Groups were also given opportunities to discuss these mitigations with POTL's management and engagement team.

In June 2026, POTL provided copies of the draft Substantive Application Report and Expert Reports to relevant tangata whenua (see **Appendix C1**), TCC and BOPRC.

In June and July 2026 an additional four CVRs were received, bringing the total to fifteen (see **Appendix F**).

2.4.6. Iwi authorities and groups that represent hapū that are parties to Mana Whakahono ā Rohe or joint management agreements

FTAA Section 11(1)(b)(ii)(A)

There are currently no Mana Whakahono ā Rohe or joint management agreements which apply to the Project area.

2.4.7. Mātaitai reserve

FTAA Section 11(1)(b)(ii)(B)

Tangata whenua of any area within the Project area that is a taiāpure-local fishery, a mātaitai reserve, or an area that is subject to bylaws or regulations made under Part 9 of the Fisheries Act 1996.

The Mātaitai Reserve (**Figure 9**) was established in 2008 and covers approximately 7 km^2 around Mauao and parts of the Tauranga Harbour entrance. All fishing within the reserve area is subject to the Te Maunga o Mauao Mātaitai Reserve Bylaw 2009. The Reserve is a statutory recognition of Ngāti Pūkenga, Ngāi Te Rangi, Ngāti Ranginui and their affiliate hapū's and is managed by the Tauranga Moana Iwi Customary Fisheries Trust ('**TMICFT**'). At the time of writing, the only bylaw in place is a limit on the taking of mussels (25/person/day).

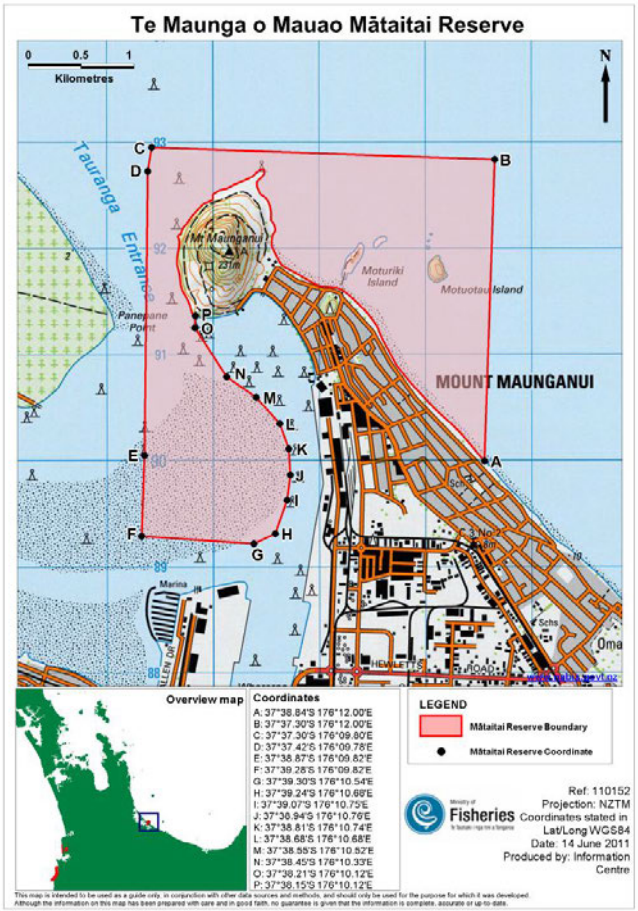


Figure 9: Location of Te Maunga o Mauao Mataitai Reserve

2.4.8. The relevant administering agencies

The relevant administering agency is the BOPRC. Please see **Section 2.4.3**.

2.5. INFORMATION REQUIRED IN A SUBSTANTIVE APPLICATION

Schedule 5, clauses 5 - 9 of the FTAA set out the requirements for resource consent applications relating to approvals under the RMA. A copy of Checklist A is included as **Appendix B**.

Sections 42 to 44 of the FTAA identify the information for substantive applications. **Table 4** demonstrates how this application meets those requirements.

Table 4: Requirements for substantive application

Section/Clause of the FTAA	Requirement	How this is addressed in this application
Section 42(1)	The authorised person for a listed Project must lodge the application with the EPA.	This requirement is met because POTL is both the authorised person (per Schedule 2 of the FTAA) and the applicant.
Section 42(3)	The applicant must be eligible to apply for any corresponding approval.	This requirement is met as POTL is eligible to apply for a resource consent under the RMA.
Section 42(4)	An application can seek approvals under different legislation.	In this case, a resource consent is sought pursuant to section 42(4)(a) of the FTAA, as this resource consent would otherwise be applied for under the RMA. The FTAA: > Provides that resource consents granted under the FTAA are equivalent in force and effect to those granted under the RMA (see FTA Schedule 5, clause 31(3)(a)); and > Requires a substantive application for a resource consent to include similar information and assessment material to that which must accompany a resource consent application made under the RMA. No other approvals are sought.
Sub-sections 42(5) - (13)	Further limit the types of applications that can be made.	None of these limitations apply to the Project.
Section 43	**Describes the information that must accompany a substantive application.**	
Section 43(1)(a)	Must be lodged in the form and manner approved by the EPA.	This report has been prepared to comply with this requirement.
Section 43(1)(b)(i)	Must explain how the Project is consistent with the purpose of the FTAA.	Addressed in **Sections 6, 9.2 and 10.1** of this report.
Section 43(1)(c)	Must demonstrate that the Project does not involve any ineligible activities.	Addressed in **Section 2.2** of this report.

Section/Clause of the FTAA	Requirement	How this is addressed in this application
Section 43(1)(d)	Must, if the application is lodged by more than one authorised person, state the proposed approval to be held by each person.	Not applicable - POTL is the authorised person lodging the application.
Section 43(1)(e)(i)	Must comply with any information requirements specified by the Minister under section 27(3)(b)(ii).	Not applicable - the Project is not a referral project.
Section 43(1)(e)(ii)	Must comply with the requirements listed in subsection (3) that apply to the approvals sought. Subsection 3 refers to clauses 5 to 9 of Schedule 5 for resource consents.	See **Appendix B**.
Section 43(1)(f) and (g)	Must, if the authorised person has applied under section 39 for a determination under section 23 or 24, include a copy of the notice under section 39(4), and steps taken to secure the agreement referred to in section 5(1)(a) for determination under section 23.	No determination under section 23 or 24 of the FTAA is required.
Section 43(1)(h)	Must state whether the application relates to a priority project and, if so, include confirmation that, to the best of the applicant's knowledge, there are no competing applications.	The Project is not a 'priority' project.
Section 43(1)(i)	Must be made by the deadline specified in the notice under section 28(3)(d).	The Project does not have a specified deadline.
Section 43(1)(j)	Must not lodge a substantive application unless any fee, charge, or levy payable under regulations in respect of the application is paid.	POTL has paid all applicable fees and levies for the substantive application.
Section 13(4)	A listed project must contain the information listed in section 13(4) of the FTAA. While this section of the FTAA addresses the requirements for referral applications, substantive applications for listed projects must also include this information, including:	These elements are addressed in CHECKLIST J included in **Appendix B**.
Section 44	The information required by section 43 of the FTAA must be sufficiently detailed to satisfy the purpose for which it is required.	This requirement is met by the comprehensive information provided in this report and the supporting appendices.

2.6. COMPLIANCE AND ENFORCEMENT

A summary of compliance or enforcement actions, and the outcome of those actions, taken against the applicant is provided in **Table 5**.

Table 5: POTL compliance and enforcement record

Local Authority	Compliance/Enforcement Action and Outcomes
Bay of Plenty Regional Council	Abatement Notice RA19-00124, issued 19 Dec 2019 Suspended particulate matter was discharged beyond the Port boundary in excess of the requirements set out in rule 17(e) of the Regional Air Plan. In response to this, POTL placed greater operational controls on the cleaning of hoppers occurring on the Port boundary during periods of high wind gusts. In addition, an eight metre high dust fence has been installed along this boundary.
Bay of Plenty Regional Council	Abatement Notice RA18-000-55, issued 24 August 2018 This abatement notice was cancelled under section 325A of the RMA, following an appeal by POTL and replaced with a formal warning. The warning was in relation to a stormwater discharge from the Mount Maunganui wharves log storage area. Better housekeeping and a resource consent has shown ongoing compliance.
Bay of Plenty Regional Council	Abatement Notice RA17-00068, issued 28 August 2017 A stormwater discharge from Sulphur Point container terminal had suspended solids measured higher than the consent limit resulting in an abatement notice. Since this abatement notice POTL has increased site sweeping, has more frequently cleaned the settlement pond prior to discharge, and has installed a turbidity gauge in the pond to automate a valve to ensure discharge from the pond only occurs when consent conditions are met.
Bay of Plenty Regional Council	Abatement Notice RA18-00037, issued 18 June 2018 Stormwater mixed with hydraulic oil leaked from a leased site within the Sulphur Point container terminal discharged to the Harbour resulting in an abatement notice. Since this abatement notice, POTL has worked with third party operators for better spill response measures and installed valves on stormwater discharge pipes.
Bay of Plenty Regional Council	Abatement Notice RA17-00063, issued 14 August 2017 This abatement notice was cancelled on the 22 March 2018 when the matters that led to the notice being issued relating to the discharge of bulk cargo by a third-party operator on POTL land were addressed. Namely the practice of discharging cargo direct to the wharf deck has been ceased.

3. DESCRIPTION OF THE PROJECT

This section of the application is provided in accordance with clauses 5(1) of Schedule 5 of the FTAA. POTL seeks to retain the ability to maintenance dredge (typically conducted annually) and complete aspects of the capital dredging most of which are authorised by the existing resource consents but have yet to be undertaken.

3.1. SCOPE OF THE PROJECT

The Project is to continue maintenance dredging for the Port's navigation channels and to undertake the deepening of discrete areas within the existing channel through capital dredging. It relates to activities related to the renewal of Resource Consents 65806 and 65807, specifically:

- The disturbance of the seabed by maintenance and capital dredging and any associated discharges;
- The deposition of the dredged material to areas of the CMA both within and outside of Te Awanui (and any associated discharges); and
- The removal of some of the dredged material from the CMA.

Capital dredging will occur within the existing shipping channels and consist of the following:

- Deepening the approach to Berth 1 (approximately 3 metres (**'m'**)) (part of the existing Resource Consents);
- Deepening an area of the Passing Lane to smooth the entrance corner (approximately 7 m) (not a part of the existing Resource Consents, but included in the application to be listed in Schedule 2); and
- Deepening the existing Sitting Basins (depths vary from 1 m to 7 m) (part of the existing Resource Consents).

3.2. CAPITAL DREDGING

The existing consent allows the Port to dredge to 16 m below chart datum inside the Harbour, and 17.4 m below chart datum outside the Harbour. Stage 1 of the capital dredging (completed in 2016) deepened the channel to 14.5 m inside the Harbour and 15.8 m below chart datum outside the Harbour. Stage 2 (which was included in the application to be listed in Schedule 2), now due to be completed early 2027, will complete the deepening in the main shipping channel and the widening for the swinging basin.

POTL is applying to dredge the existing basins alongside the wharves, as well as the approach to berth 1, both of which will only be required to be dredged once the respective wharves are upgraded or replaced in the future.

An additional area of deepening, of approximately 2,788 m^2, will also be included in the application. This work is in the existing passing lane of the entrance channel and will effectively widen the channel by 19 m. The purpose of this modification is to smooth the corner and enhance navigational safety.

The capital dredging would not be undertaken all at the same time and any stage of capital dredging is expected to take up to approximately six weeks.

3.3. MAINTENANCE DREDGING

Most ports require maintenance dredging and, without the maintenance dredging, shipping channels infill and become shallower. The POTL wishes to continue its current level of maintenance dredging where needed in all of the channels and turning areas that are used by vessels accessing and leaving the Port. This includes the areas to be dredged under the Stella Passage Resource Consent, should that be granted.

The existing consents allow up to 185,000 cubic metres (**'m^3'**) to be dredged on average every year. However, increases in storm activity mean that more dredging is required to maintain the shipping channels than in previous years. Therefore, POTL wishes to increase the allowable annual volume to 250,000 m^3 averaged over 10 years, with a cap of 350,000 m^3 in any year. This volume is consistent with the listing in Schedule 2 (see **Section 2.1**).

3.4. COMMENCEMENT, COMPLETION AND STAGES

Maintenance dredging would typically take place annually.

The first stage of capital dredging would be the smoothing of the entrance corner and would take place within a year of consent approval. The first berth approach or sitting basin deepening would occur after 3-5 years to compliment the extension to the Mount Wharves (subject to separate approvals process). The next planned stage would coincide with the replacement of the original Mount Wharves with modern wharf structures that will require the deepening of the sitting basin, 5-10 years after consent is granted. Future capital works will be driven by shipping and cargo trends that will dictate the timing of berth upgrades. Each capital and maintenance dredging campaign anticipated as a part of the Project would be completed in six weeks.

3.5. DREDGING METHODOLOGY AND ALTERNATIVES

Maintenance dredging at the Port is expected to almost entirely be undertaken by a Trailing Suction Hopper Dredge (**'TSHD'**). Some isolated work with a Grab Dredger (**'GD')** or Back-Hoe Dredge (**'BHD')** may be undertaken in areas that cannot be reached by a small TSHD. This includes confined areas close to wharves. Due to the small areas and volumes associated with the capital dredging the same equipment used for the maintenance dredging would be used for the capital dredging.

3.5.1. Trailing Suction Hopper Dredging

Currently, dredging at the Port is undertaken by the *'Albatros'*, a small TSHD with a hopper capacity of 1,860 m^3 (Figure 10). While it is uncertain whether the Albatros specifically will undertake the maintenance dredging that forms a part of this Project, it is very likely that most of the proposed maintenance and capital dredging will be done by a small TSHD very much like the Albatros.



Figure 10: 'Albatros', small TSHD which currently undertakes most of the maintenance dredging at the Port

A TSHD is a ship that operates under its own power to suck up sandy or loose material from the seabed with the use of a long suction pipe that trails behind the ship and drags along the seafloor. Material extracted from the seafloor is stored in a hopper onboard the vessel. TSHDs are widely used for dredging where the makeup of the seafloor is sandy or loose and therefore easy to remove by way of suction. **Figure 11** identifies the key parts of a typical TSHD.

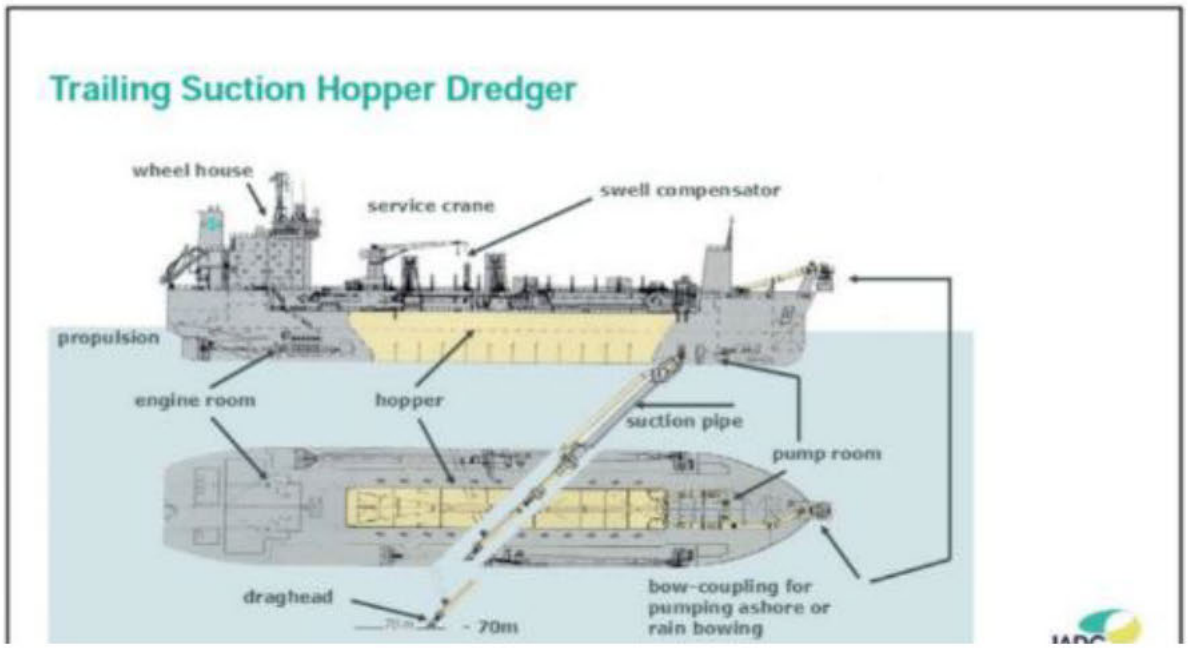


Figure 11: Trailing Suction Hopper Dredger

A TSHD works by lowering a long, hinged suction pipe tipped with a drag head (**Figure 12**) to the seafloor and trailing it behind the ship while material is sucked up from the seafloor by the pipe. The dredge moves slowly (approximately 2 knots) along the channel and removes material in a swathe the width of the drag head. Drag-heads come in two types: passive and active. A passive drag head is weighted to ensure that contact with the seafloor is maintained. An active drag head uses cutting teeth or high-pressure jets of water to excavate additional material and make it easier to suck into the line. In either case, the extracted material is made up of a slurry of water and excavated material that is sucked into the hopper with the use of powerful pumps. Operation of the drag head does generate some localised turbidity; however, the operation of the vacuum pumps limits this.



Figure 12: Typical TSHD drag head

The slurry of dredged material and seawater is then separated in the hopper by allowing the dredged material to settle and decanting off the water through an outlet at the bottom of the vessel. Finer particles may not always settle out from the water readily. This may result in the discharge of silty water.

Common mitigation measures when dredging particles that don't readily settle is to limit the time of overflow from the hopper or undertake the dredging when the current is taking any plume away from the sensitive receiving environment. This maximises the efficiency of the dredging operation and reduces the turbidity of the surrounding water.

Once the hopper is full of material, the dredge will travel to the specified deposition site. Dredges must be adequately maintained to ensure the hopper doors and hull seals are in good condition in order to prevent leakage of dredged material while in transit.

At the disposal site, the dredge will dispose of the material in the hopper through either hopper doors or a split hull that allows the dredged material to be discharged (see **Figure 13**).

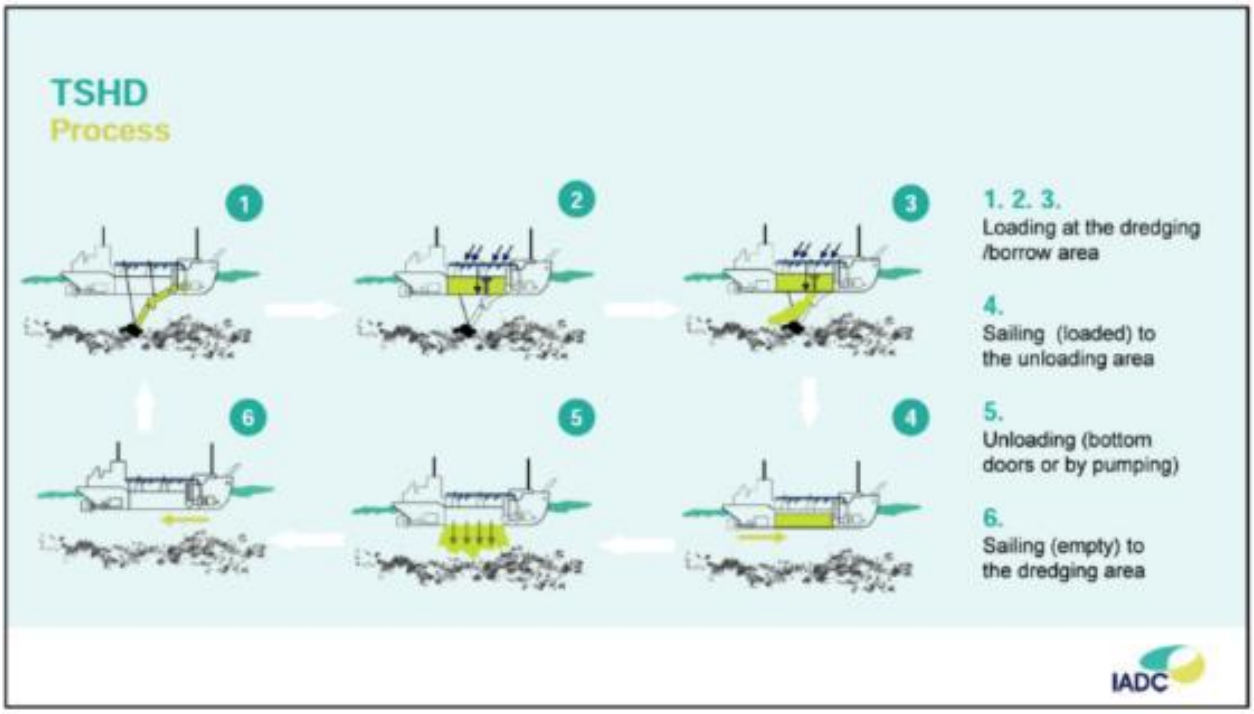
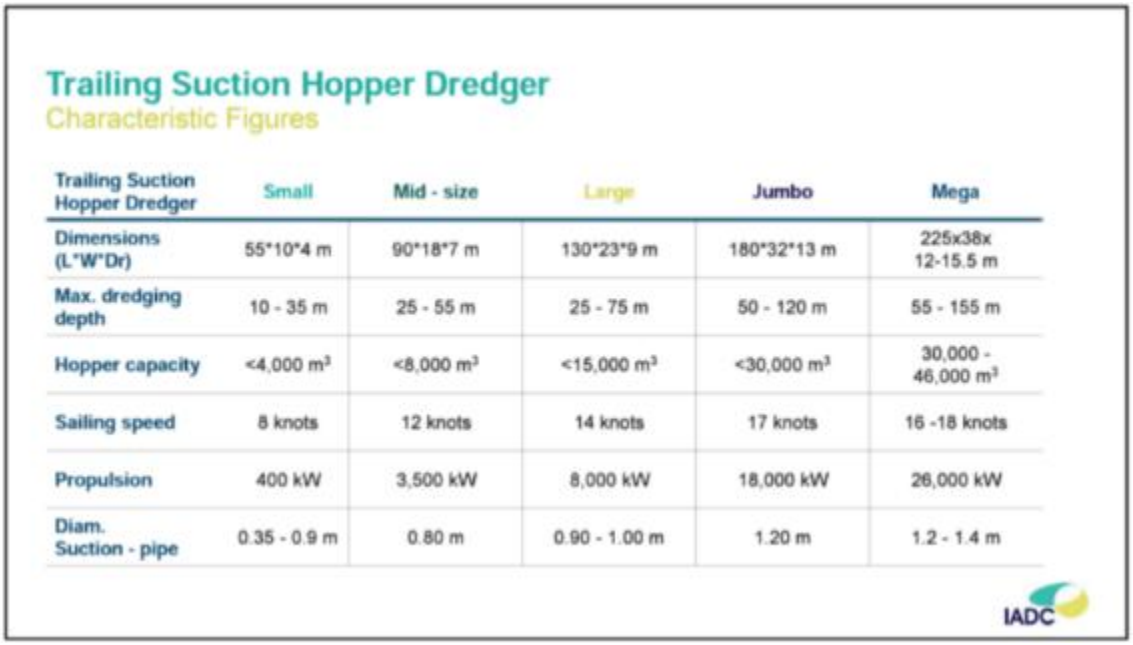


Figure 13: TSHD process

Daily track plots are taken to track the dredging vessel to ensure dredged material is disposed of in the specified location. The disposal site is broken up into a grid of smaller disposal sites which are used in sequence to ensure even deposition of material across the site.

TSHDs come in a variety of sizes based on the size of their hopper (Figure 14). Smaller TSHDs have a high manoeuvrability and are therefore ideal for working in confined areas. Larger dredges, by contrast, are quicker and more efficient at removing and disposing of large quantities of material in a shorter period of time.



Trailing Suction Hopper Dredger
Characteristic Figures

Trailing Suction Hopper Dredger	Small	Mid - size	Large	Jumbo	Mega
Dimensions (L*W*Dr)	55*10*4 m	90*18*7 m	130*23*9 m	180*32*13 m	225x38x 12-15.5 m
Max. dredging depth	10 - 35 m	25 - 55 m	25 - 75 m	50 - 120 m	55 - 155 m
Hopper capacity	<4,000 m³	<8,000 m³	<15,000 m³	<30,000 m³	30,000 - 46,000 m³
Sailing speed	8 knots	12 knots	14 knots	17 knots	16 -18 knots
Propulsion	400 kW	3,500 kW	8,000 kW	18,000 kW	26,000 kW
Diam. Suction - pipe	0.35 - 0.9 m	0.80 m	0.90 - 1.00 m	1.20 m	1.2 - 1.4 m

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Figure 14: Characteristics of TSHDs based on size

3.5.2. Back-Hoe Dredge

A BHD is a barge-mounted bucket excavator (**Figure 15**). BHDs are most often used for dredging materials such as clay, sand, pebbles, boulders and fragmented rock. BHDs are suitable for dredging a wider range of materials than TSHDs due to their ability to generate cutting forces with the digger bucket. BHDs are also used when working close to marine structures, in berth pockets, in tight corners, along toe lines of channels and other hard to reach areas.



Figure 15: BHD 'Gungner R' operating in Stella Passage in 2016

Prior to beginning excavation, the barge upon which the excavator is mounted is secured to the seafloor with the use of spuds (**Figure 16**). It is necessary to anchor the BHD to the seafloor to ensure stability and accurate excavation. Typically, one or more of the spuds will be able to be moved laterally along the barge, allowing the barge to be pulled along by raising, lowering, and shifting the spud. While this method can provide some limited movement for the barge, longer distances would need to be covered with the assistance of a tug.

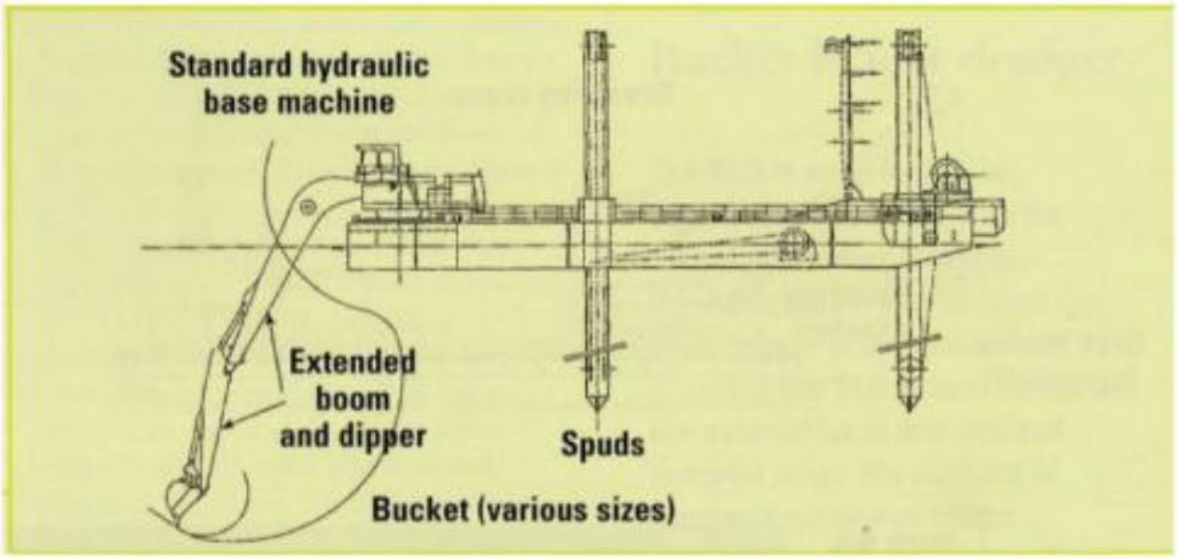


Figure 16: Schematic of BHD barge showing anchoring spuds

Material excavated from the seafloor is emptied into a barge that accompanies the BHD barge. Because the boom is of a limited length, the radius of excavation that can be completed by a BHD is relatively limited but depends on the size of the boom arm and the bucket. **Table 6** shows the typical sizes of BHD available.

Table 6: Characteristics of BHDs by size

	Small	Medium	Large	Mega
Length	25 - 35 m	30 - 50 m	45 - 60 m	60 - 70 m
Draught	1.5 m	2 -3 m	2 -3 m	2.5 - 3.5 m
Dredge Depth	10 - 20 m	Up to 20 m	Up to 20 m	20 - 35 m
Bucket Size	1.5 - 2.5 m^3	Up to 10 m^3	Up to 20 m^3	Up to 40 m^3
Power	200 - 500 kW	500 - 950 kW	1000 - 2000 kW	2000 - 4000 kW

Compared to TSHDs, BHDs are relatively inefficient and therefore relatively expensive, for this reason, they are most often only used for areas that cannot be reached by TSHDs or where the material to be excavated requires additional force to remove. Due to the way BHDs excavate material, turbidity is generated by material spilling from the top of the bucket when it emerges from the sea. This can be limited by slowing the hoisting speed, but the trade-off of this is increasing the excavation period. Excavation would be conducted with the assistance of a computer and Global Positioning System to enable the excavator operator to know what parts of the seafloor have been excavated and what parts still require excavation.

Due to the relative expense and inefficiency of BHDs, POTL does not anticipate that a BHD would be used unless material is unable to be dredged or reached by a TSHD.

3.5.3. Grab dredger

A GD is made up of a clamshell grab suspended by cables from a crane (**Figure 17**). A GD is similar to a BHD in that it is mounted on a barge anchored by spuds or onshore and must dispose of dredged material to a nearby barge. A GD is also relatively inefficient at removing material and less accurate than BHD. Sediment can be released through the disturbance of the seabed, overflow from barges, and the release of residual matter on the outside of the grab when it is lowered into the water. Use of a GD would be limited to dredging along the toe line of the wharf and the sitting basin.



Figure 17: Grab dredger

3.5.4. Bucket Ladder Dredge

A Bucket Ladder Dredge ('**BLD**') is made up of a series of scoop buckets on a conveyor belt that scoop material from the seabed and release it into a nearby barge (**Figure 18**). A BLD is moved along the dredge area using mooring lines and winches. In 1972, a BLD was used for dredging the Tanea Shelf following explosive work. A BLD is typically noisy above water and removes material from the seafloor relatively slowly compared to a TSHD. The buckets being dragged along the seafloor create turbidity through the consistent movement of the buckets and disturbance of sediment. POTL does not anticipate the use of a BLD.



Figure 18: Bucket Ladder Dredge

3.5.5. Cutter Suction Dredge

A Cutter Suction Dredge ('**CSD**') (**Figure 19**) is similar to TSHD in that it works through a suction pipe that is extended to the seafloor. However, at the end of the suction pipe for a CSD is a mechanical

rotating cutting tool (known as a cutting head) which is able to cut hard material and rock into fragments. The cutter head is mounted to the end of the suction pipe and rotates around the axis of the suction pipe. The cutter head breaks up hard material which is then sucked into the pipe as a slurry.



Figure 19: Cutter head

CSD is undertaken in a stationary position by either mooring or anchoring the barge using spuds (**Figure 20**). The material from a CSD is either transported using a pump through a long pipeline to the disposal site or is loaded into barges to be disposed of at the specified site. A CSD can remove a lot of material quickly, including being able to remove hard material. However, a CSD is difficult to move and reposition owing to its need to be anchored. Further, the action of cutting generates turbidity at the seafloor. POTL does not anticipate the use of a CSD for the proposed dredging.

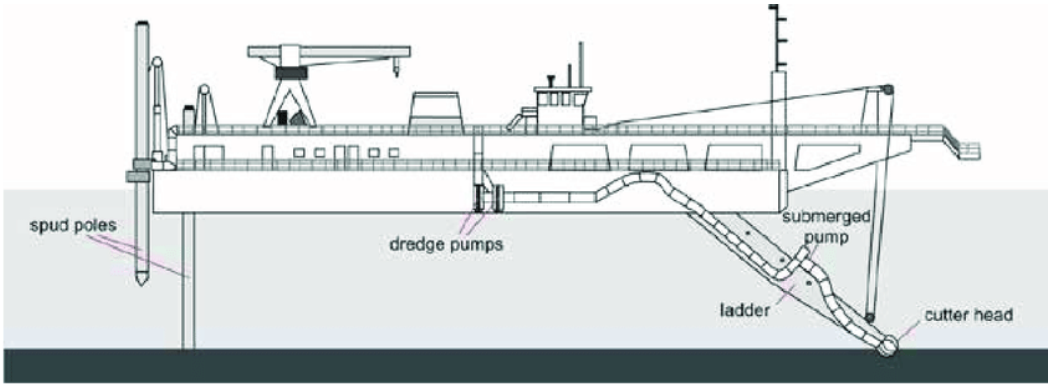


Figure 20: Schematic of a CSD

3.6. VOLUME AND MAKEUP OF MATERIAL TO BE REMOVED

POTL proposes in Draft Condition 14.2 to carry out bathymetric surveys at all dredge sites both prior to and after dredging. The bathymetric survey shall be sufficient to enable an assessment of the volume of material dredged.

3.6.1. Maintenance Dredging Volume

Under RC 65806, maintenance dredging was limited to 185,000 m^3 per year when averaged over five years. Volumes of material dredged under RC 65806 are detailed in **Table 7.**

Table 7: Maintenance dredging volumes 2013 to 2023

Year	Volume Dredged (m^3)	5 Year Average (m^3)
2013	193,737	
2014	155,391	
2015	93,555	
2016	No maintenance dredging	
2017	96,980	134,916
2018	137,313	120,810
2019	116,885	111,183
2020	118,355	117,383
2021	161,635	126,234
2022	181,170	143,072
2023	256,122	166,833
2024	167,606	176,978
2025	168,921	184,645

The limit of 185,000 m^3 of maintenance dredging when averaged over 5 years was proposed in consent RC 65806 due to uncertainty around the potential impacts of maintenance dredging on the Ebb Tide Delta.

Increased frequency and intensity of storms as a result of the El Niño-Southern Oscillation climate patterns has resulted in greater mobility of sediments within the channel and surrounds. This has meant that the volume of sediment that needs to be moved in order to maintain the design depths of shipping channels has increased recently.

It is expected that the trend of more frequent, more intense storms is likely to continue. In order to future-proof against the risk of greater movement of sediment from storm events, this application is requesting an amended volume of maintenance dredging to be 250,000 m^3 averaged over ten years, with a cap of 350,000 m^3 in any year. It is in POTL's interest to only undertake the amount of maintenance dredging that is required to maintain the design depths of the channels, due to the costs involved in any dredging activity. It follows that the proposed increase in maintenance dredging is only proposed to provide assurance that port activities can continue in the face of risks from changing weather patterns. It is worth noting that the maintenance dredging consents prior to 65806 and 65807 allowed for an average of 240,000m^3 per annum with a maximum of 720,000m^3 in any one year in any ten year period (refer RC 40152).

POTL is proposing Draft Condition 13.3 to limit the quantity of capital dredging to these volumes.

Draft Condition 13.3: The maximum volume of maintenance dredging and material from maintenance dredging to be deposited shall not exceed 250,000 cubic meters per annum averaged over ten years with a maximum of 350,000 cubic meters in any year.

3.6.2. Capital Dredging Volume

The existing consent allows up to 15 million m^3 of capital dredging to be deposited in the deposition grounds. In Stage 1, POTL dredged and deposited approximately 6 million m^3 of material. Stage 2 is expected to involve a similar quantity. The remaining required capital dredging being requested is 800,000 m^3 as shown in **Table 8**.

Table 8: Capital Dredging Volumes

Location	Stage 1 Dredging (m^3)	Stella Passage Development	Current Stage 2 Dredging (m^3)	Proposed Capital Dredging
No 1 Reach and No 2 Reach	2,572,247		2,976,000	20,000
Harbour				
Cutter Channel	1,597,332		826,600	
Maunganui Roads/Swinging Basin	1,092,375		1,551,800	165,000
Stella Passage	784,051		683,000	
Stella Passage Extension		1,500,000		
Sitting Basins				600,000
	6,046,005	1,500,000	6,037,400	785,000 Rounded up to 800,000

Dredging will be undertaken to a specified depth at different areas of the proposed activities as shown on **Figure 1** (capital dredging) and **Figure 2** (maintenance dredging).

POTL is proposing Draft Condition 13.1 to limit the quantity of maintenance dredging to these volumes.

Draft Condition 13.1: The maximum volume of excavation for capital dredging shall not exceed 800,000 cubic meters, over the term of this Resource Consent.

3.7. DREDGE DEPOSITION

Spoil generated from capital and maintenance dredging activities associated with this Project would continue to be disposed of in the existing spoil deposition sites (Sites A, B, C and H1 and H2) as illustrated on **Figure 3**. In addition to these volumes, this application includes the deposition of 1,500,000m^3 of material dredged under the Stella Passage resource consent. POTL is proposing Draft Condition 13.2 to limit the quantity of maintenance dredging to these volumes.

Draft Condition 13.2: The maximum volume of material from capital dredging to be deposited shall not exceed 2,300,000 cubic meters, over the term of this Resource Consent.

3.7.1. Alternative disposal sites

According to **Appendix G**, the disposal sites were chosen using two main criteria:

- The sediment texture of the seabed - the philosophy was to have natural characteristics as similar as possible to the deposited dredged sediment, so that the disposed sediment would behave the same way in response to natural processes and preserve the natural habitat for any biota present; and
- Whether the sites would be non-dispersive or dispersive – which characterises the mobility of the dredged sediment and determines whether sediment would stay where it was put or would spread outside the disposal site.

A methodology was developed for Tauranga based on the thresholds of sediment motion due to wave-induced currents, the annual distribution of wave heights, and the depth of the spoil mound within the disposal site (de Lange and Healy (1994[35]). This was used to identify zones where sediment: would be exchanged with the beach (sites A and B); could slowly exchange with the beach (site C and H1) and would not disperse (site H2).

3.7.2. Sites H1 and H2

Most of the material generated during both capital and maintenance dredging is expected to be discharged to offshore deposition sites H1 and H2, the primary deposition sites, which are located outside of Te Awanui, at locations where there is a limited geomorphological connection to both Te Awanui and the near shore area. Sites H1 and H2 were sized and consented to take 15,000,000 m^3 of capital dredged material. These sites occur in water depths of 20 – 30 m. Site H1 is designated for clean sands and Site H2 for both clean sands and silty sediments. To ensure an even coverage, these disposal areas are segregated into smaller grids for sequenced deposition to ensure an even distribution across these areas over time. During maintenance dredging H1 is used for inner harbour material with a silt content less than 25% and for material from the entrance with a silt content less than 25% but containing a high shell content. Site H2 is located in water depth of approximately 30 m. During maintenance dredging this site is used for inner harbour material with silt content greater than 25%.

3.7.3. Sites A, B and C

Sites A, B, and C are expected to be used for nearshore deposition of clean sand. Site A, otherwise known as the 'Main Beach nearshore replenishment site' is located north of Maunganui Beach between Moturiki Island and North Rock. Site B and Site C are located north of Marine Parade and to the east of Motuatau Island. Site B enables the rapid replenishment of the beaches along Marine Parade while Site C being in deeper water requires greater wave activity to disperse the deposited sands before replenishing the beaches.

The sands for deposition at sites A to C will be sourced from No 1 reach and No 2 reach. These are the sites that are likely to have the highest quality, cleanest sand with the lowest quantity of silt. All material that is identified as potential material for disposition to sites A to C will be visually inspected to ensure it is good quality sand material. Sand with a high shell load or of questionable quality will be disposed to site H1. Deposition at sites A to C ensures the sediment is available to enable natural movement of sands to replace beachward erosion as a result of storms.

3.7.4. Direct beach nourishment purposes

Dredged material is also pumped directly ashore from the TSHD to a sand pile at Sulphur Point and used when required for beach renourishment at Whareora and Pilot Bay Beach. Typically, the sand that is used in this way is sourced from the Maunganui Roads and Cutter Channel.

3.7.5. Material to be removed from the Coastal Marine Area

POTL is seeking the ability to remove up to 500,000 m^3 of material (in total) from the marine and coastal area. This material could be used for nourishment activities in landward locations or used in reclamations or other activities that are undertaken by POTL or third parties. In summary, the extracted sand would be used for beneficial purposes.

3.7.6. Draft Conditions

POTL propose the following draft conditions to ensure that the disposal sites are used as intended:

14.9 With the exception of the areas identified in Condition 14.14, all material shall be deposited at "Site H" as shown on the Port of Tauranga plan entitled the Port of Tauranga plan entitled *Deposition Sites Reconsenting, Drawing Number 324-250-2*.

14.10 When material is deposited at "Site H" material with a high (greater than 25% by weight) proportion of silt, as measured under Condition 20.1, shall be dumped on the seaward side of "Site H" as shown on the Port of Tauranga plan entitled Deposition Sites Reconsenting, *Drawing Number 324-250-2*.

14.11 When material is deposited at "Site H" the Consent Holder shall ensure, as far as is practicable, that the material is spread over the disposal area to ensure that the mound created by depositing is as low as possible.

14.12 Clean material sourced from No. 1 and No. 2 Reach as shown on the Port of Tauranga plan entitled Maintenance Dredging Reconsenting, Drawing Number 324-250 during maintenance dredging shall be deposited at Sites B or C. Shell content shall be monitored when dredging the entrance channel and if noted as higher than would be expected on the beach, shall be deposited at Site H1.

14.13 Notwithstanding Conditions 14.9 to 14.12 the consent holder shall deposit specified volumes of material at Sites A, B, or C if so directed by the CEO (see Advice Note 4).

14.14Notwithstanding conditions 14.9 to 14.12, the consent holder may use volumes of clean suitable dredged material for beach nourishment purposes (with nourishment occurring above and below mean high water springs) with the agreement of the Tauranga City Council and prior written approval of the CEO. (see Advice Note 5)

14.15 Furthermore and also not withstanding Conditions 14.9 to 14.12 and 14.14 the consent holder may, at its sole discretion, remove up to 500,000 cubic meters of dredged material from

Monitoring of dredged material to, *inter alia*, inform where the material should be disposed of is detailed in the Draft Conditions 20.1 to 20.3.

4. APPROVALS SOUGHT

Application form Part 3 and section 42 of the FTAA

4.1. CONTEXT OF PROJECT AND CONSENTING HISTORY

A history of the Port of Tauranga is provided in **Appendix U**. Sulphur Point was created through a land reclamation effort in 1969 with the decision to establish a container port in the current location of the Port. To complete this landform, 5.5 million m^3 of seabed was dredged between 1970 and 1989 from the Maunganui Roads and Stella Passage (see **Figures 1 - 3**) and pumped ashore. Capital and maintenance dredging to support the Port's container wharves has been ongoing since this time.

In 2013 POTL was granted resource consents 65806 and 65807 to carry out dredging to deepen and widen the existing shipping channels and to continue to conduct routine maintenance dredging. The object of the capital dredging programme authorised by the 2013 resource consents was to enable larger container ships to enter and exit the Port, in keeping with global trends for larger vessels.

Stage 1 of the planned deepening and widening work has been completed and Stage 2 of the capital dredging has commenced. Since 2013, maintenance dredging has occurred annually. Consents 65806 and 65807 both expire in December 2027 and POTL requires renewal of these consents to continue capital and maintenance dredging.

The current Sulphur Point wharf can safely accommodate two modern container ships at a time. POTL lodged a substantive application for the 'Stella Passage Development' with the EPA on the 22 January 2026. The project is to extend the Sulphur Point and Maunganui Wharves including dredging and reclamation for the wharf extensions. The application has been determined to comply with the requirements for a substantive application and is in process of being considered.

4.2. RESOURCE CONSENTS APPLIED FOR

Resource consents that would otherwise be applied for under RMA (section 42(4)(a)) are required. Please see a complete checklist A in **Appendix B**.

A **coastal permit** is required from the BOPRC under the Regional Coastal Environment Plan (**'RCEP'**) for activities listed in **Table 9**. BOPRC provided confirmation of this assessment on 3 July 2026 (see **Appendix C2**).

Table 9: Summary of resource consents sought under the Regional Coastal Environment Plan

Consent applied for	Rule	Commentary
The disturbance of the seabed and any associated discharged from maintenance dredging	PZ 5 (CON)	PZ 5 regulates the discharge and disturbance of the foreshore or seabed associated with maintenance dredging.
Deepening of the inner harbour and sitting basin through capital dredging	PZ 10 (RDIS)	The capital dredging specified in this rule must comply with the depths and volumes specified in Schedule 9 of the RCEP. Of note is that apart from the proposed capital dredging in the entrance passing lane; all of the other proposed capital dredging is specifically identified in Schedule 9. Capital dredging in the entrance passing lane defaults to a discretionary activity under rule PZ 13.

Consent applied for	Rule	Commentary
The deposition of dredged material from maintenance dredging in Spoil Disposal Sites A, B, C, H1, H2 and to the Pilot Bay Beach Replenishment Site	PZ 12 (DIS)	Dumping of dredged material must be done to the sites and in accordance with Schedule 9 of the RCEP[13]. We note that both of the figures in Schedule 9 relating to the disposal sites for dredged material are labelled as being for 'maintenance dredging'. This provides some uncertainty, as to if the disposal of material from capital dredging could be consented under this rule. Given this, the disposal of dredged material from capital dredging at all of the spoil sites would be a discretionary activity under rule CD 8.
Dumping of spoil from capital dredging to Sites A, B, C, H1 and H2	CD 8 (DIS)	Rule CD 8 relates to the dumping of dredge material to the CMA, and while it is not clear whether the disposal of dredge material from capital dredging can be consented under rule PZ 12, part (a)[14] this rule pertains specifically to the disposal of dredge material. Consent is, therefore, sought under this provision also.
Proposed capital dredging - deepening the entrance passing lane	PZ 13 (DIS)	As mentioned in our analysis of rule PZ 10, some of the proposed dredging is not in areas identified in Schedule 9. Therefore, these activities fall under rule PZ 13[15] as a discretionary activity.
Deposition of capital dredging material in Spoil Disposal Sites A, B, C, H1, H2 and the Pilot Bay Beach Replenishment Site	DD 14 (DIS)	POTL proposes to dredge and remove material from the seabed and dispose of it, in some cases, to onshore replenishment or storage sites. We therefore consider that consent is required under rule DD 14[16].

[13] Being Figure 324-56 (RCEP, page 396) and Figure 324-75 (RCEP, page 399)

[14] Rule CD 8: Discretionary - Dumping of specified matter in the coastal marine area

The dumping of the wastes and other matter listed below, in the coastal marine area from any ship, aircraft, or offshore installation is a discretionary activity.

(a) Dredge material (where no other rule applies)

[15] Rule PZ 13: Discretionary - Activities in the Port Zone

Any activity in the Port Zone, which is not provided for as a permitted, controlled, restricted discretionary or prohibited activity, is a discretionary activity.

Advisory notes:

1. An application to construct the new Otumoetai Shipping Channel, shown on Maps 270-65 and 270-67, will be considered as a discretionary activity under this rule
2. The dumping of dredge material is deemed to be a discretionary activity in accordance with Regulation 4 of the Resource Management (Marine Pollution) Regulations 1998

[16] Rule DD 14: Discretionary - Disturbance of, deposition on, dredging of, or removal of sand, shingle and shell

The:

1) Disturbance of the foreshore or seabed
2) Deposition of material on the foreshore or seabed, including disposal of spoil
3) Removal of sand, shell, shingle and minerals from the foreshore or seabed
4) Dredging of the foreshore or seabed
5) Removal, damage, modification or destruction of indigenous vegetation that is growing on the foreshore or seabed

That is not a permitted, controlled, restricted discretionary, non-complying or prohibited activity under a rule in this Plan, is a discretionary activity.

4.3. PROHIBITED ACTIVITIES

The application does not include any activities prohibited under the RMA (section 42(5)(a)).

4.4. EXISTING RESOURCE CONSENTS

The approvals would replace the existing consents 65806 and 65807.

4.5. PERMITTED ACTIVITIES

The Project includes elements that are deemed to be Permitted Activities.

4.5.1. Permitted activities under the Regional Coastal Environment Plan

Permitted activities under the RCEP are listed in **Table 10**.

Table 10: Permitted activities under the Regional Coastal Environment Plan

Rule number	Activity	Standards/terms/conditions
PZ 1	Emission of noise as a result of dredging activities	The emission of noise from activities in the CMA of the Port Zone is a Permitted Activity, subject to the noise not exceeding the following conditions: • The long-term average sound level (Ldn) from all activities within the Port Zone shall not exceed 55 dBA at any point outside of the 55 dBA noise control boundary (shown on Map Sheet 11c) nor 65 dBA at any point outside the 65 dBA noise control boundary. • No single 15-minute sound measurement level shall exceed 65 dBA Leq between 2200 and 0700 at any point outside the 65 dBA noise control boundary. • The nighttime maximum sound level (Lmax) shall not exceed 85 dBA at any point outside of the 65 dBA noise control boundary. (a) Sound levels shall be measured in accordance with NZS 6801:2008 Acoustics - Measurement of Sound and assessed in accordance with NZS6809:1999 Acoustics - Port Noise Management and Land Use Planning.

4.5.2. Permitted activities under the Bay of Plenty Regional Natural Resources Plan

The Air chapter of the Bay of Plenty Regional Natural Resources Plan ('**RNRP**') manages potential discharges to air, including those in the CMA. Because the Project involves the transportation of fine sediments including silt, there is a limited possibility that dredging activities may result in discharge of sediment to air. However, the nature of proposed dredging activities and its subsequent transport mean that the sediments are likely to be trapped or suspended in water and even drained sediments are likely to be very wet. This substantially limits the likelihood that sediment from the dredging activities will escape to air.

Permitted activities under the RNRP are listed in **Table 11**.

Table 11: Permitted activities under the Regional Natural Resources Plan

Rule number	Activity	Standards/terms/conditions
AIR-R1	Potential emission of fine sediments from in the process of transportation to disposal site.	(3) If the discharge is in the CMA the discharge must not be noxious or dangerous, offensive or objectionable or into coastal water.

4.6. OTHER RESOURCE CONSENTS REQUIRED

No aquaculture activities are to be undertaken.

No other resource consents are required.

5. EXISTING ENVIRONMENT

The information in this section relies on expert reports prepared as a part of the resource consent application and which are listed in the table of contents and appended to this document.

5.1. LOCATION

FTAA Schedule 5 Clause 5(1)(b) and Checklist A

The proposed maintenance dredging would take place in the portion of Te Awanui zoned 'Port' in the RCEP, which is located north of Tauranga City as shown on **Figure 2**. The areas requiring capital dredging are shown in **Figure 1**. The navigation channels to be dredged are located adjacent to the wharf. The berth pockets stop at the wharf face and the land titles stop at the back of the wharf. No properties with certificates of title are therefore directly affected by the Project.

Dredged material will be deposited at existing sites (**Figure 3**).

5.2. OWNERS AND OCCUPIERS OF LAND ADJACENT TO THE SITE

FTAA Schedule 5 Clause(5)(1)(d) and 5(6)

Owners of land adjacent to the Site are listed in **Table 12**. Maps showing the locations are included in **Appendix D**.

Table 12: Owners of adjacent land

Owner	Location	Title / Parcel ID
Port of Tauranga Limited	Mount Maunganui Wharves	SA69B/108 SA56C/547 SA50B/483 SA57C/279 SA30A/907 SA30A/906 SA30A/905 SA69B/108 SA56C/548 SA50C/624 SA15C/48 SA27C/938 SA55C/948 SA55C/944 742569 631110 SA27C/846 SA59B/647

Owner	Location	Title / Parcel ID
	Sulphur Point	SA67D/524 979964 SA69A/122 SA46B/265 979965 SA67D/525 SA44B/46 25516 1066167
Western Bay of Plenty District Council	Matakana Island	1030016 1030017 1030018 (local purpose reserve)
Tauranga City Council	Mauao	548396
	Mount Holiday Park	SA61D/711
	Mount Maunganui Beach	589622 SA24C/1032
	Leisure Island	SA61D/710
	Road parcels	7253877 4592034 4573646 4593076 4579675 459541 4574593 4593544 4574592 4593652 4574591 4597144 4589904 4597147 4574399 4569419
	Whareroa	606792 SA25A/371

Owner	Location	Title / Parcel ID
		4324246
	Aerodrome	505806
Whareroa Marae [redacted]	25 Taiaho Place, Mount Maunganui	462261 684386
[redacted]	27 Taiaho Place, Mount Maunganui	387937
Balance-Agri Nutrients Limited	161 Hewletts Road, Mount Maunganui	SA24C/658
NZTA	State Highway 2	4587754
The trustees for the time being of Mauao Trust	Mauao	515000
Her Majesty the Queen	Mount Maunganui Railway Yard	SA140/161
Cargood Holdings Limited	Tauranga Bridge Marina	104818
RMD Marine Limited	Ngawhetu Lane, Sulphur Point	776784
Sanford Limited	Ngawhetu Lane, Sulphur Point	1116490
Tumblehome Bay Limited	Ngawhetu Lane, Sulphur Point	776783

Occupiers of land adjacent to the Site are listed in **Table 13.**

Table 13: Occupiers of adjacent land

Occupier	Location	Title / Parcel ID
POTL	As per table above and the below (which is not an exhaustive list): • Tug Berth (Sailsbury Wharf) • Sulphur Point • Mount Wharves • Coastal occupation permit	As per table above
All occupiers of POTL's land being:	Varies	Varies
Graincorp Liquid Terminals NZ Limited	164 Hewletts Road, Mount Maunganui	

Occupier	Location	Title / Parcel ID
Genera Limited	Cargo Shed 9, Mount Wharf	
Miraka Limited	Cargo Shed 7 & office	
Nature's Flame Limited	Shed 5 & Shed 5 North	
TKL Logistics Limited	No. 1 Shed, Mount Wharf	
Zespri	No. 1 Shed, Mount Wharf	
Zespri	No. 1 Shed, Mount Wharf	
Zespri	No. 1 Shed, Mount Wharf	
Daltons	Bark shed	
Thompson Port Agency Limited	1st Floor office building Sth of Shed 3 - Mount Maunganui Wharf	
Z Energy Limited	Tasman Quay Fuelstop - Tasman Quay, Mount Maunganui	
Waitomo	Salisbury Avenue Fuel Stop	
AVA Timber LP	Log storage	
NZFM (2022) Limited Partnership	Log storage	
Pacific Forest Products Limited	Log storage	
Tenco Limited	Log storage	
Timberlands Limited	Log storage	
Timberlands Limited	Log storage	
Manulife	Log storage	
Fortuna Forest Products Limited	Log storage	
Ixom Operations Pty Limited	Tanker Berth	
BP Oil New Zealand Limited	Tanker Berth	
Downer EDI Works Limited	Tanker Berth	
Fulton Hogan Limited	Tanker Berth	
Mobil Oil New Zealand Limited	Tanker Berth	
Mobil Oil New Zealand Limited	Tanker Berth	
Terminals New Zealand Limited	Tanker Berth	
Terminals New Zealand Limited	Tanker Berth	

Occupier	Location	Title / Parcel ID
Nature's Flame Limited	Shed 4 - Mount Maunganui Wharf	
Fletcher Concrete & Infrastructure Limited	160 Hewletts Road, Mount Maunganui	
Stolthaven New Zealand Limited	252 Tasman Quay, Mount Maunganui	
Bulk Storage Terminals Limited	182 Totara Street, Mount Maunganui	
Champion Flour Milling Limited	114 Hull Road - Wheat shed	
Oji Fibre Solutions (NZ) Limited	Sheds 10, 16, 22&23 and 6	
Woodland Management Limited	100 Hull Road - Coolstore No 1, 2 & 3	
Seeka Limited	Totara Street Coolstore	
Ballance Agri-Nutrients Limited	Mount Maunganui Wharf	
Claymark Group Limited Partnership	9 Kereiti Street	
Sequal Lumber Limited	9 Kereiti Street	
Specialised Container Services (Tauranga) Limited	9 Kereiti Street	
Bunge New Zealand Operations Limited	Waimarie Street Bulk Grain store site	
ContainerCo (NZL) Limited	Waimarie Street Container yard (3.000ha)	
Genesis Energy Limited	Totara Street Bulkstore - Outfeed Conveyor System	
Marnco Limited	Totara Street Bulk Store	
Sanford Limited	3 Cross Road, Tauranga	
New Zealand Customs Service	71-73 Mirrielees Road, Tauranga	
Lineage NZ TRS Limited	Coldstore, Sulphur Point	
Fonterra Limited	Fonterra Port Stores	
Fonterra Limited	Fonterra Port Stores	
Quality Marshalling	Oceania House	
J Swap	Mount Maunganui Wharf Storage	

Occupier	Location	Title / Parcel ID
Pelco	Berth 5	
Qube Ports NZ Limited	Port Stevedore	
C 3 Limited	Port Stevedore	
3 Islands Intermodal	Port Stevedore	
Independent Stevedoring Limited	Port Stevedore	
Maersk	Shipping Line	
Cosco	Shipping Line	
CMA / CGM	Shipping Line	
One	Shipping Line	
PIL	Shipping Line	
MSC	Shipping Line	
Neptune Pacific	Shipping Line	
Swire	Shipping Line	
Kotahi		
Holders of coastal permits for swing moorings between the dredging footprint and the Tauranga Harbour Bridge	CMA	N/A
Holders of coastal permits for swing moorings between the dredging footprint and Pilot Bay	CMA	N/A
Tauranga Limited Bridge Marina Limited	CMA	N/A
Berth holders at Tauranga Bridge Marina	CMA	N/A
Tauranga City Council	Various including CMA: • Sailsbury Wharf (Mount Maunganui Ocean Sports Club) • Rock revetment (Mauao base track) • Stormwater outlets (Sulphur Point) • Wastewater infrastructure (Sulphur Point)	N/A

Occupier	Location	Title / Parcel ID
Ballance-Agri Nutrients Limited	Butters Landing / CMA (water intake and discharge)	631110
Heron Construction Co Limited	Consent for a pontoon and jetty in the CMA	
KiwiRail Holdings Limited	Sulphur Point and Mount Maunganui	SA44B/46 25516 SA140/161 SA69B/108 SA15B/977 SA3B/718 SA56C/548 SA50C/624
ONTRACK (NZ Railways Corp)	Sulphur Point and Mount Maunganui	SA44B/46 25516 SA140/161 SA69B/108 SA15B/977 SA3B/718 SA56C/548 SA50C/624

5.3. EXTANT CONSENTS

When considering the 'existing environment' from a planning perspective, it is important to take into account consents that have been granted but have not yet been given effect to (extant consents). An analysis of twenty-six (26) extant consents is included in **Appendix E**. All of the experts advising POTL have considered the implications of the extant consents for their analysis.

5.4. CULTURAL VALUES

The Tauranga region has a strong historical and current presence of Māori groups with strong associations with the receiving environment potentially affected by the Project. Waitangi Tribunal decisions and case law that provides an insight into the history and associations with the Project area are included in **Appendix F**.

According to the Te Kāhui Māngai website accessed on 6 March 2026 (TKM | Tauranga Moana | Te Kahui Mangai), four Iwi with overlapping rohe are recognised by the Crown in Tauranga Moana, namely Ngāti Pukenga, Ngāi te Rangi, Ngāti Ranginui and Ngā Pōtiki. Each Iwi has multiple hapū in their rohe and representative organisations with mandates to represent these iwi/hapu have also been established.

CVRs were received from the following groups:

1. Ngā Hapū ō Ngāti Ranginui Settlement Trust (**'NR Settlement Trust'**)

2. Ngā Pōtiki ā Tamapahore Trust (‘**Ngā Pōtiki**’)

3. Ngāi Tamarāwaho Tribal Authority Trust

4. Ngāi Tukairangi Hapu

5. Ngāti Hangarau Hapū Trust

6. Ngati Pukenga Iwi ki Tauranga Trust and Te Tāwharau o Ngāti Pūkenga (‘**Ngāti Pūkenga**)’

7. Ngāti Ranginui Fisheries Trust (‘**NR Fisheries Trust**’)

8. Ngāti Ranginui Iwi Society Incorporated (‘**NRI Inc Soc**’)

9. Tauranga Moana Iwi Customary Fisheries Trust (‘**TMICFT**’)

10. Te Kapu ō Waitaha (‘**TKOW**’)

11. Te Whānau ā Tauwhao ki Otawhiwhi Trust (‘Otawhiwhi’)

12. Pirirākau Tribal Authority

13. Ngāi Tamawhariua (ki Matakana)

14. Whānau a Tauwhao (ki Rangiwaea) & Te Ngare Hapū (Tauwhao & Te Ngare Hapū)

15. Ngāi Tuwhiwhia Hapū

Additional feedback (supplementary to CVRs) was received from Ngāi Tūkairangi Hapū and TMICFT. Non-CVR feedback was received from Tauranga Moana Advisory Group.

With regard to the CVRs received, some CVRs explicitly had a section on values, whereas others had values embedded throughout their kōrero. Values presented in the CVRs are summarised in Appendix D of **Appendix C1**.

The values most commonly included in the CVRs were **mauri**, **kaitiakitanga**, **mātauranga**, **kaimoana / mahinga kai mana**, and **whakapapa**[17]. The interconnections between the values and the impacts on the iwi/hapū of Tauranga Moana come through clearly in the CVRs and feedback, with how the values, places and effects are described and outlined together. The interconnection theme also runs through the values in how they are often linked to broader matters than those just specific to the POTL’s Project but are nonetheless tied together and related to the Project either directly or indirectly.

“***Mauri*** *is the life force and vitality of a system. … Mauri can be degraded by physical disturbance, contamination, habitat destruction, and by the cumulative effect of repeated interventions that, individually, may appear minor but collectively erode the resilience of the system (*N. Pūkenga*).*” The Pirirākau Tribal Authority describe mauri as “*The life-sustaining essence of Te Awanui as a living system. Mauri is not metaphorical. It is the measurable capacity of the harbour to sustain biological processes, support mahinga kai, and maintain ecological equilibrium*”. Ngāi Tuwhiwhia defined

[17] See Appendix C1

Mauri as "*the life force present within all things, and its condition reflects the health and integrity of the wider system*".

Kaitiakitanga is identified as a Ngā Pōtiki value "*that expresses the responsibility of Ngā Pōtiki to protect and enhance the mauri of taiao*". Ngāi Tukairangi describe kaitiakaitanga as "*The active practices of spiritual and physical tiaki, or guardianship… An obligatory value*" and state that "*Local iwi and hapū have a role as kaitiaki (guardians) of the harbour, responsible for its health and wellbeing.*" N. Hangarau describe "*active, intergenerational obligation to protect, monitor, and physically enhance the environment*". Pirirākau Tribal Authority describe Kaitiakitanga as "*The inherited, non-discretionary obligation to protect and enhance the receiving environment*". Ngāi Tuwhiwhia defines it as "*the intergenerational responsibility to protect, care for and sustain the wellbeing of Te Awanui and its associated taonga.*", and Ngāi Tuwhiwhia defines it as "*the intergenerational responsibility to protect, care for and sustain the wellbeing of Te Awanui and its associated taonga.*" "*For Pirirākau, kaitiakitanga is operationalised through active monitoring, management of access, and intervention when harm is identified. It requires the ability to act, not merely to observe*" (Pirirākau).

The Ngāti Ranginui Incorporated Society ('**NRI Inc Soc'**) identify **mātauranga** māori as: "*A legitimate and enduring environmental knowledge system developed through generations of continuous observation, interaction, and relationship with Te Awanui and the surrounding environments of Tauranga Moana.*" Ngāi Tamawharuia state that "*Mātauranga, therefore, is not simply knowledge about the environment; it is the means by which those relationships are understood, maintained, and enacted.*" The Pirirākau Tribal Authority refer to Mautaranga Pirirāku as "*Intergenerational knowledge of Te Awanui's seasonal patterns, species behaviour, sediment movement, and ecological indicators.*" The NR Fisheries Trust refer to Mātauranga Ranginui as "*Ngāti Ranginui knowledge systems, practices, and intergenerational knowledge transfer grounded in lived relationship with place.*"

Kaimoana is "*seafood; relationship with traditional and contemporary gathering, preparation and sustainability*" (NR Settlement Trust), and includes "*Culturally significant shellfish species e.g. tuangi, pipi and kūtai*" (Ngāi Tukairangi).

Ngāi Tuwhiwhia describe "**Mahinga kai** as "*a source of sustenance, cultural practice and the transmission of intergenerational knowledge*". Ngāti Hangarau describe Mahinga kai as "*Traditional Sustenance and Gathering: The rigorous safeguarding of our moana, estuarine and riverine habitats that support our customary fisheries, such as tuna, pipi, titiko, kanae and others.*" "*For Tauwhao, mahinga kai is central to manaakitanga, whanaungatanga, and the maintenance of ahikaa and of ones relationship with the moana.*" *(Tauwhao & Te Ngare)*.

Ngāi Tukairangi describe **whakapapa** as: "*Identity… connection to the whenua and moana*". Pirirākau state that "*The genealogical connection between Pirirākau, Te Awanui,and the species within it. Taonga species (dolphins, kororā,kuaka) are not merely ecological receptors; they are kin*.". Ngāi Tuwhiwhia describe whakapapa as "the network of relationships that connects people, whenua,moana, atua and tupuna".

5.5. HYDRODYNAMICS AND SEDIMENTATION

This section relies on information provided in an expert report by Dr Willem de Lange entitled '*Port of Tauranga Reconsenting Dredging impacts – Turbidity and morphodynamics*' (**Appendix G**).

Te Awanui was formed within the last 7,500 – 8,500 years, as a result of sea level rise since the last ice age. It consists of two basins: the northwest Katikati Basin and the southeast Tauranga Basin. These basins are on the western edge of the Central Volcanic Zone and are separated by a shallow interfluve between Matahui Point and Matakana Point that is only submerged around high tide.

The sediments of Te Awanui are largely a result of erosion from young volcanic deposits formed by eruptions within the Tauranga Volcanic Centre carried out to the coastal environment by rivers when the sea level was 100 – 120 m lower than at the present time. On top of this layer is sediment that was transported into the Harbour environment from offshore with some continuing contribution of terrestrial sediment by rivers.

Te Awanui has continued to develop into a more mature estuary since the sea level reached current levels around 7,000 years ago. This progression is quite slow compared to other New Zealand estuaries due to a limited supply of sediment and rising relative sea level in the Tauranga Basin caused by subsidence. This results in a strong tidal influence and sufficiently deep water at high tide to allow moderate wave action. This, in turn, results in the export of fine sediment from the intertidal and sub tidal areas and the accumulation of fine sediment is restricted to the Harbour margins.

Although the Katikati Basin and the Tauranga Basin are connected around high tide, numerical modelling and analysis of sediment transport pathways indicates that there is little exchange of water and sediment between the two basins.

Marine-dominated and terrestrial-dominated sediment movement is dynamic and highly influenced by storm surges and floods. A study in 2022 utilising a numerical model to examine the movement of sediment within Te Awanui shows that the transport of coarse and medium sand is predominantly confined to tidal channels and the flood tidal delta, while finer sediment is moved in shallower areas. The arrows in **Figure 21** indicate the range of sediment grain sizes transported between the different estuary regions. The different arrow ends may show transport of different sizes.



Figure 21: Conceptual model of the main sediment transport pathways in Te Awanui, based on sediment connectivity analysis.

Most of the material dredged in previous dredging campaigns has consisted of sand sized particles with low proportions of silt and clay. The sediment encountered during maintenance dredging tends to consist of recently deposited material and is likely to contain a higher concentration of silts and clays, and organic material, and may contain contaminants.

Panepane Point, an unstable sand spit located in high currents at the southernmost point of Matakana Island, on the northern side of the Harbour entrance, has experienced significant erosion and accretion as a result of dredging and natural evolutionary changes. The mobile sand at this location now drops off sharply.

5.6. AIRBORNE NOISE

Mr Jon Styles undertook measurements of the noise levels within Te Awanui between 21 October and 3 November 2023. These measurements characterise the ambient noise environment within the Harbour environment and set the baseline against which the noise generated by the Project is to be measured. A sound level meter was deployed on a coastal platform to the west of Salisbury Wharf (**Figure 22**). All measurement was undertaken in accordance with the relevant sections of NZS6801:2008 and NZS6802:2008. Long-term measurements on Matakana Island, Mauao and on land near Pilot Bay, were not possible due to access and security limitations. Mr Styles, therefore, estimated the ambient noise levels at these locations based on the measurements inside the Harbour.



Figure 22: Noise measurement location

The results show that:

- The ambient noise levels inside the Harbour during the day and night are generally elevated. Noise levels of between 50 dB L_{Aeq} and 65 dB L_{Aeq} are common during the day and nighttime period.
- The ambient noise levels inside the Harbour are occasionally as low as 45 dB L_{Aeq} (during day and night) when vessel traffic is low and meteorological and sea conditions are calm.

Both the RCEP and the Tauranga City Plan (**'TCP'**) acknowledge that port activities come along with the expectation of elevated noise levels. Mr Styles' measurements show that ambient noise is predominately made up of noise from vessel traffic and from commercial, recreation and port activities, when mild weather exists. Wind contributes to the noise levels on the 'noisiest' days.

5.7. UNDERWATER NOISE

Dr Matt Pine (Styles Group) undertook an assessment of underwater noise (**Appendix S**).

Dr Pine undertook several studies to assess the existing acoustic environment within and around the Harbour. These were:

- Passive acoustic monitoring within the Harbour.
- Vessel noise detection within the Harbour.
- Cumulative Automatic Identification System (**'AIS'**) traffic noise mapping within and outside the Harbour.

Dr Pine deployed autonomous recorders at two sites to provide data on the current soundscape of the area, including marine mammal presence.

Dr Pine concluded that the ambient soundscape within the Te Awanui is complex with a range of sound sources occurring simultaneously at any given time. Wind, waves and tides (causing sediment entrainment) were the primary contributor to the Harbour's geophony, while fish, marine mammals and snapping shrimp formed the Harbour's biophony. Vessel noise was the primary anthropogenic noise source. Relatively high levels of underwater noise inside the Port Zone were measured, commensurate with being near a busy port. The acoustic environment within the Port Zone is

dominated by vessel noise. Vessel engine noise from berthed ships (the nearest approximately 1 km away) remained a constant source of anthropogenic noise, particularly below 1 kilohertz.

5.8. WATER QUALITY

This section draws from information provided in '*Water quality aspects of Port of Tauranga dredging reconsenting*' authored by Dr Mike Stuart of Streamlined Environmental Limited, dated March 2026 (**Appendix I**).

The existing water quality is based on BOPRC's long-term water quality data from eight sites in Te Awanui and POTL's six long-term continuous turbidity monitoring stations in and around the shipping channel during dredging campaigns. Dr Stewart concludes that the water in the Te Awanui generally has turbidity and Total Suspended Solids (**'TSS'**) well below ecological effects thresholds. Water clarity is more variable across the Harbour, but at times, is well below the 1.6, threshold for all sites. Water temperature is consistent rarely above 20ºC or below 14ºC. Seawater is a good pH buffer, and pH at all sites never exceeds the maximum of 8.5 and minimum of 7.5 specified by Australian and New Zealand Environment and Conservation Council (**'ANZECC'**) (2000). Te Awanui sites are all generally well oxygenated.

Total Phosphorus concentrations are generally consistent and low across all Te Awanui sites, while dissolved phosphorous concentrations are more variable, but median values (0.001-0.004 mg/L) are below the ANZECC (2000) default trigger value of 0.005 mg/L at all sites. Maximum and upper quartile concentrations for urban sites (Toll Bridge Marina, Mt Maunganui, Maungatapu Bridge, and Waikareao) exceed the ANZECC (2000) default trigger value, suggesting at times elevated dissolved phosphorus at these urban sites.

Total Nitrogen concentrations are generally consistent across all Te Awanui sites with median concentrations (0.21-0.27 mg/L) below the ANZECC (2000) default trigger value (0.30 mg/L). The highest concentrations are observed at Waikareao and Tilby Point. Ammoniacal nitrogen and nitrate and nitrite nitrogen concentrations are consistently higher than guideline values. Elevated nutrients, especially nitrogen and those in the bioavailable form, i.e. dissolved nitrogen and nitrate nitrite nitrogen or ammoniacal nitrogen have the potential to cause estuarine eutrophication. However, this is not supported by measurements of chlorophyll a, with median concentrations at all sites (range 0.7-1.6 µg/L) well below the ANZECC (2000) default trigger value of 4.0 µg/L.

The ANZECC (2000) default trigger value chlorophyll a results show low susceptibility for Te Awanui to exhibit eutrophication, however the interim threshold values for New Zealand estuaries shows potentially slightly impacted ecological communities at three sites. For short residence time estuaries, Dr Stewart recommends that macroalgae are much better suited as primary symptom indicators of eutrophication. Dr Stewart reported on research showing the ecological quality status of the southern Harbour being graded as very poor and the northern Harbour as poor based on the total area coverage by macroalgae alone. The southern Harbour was graded as good overall and northern Harbour as very good overall, based on the percentage of affected habitat available to intertidal habitat.

Ent concentrations and Faecal coliforms are generally, with some exceptions, low in Te Awanui suggesting most of the time shellfish collection is safe for all sites, except Tilby Point.

Metals/metalloids were measured in water samples from Te Awanui collected by BOPRC during a 3-week period in 2019. Average metal/metalloid estuarine water concentrations were generally low and below the 2018 revision of the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (**'ANZG'**) 99% marine Default Guideline Value (**'DGV'**).

Emerging organic contaminants – namely representative chemicals from classes of flame retardants, plasticisers, surfactants, polyfluorinated alkyl substances (‘**PFAS**’), musk fragrances, pyrethroid insecticides, pesticides, pharmaceuticals, steroid estrogens, personal care products, wastewater markers, preservatives, antifouling agents, and UV filters - were measured in water and sediment from the same sites. An independent ecological risk assessment concluded that all water concentrations were below effects guidelines.

Dr Stewart reports that there appears to be low level PFAS contamination of soil in the industrial area near the Port, however Whareroa Marae and the Port (and other harbour sites) reported concentrations below ecological and/or human health effects levels.

Shellfish contaminant monitoring comparisons of these studies show:

- No change in the concentration of cadmium, chromium, mercury and zinc in oysters between 1990 and 2016;
- A reduction in lead concentrations since 1990;
- An increase in copper concentrations;
- An increase in polycyclic aromatic hydrocarbons concentrations in oysters, with the highest concentrations being around the city and Port areas;
- Organochlorine pesticide concentrations below detection limits;
- Dichlorodiphenyltrichloroethane (‘**DDT**’) levels in oysters dropped between 1990 and 2016;
- Polychlorinated biphenyls concentrations dropped between 1990 and 2016, with all samples being below detection limits in 2016;
- Tributyltin (‘**TBT**’) concentrations in oysters dropped significantly between 1990 and 2016, with the highest concentrations recorded around the Port area.

Dr Stewart concluded that toxicants measured in shellfish from Te Awanui in 1990 and 2016, and at Te Paritaha bank have all been reported at concentrations well below applicable Food Safety Australia New Zealand (‘**FSANZ**’) maximum limits, suggesting they are safe to eat.

5.9. SEDIMENT QUALITY

This section draws from information provided in ‘*Water quality aspects of Port of Tauranga dredging reconsenting*’ authored by Dr Mike Stuart of Streamlined Environmental Limited dated March 2026 (**Appendix I**).

BOPRC samples sediments in Te Awanui annually as a part of an ongoing monitoring programme. The aim of the BOPRC monitoring is to understand the health of the sediments and potential freshwater sources of contaminants to the Harbour. BOPRC monitors mud content, Total Organic Carbon (‘**TOC**’), heavy metals/metalloids and persistent organic pollutants (‘**POPs**’).

Dr Stewart calculated the ‘current state’ of sediment health by averaging the data from the five most recent data entries (typically the last five years) and comparing that to the relevant standard.

Dr Stewart concluded that information from BOPRC monitoring indicates that:

- All metal and metalloid concentrations were ‘well below’ the ANZG 2018 DGV;
- Sediments are largely composed of sand (between 63 – 94%) with virtually no gravel and some notable mud fractions at P1, P15, P29, P63, P64 and P65. Of these, P63 and P64 are within the proposed dredging channel;
- TOC concentrations are ‘generally low at all sites’, ranging from 0.25 – 0.87 g/100g;
- TN ranges from 250 – 980 mg/kg; and
- TP ranges from 78 – 292 mg/kg.

Temporal trends (since the early 1990's) of sediment quality metrics are summarised in **Table 14.** There were 23 significant and meaningful increases and 11 significant and meaningful decreases in sediment parameters, with one significant but not meaningful increase.

Table 14: Temporal trend of sediment quality from BOPRC monitoring sites

Significant increasing trends are bold arrows highlighted in red and meaningful decreasing trends are bolded arrows highlighted in blue. Non bold arrows indicate non-significant changes. (From water quality report prepared by Dr Mike Stewart)

Site	Site Name	% Mud	TN	TOC	TP	As	Cd	Cr	Cu	Hg	Ni	Pb	Zn
P61	Poi's	↑	→	↑	↑	↑	↑	↑	↓	↑	→	↑	↑
P49	Katikati	↑	→	↓	↑	↑	↓	↑	→	→	↓	↑	↑
P29	Te Puna	↑	↓	→	↓	↑	↑	↑	↓	→	↑	↓	↑
P23	Matua	→	→	↓	↓	↑	↑	↑	↓	↑	↑	↓	↑
P15	Waikareao	↓	↓	↑	→	↑	↑	↑	↑	→	↑	↑	↑
P62	Otumoetai	↑	→	↓	↓	↑	↑	↑	↑	↑	↑	↓	↑
P64	Waimapu	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
P63	Grace Rd	↑	↑	↑	↑	↑	→	↑	↑	↑	↑	↑	↑
P65	Welcome Bay	↑	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
P1	Rangataua Bay	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

Dr Stewart assessed the following other sediment quality data near the Port:

- POPs and Emerging Organic Contaminants from targeted sediment contaminant monitoring in 2019 (Section 2.4.4.1 of **Appendix I**);
- Metals measured for the Stella Passage development Assessment of Environmental Effects (**'AEE'**) (Section 2.4.4.2 of **Appendix I**);
- Sub-tidal sediment metal data collected for 45 sites in Te Awanui in 2016 (Clark et al., 2018) (Section 2.4.4.3 of **Appendix I**);
- POTL's targeted sediment monitoring at eight selected sites for this application (Section 2.4.5.1 of **Appendix I**); and
- Boffa Miskell's sampling at Te Paritaha (Section 2.4.5.2 of **Appendix I**).

In summary, Dr Stewart found that sediments at Te Awanui estuarine sites are typified by relatively high silt (mud) content and low TOC. Metal/metalloids and organic toxicants are generally low with most well below applicable ANZG DGVs.

5.10. MARINE ECOLOGY

Dr Sharon De Luca has provided an assessment of the state of the marine ecology in the southern basin of Te Awanui as a part of her assessment of effects on marine ecology (**Appendix J**). The areas of marine ecology that Dr De Luca covered in her assessment include seabed soft sediment (channel and adjacent to existing wharves), hardshore (reefs, wharves, and riprap), Te Paritaha pipi bed and sediment quality, estuary and seagrass adjacent to Whareroa marae, reef and soft sediment kaimoana, relocated boulder habitat from Tanea Reef, marine vegetation, fish, invasive species and the disposal field (including Motuotau subtidal reef).

Te Awanui and its surrounds are home to ten '*significant habitats of indigenous fauna*' as defined by the Bay of Plenty Regional Policy Statement (**'RPS'**). These are:

(1) Sandy offshore areas;
(2) Rocky reef of Moturiki and Motuotau;
(3) Margins of Mauao;
(4) Tanea Shelf;
(5) Pilot Bay Relocated Boulder Reef;
(6) Harbour Entrance Gorge;
(7) Western Channel;
(8) Centre Bank;
(9) Wharf Structures; and
(10) Seagrass Beds.

Dr De Luca reports that no taxa (nor ecosystem) present in the southern basin of Te Awanui are recognised as Threatened or At Risk or Naturally Uncommon apart from seagrass (*Zostera muelleri subsp. novazel*andica) which is an At Risk - Declining taxa (which some fish species use as a nursery ground) and marine mammals that are occasionally or seasonally present in the Harbour.

Dr De Luca concludes that the habitats within Te Awanui are '*typical of a working Port in a harbour/estuarine environment*'.

Te Awanui is comprised of fairly healthy subtidal communities with a 'good' ecological ranking. The sandy offshore areas outside of the Harbour comprise clean mobile sand and

naturally sparse marine fauna (the depauperate benthic invertebrate character of this type of habitat is typical on open sandy beaches). From intertidal beaches to subtidal (approximately 25 to 30 m depth) sand dollars (*Fellaster zelandiae*) and tuatua (*Paphies subtriangulata*) are commonly found along with sparse assemblages of molluscs, crustaceans, decapods and worms. Tuatua (*Paphies subtriangulata*) are often abundant (subject to their natural variability in space and time) in shallow water at low tide. Beyond 25-30 m depth the benthic habitat becomes more stable and more muddy.

Tanea shelf, located at the base of Mauao / Mount Maunganui, is a subtidal boulder reef that supports a diverse marine community. The reef has experienced a history of modification to reduce its extension into the main shipping channel and to support the use of the Port by larger ships. For the expansion of the Port of Tauranga shipping channel (during previous capital dredging programmes in 1991/1992 & 2015/2016, rock was removed from Tanea Shelf and relocated to the southern side of Mauao near Pilot Bay (**Figure 23**).



Figure 23: Boulder relocation areas

A 2010 survey concluded that the marine reef life had become similar to that expected in a natural reef in this area. The remaining section of Tanea shelf has also been recorded as a rich and diverse habitat, which has fully recovered from the disturbance of boulder removal since the dredging.

The rocky shores of **Mauao, Moturiki and Motuotau reefs,** within the Tauranga Moana Mātaitai Reserve, are wave-exposed, and support kaimoana such as pāua, kina, kōura and kūtai (green lipped mussel) and typical rocky shore species found on northeastern New Zealand shores. The shallow parts of Mauao, Moturiki and Motuotau reefs are dominated by kina (*Evechinus chloroticus*), which graze on marine algae. Kōura (*Jasus edwarsii*) and kūtai (*Perna canaliculus*) are also present. Where the reefs are deeper than approximately 15 m, sponges, sea squirts (ascidians), bryozoans, anemones and red seaweeds are common.

The **Harbour Entrance Gorge** is approximately 36 m deep. The sandy subtidal habitat comprises dead pipi (*Paphies australis)* shells, live adult pipi, hermit crabs and gastropods.

The subtidal substrate in the **Western Channel** also comprises largely dead pipi shell and sand with live large pipi.

The study site for the survey of kaimoana at **Panepane Point** in 2023 found no taonga rocky reef species such as kina, kūtai, pūpū, pāua, or koura. Pipi are expected to be present, however the densities are difficult to determine, based on the drop camera images provided.

Stella Passage's marine species assemblages are relatively stable over time despite a number of capital dredging campaigns. The **wharf structures** at Mt Maunganui and Sulphur Point have high marine biodiversity (including a range of anemones, barnacles, sponges, seasquirts and hydroids). Juvenile crayfish are known to settle in the structures, moving to the Harbour entrance and to the offshore reefs when adults.

Te Paritaha shellbank is a significant kaimoana collecting ground for pipi (*Paphies australis*). Juvenile pipi settle on the intertidal sand of Te Paritaha and migrate as adults to the subtidal populations. Long term monitoring of Te Paritaha has been undertaken since 2015 as part of the Kaimoana Restoration Programme, including in relation to a range of kaimoana species. Available data shows sediment and pipi tissue contaminant concentrations are consistently below relevant guideline values, and hydrodynamic modelling indicates dredge induced suspended sediment plumes are contained to the mixing zone and do not extend to Te Paritaha at ecologically significant levels. Multi-year monitoring of pipi populations, including at Te Paritaha, demonstrates that observed fluctuations are consistent with natural recruitment and life-cycle dynamics, and are not attributable to dredging activities.

Marine vegetation consists of marine macroalgae/seaweeds, sea lettuce (*Ulva sp.*) and seagrass (*Zostera Muelleri*). The hard structures in the Harbour, such as existing rocks and concrete sides, support attached species of **seaweeds**. **Sea lettuce**, a naturally occurring green algae that is common in Te Awanui, are particularly prevalent in the southern Harbour, potentially driven by higher inputs of nutrients from rivers and streams.

The **seagrass** beds present in Te Awanui are the largest remaining seagrass beds in the Bay of Plenty. Seagrass has been declining in Te Awanui for decades, until 2024 when BOPRC reported an increase in seagrass extent.

The Port area has consistently supported species diversity and significant populations of adult fish, particularly kahawai. Species detected in 2019 included eagle ray, snapper, trevally, kingfish, gurnard (*Chelidonichthys kumu*), kahawai, parore, and spotty (*Notolabrus celidotus*). Fish populations differed significantly across reef locations and water depth, with the highest species richness and diversity at the offshore reefs compared to the unprotected Motiti Island reef sites. Diadromous fish in Waipu Bay and surrounding estuary include short (*Anguilla australis*) and long fin eel (*Anguilla dieffenbachii*) (At Risk – Declining) (tuna).

Recreational fishing is popular, and shark populations suggest a stable pelagic food web.

5.11. MARINE MAMMALS

In her report prepared for this resource consent application (**Appendix K**), Dr Helen McConnell describes the marine mammal presence and habitat along the coast from the north end of Waihi Beach to a point just east of Maketu, including a 20 km buffer offshore, which she defines as the Area of Interest ('**AOI**') for her assessment (**Figure 24**).

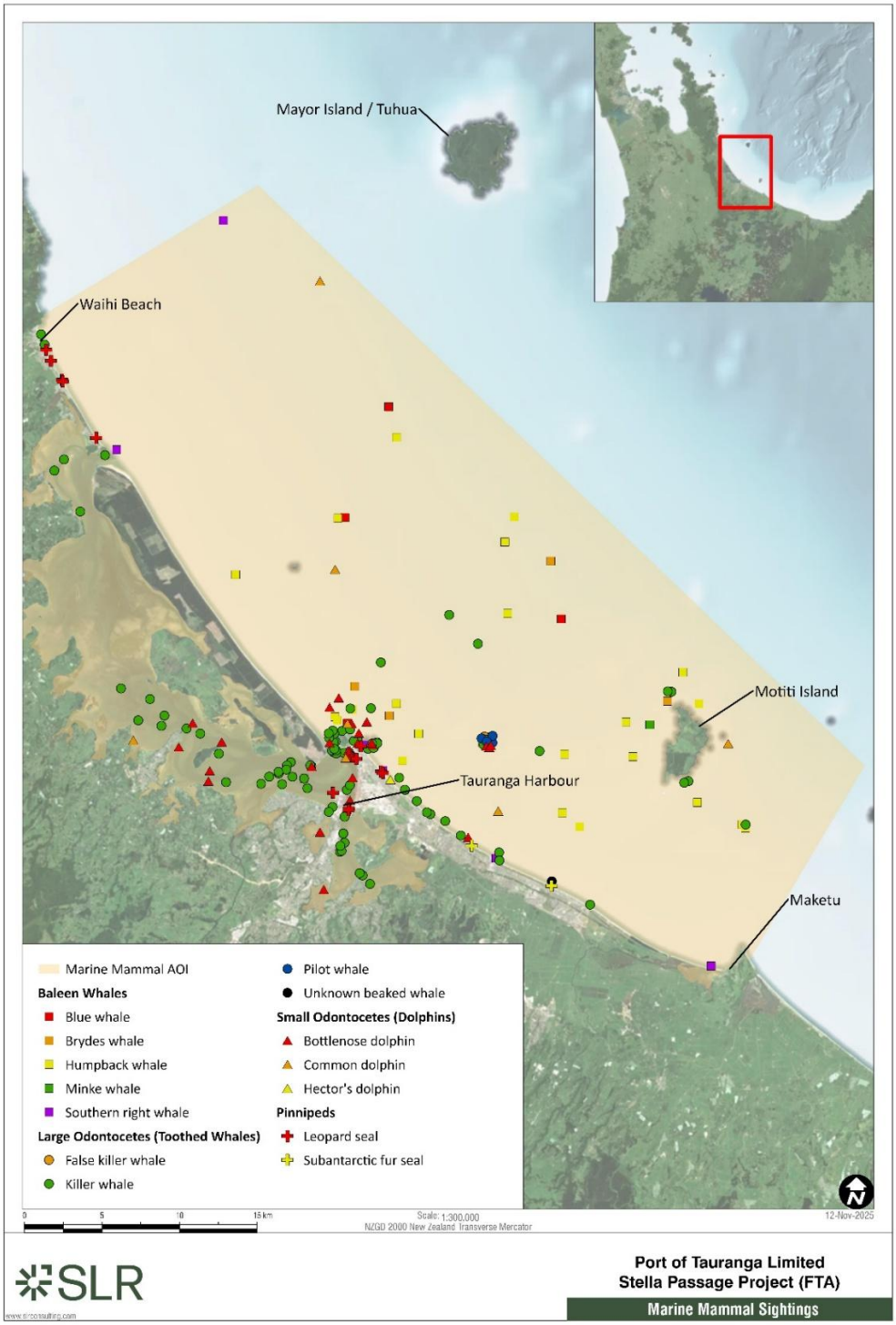


Figure 24: Area of Interest, showing reported marine mammal sightings

Dr McConnell's survey of sightings, strandings, habitat modelling, knowledge of species distributions and acoustic monitoring found that the following species of marine mammals could possibly occur in the AOI:

- Bottlenose Dolphin
- Killer Whale
- New Zealand Fur Seal

- Common Dolphin
- Humpback Whale
- Southern Right Whale
- Leopard Seal
- Long-finned Pilot Whale
- Gray's Beaked Whale
- False Killer Whale
- Bryde's Whale
- Minke Whale
- Blue Whale, and
- Sei Whale.

Dr McConnell's assessment of the available data suggests that marine mammals are not resident in Te Awanui, but do occur 'relatively infrequently' inside the Harbour limits. However, bottlenose dolphins, killer whales and New Zealand fur seals occur within Te Awanui as seasonal visitors in the winter and spring. These three species, along with common dolphins, have a regular presence outside of Te Awanui where the rate of sightings is higher. Dr McConnell indicates that while whale migration occurs throughout the Bay of Plenty region, mostly whales travel in waters with a depth greater than 30 m, with only southern right whales known to spend time close to shore during migrations. This indicates that by and large whales are unlikely to travel into Te Awanui.

Of the species that are naturally present within the AOI, six are listed in the New Zealand Threat Classification System as 'Threatened' or 'At Risk'. These include three threatened species; being: bottlenose dolphin, killer whale and brydes whale and three At Risk species: southern right whale, leopard seal and the false killer whale. Further, humpback whales, blue whales and sei whales are listed as threatened under the International Union for Conservation of Nature.

5.12. AVIFAUNA

Dr Della Bennet (Wildlands) undertook an '*Assessment of potential effects on marine avifauna due to channel dredging at the Port of Tauranga*' dated March 2026 (**Appendix P**).

Te Awanui is of international significance for migratory and coastal seabirds. The tidal flats provide high tide roosts for many coastal foraging birds that forage on or within the water column and some of which nest within Te Awanui or the coastal islands. The Port land and structures also provide roosting and nesting habitat for (**Figure 25**):

- kororā/northern blue penguin (*Eudyptula minor iredalei*, At Risk - Declining; nesting in rock wall burrows/crevices at Mt Maunganui),
- tarāpunga/red-billed gull (*Chroicocephalus novaehollandiae scopulinus*, At Risk – Declining; nests/roosts on a rock wall at Mt Maunganui and periodically at the Sulphur Point sand pile),
- tarapirohe/black-fronted tern/ (*Chlidonias albostriatus*, Threatened – Nationally Endangered, Sulphur Point sand pile),
- kāruhiruhi/pied shag (*Phalacrocorax varius varius*, At Risk – Recovering; roosts/nests on wharfs and pylons piles), and
- karoro/southern black-backed gull (*Larus dominicanus dominicanus*, Not Threatened; roosts/nests on structures and roofs, and is a predator of eggs and chicks of other species).

Matakana Island is Aotearoa New Zealand's largest sand bar island and is a Wildlife Refuge. Tahunamanu Spit/Island provides breeding habitat for taranui/Caspian tern (*Hydroprogne caspia*, Threatened – Nationally Vulnerable). There is a significant breeding site for tuturiwhatu/New Zealand dotterel (*Charadrius obscurus aquilonius*) at Panepane Point, at the eastern end of the island. With recent erosion at Panepane Point, nests have an increased risk of flooding during high tides and storm events.

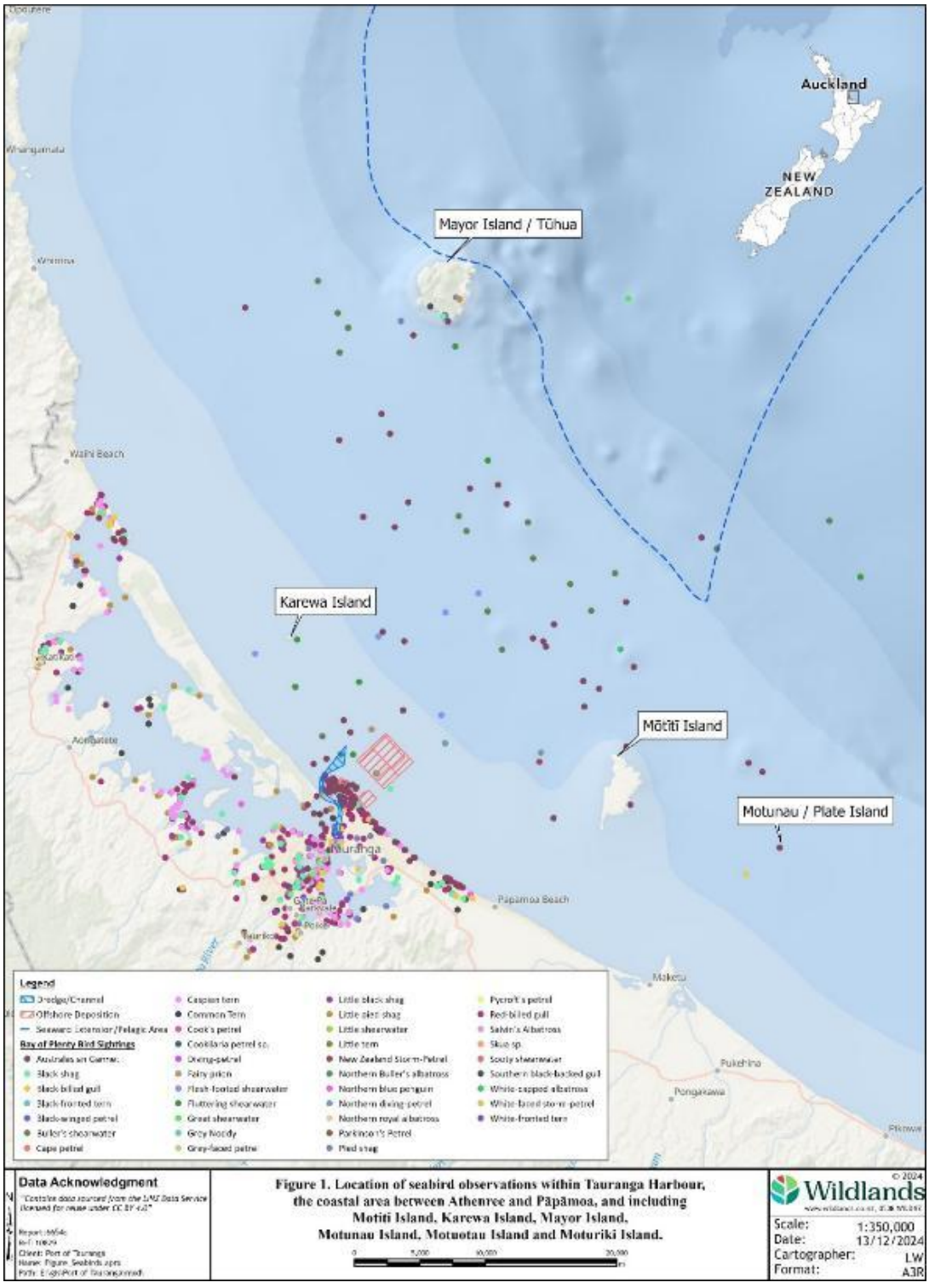


Figure 25: Location of seabird observations

5.13. BIOSECURITY

Cawthron (Dr Lauren Fletcher and Dr Patrick Cahill) assessed the effects of the Project on biodiversity (**Appendix L**). Biosecurity in Aotearoa New Zealand is primarily managed by the Ministry for Primary Industries through the Biosecurity Act 1993 (**'the Biosecurity Act'**). Under the Biosecurity Act, the Ministry for Primary Industries manages activities that may result in the importation of non-indigenous species **('NIS')**; this includes surveillance at high-risk points of entry such as shipping ports.

Under the Biosecurity Act, there are 12 species listed as '*notifiable organisms*' which means that the species has a history of habitat invasion around the world, is known to significantly impact indigenous ecosystems, and is considered capable of successfully inhabiting Aotearoa New Zealand coastal waters. Of these, there are five which are already established in Aotearoa New Zealand. Three of these species – Asian kelp (*Undaria pinnatifida*), the Clubbed tunicate (*Styela clava*) and the Mediterranean fanworm (*Sabella spallanzanii*) have been recorded in Te Awanui. In addition to this, Asian brown mussel (*Perna perna*) and Asian shore crab (*Hemigrapsus sanguineus*) which are specified on Biosecurity New Zealand's list of priority pest and diseases of biosecurity have also been recorded in Te Awanui.

Commercial shipping ports are recognised as high-risk areas for the introduction for NIS. A 2005 baseline biological survey of Te Awanui found out of 264 recorded species, 177 were indigenous, 9 were non-indigenous, and 43 were of unknown origin. Most of the NIS recorded are likely to have been introduced accidentally by international shipping.

Te Awanui has been included in the National Marine High Risk Site Surveillance (**'NMHRSS'**) programme since 2002. The programme engages in 6-monthly surveys with the intention of detecting primary and secondary target species. Since the baseline survey in 2002, NMHRSS and other surveys have found four secondary target species and a further 32 non-target NIS in Te Awanui.

Cawthron's conclusion from these survey results is that '*when collated, these sources indicate that marine NIS are relatively widespread within the southern basin of the harbour*'.

Cawthron notes specifically the sporadic detections of Mediterranean Fanworm in Te Awanui since 2013 – several worms were detected by NMHRSS surveys between May 2014 and November 2016 and 81 worms were found on the seafloor in Pilot Bay in 2023 that are suspected to have resulted from in-water cleaning of a recreational boat hull. The worms have since been removed by BOPRC dive teams and further surveillance and remediation is ongoing. However, Cawthron indicates that '*this finding illustrates the challenges in preventing establishment of pest species that are present in neighbouring regions, particularly those that are highly connected through anthropogenic vectors such as vessel traffic.*'

Cawthron concludes that: '*When compared to other major shipping ports in Aotearoa New Zealand, Port of Tauranga appears to have had similar rates of marine NIS introduction.*'

5.14. NAVIGATION

Mr Geraint Bermingham from Navigatus Consulting (**Appendix O**) explains that the ability of vessels to navigate into and within Te Awanui is, in addition to the physical channels, dependent on environmental conditions, such as seasonal weather patterns and tidal streams.

Mr Bermingham describes the entrance to Te Awanui as highly sensitive to wave conditions, which he explains can be challenging, because the swell has a strong easterly component which reduces under-keel clearance. Large swells, especially from the north-east, can cause treacherous conditions, especially on the ebb-tide. The inner Harbour is protected from ocean swells by Matakana Island and Mt Maunganui. Within this enclosed area, the prevailing westerly wind can generate slight wave heights of 0.5 to 1.25 m, which can be hazardous to small vessels.

Mr Bermingham records that visibility is generally good with reports of reduced visibility being relatively uncommon. Heavy rain and squally showers are the most likely condition to impact visibility.

POTL uses Portable Pilot Units ('**PPU**'), a navigational aid system that allows pilots to have greater information during adverse meteorological conditions, hours of darkness or due to the size of the larger vessels provide situation awareness information. The PPU aids navigating the shipping channels. PPUs provide up to date bathymetry to the pilot and an accurate location and speed of the vessel in real time. POTL also has AIS data which monitors and tracks vessels and allows for POTL to give feedback to pilots to ensure good habits and appropriate margins of safety are being maintained.

Aids to Navigation (infrastructure in Te Awanui) is described in detail in **Appendix O**. This includes leads, prominent marks and cardinals which Mr Bermingham describes as '*well designed and in good condition*.' Aids to Navigation infrastructure across the pilotage area are in conformance with standard national and international conventions. The main navigation channel is easily distinguished from minor side channels at night by the differentiation of light phasing. The channel centrelines are marked with a transit of two prominent navigation marks, each lit with either a fixed of flashing light and sectored directional lights. The Maunganui Roads and Stella Passage do not have leading lights, but the design and spacing of lateral marks allow for people to maintain situational awareness.

Te Awanui is utilised by the following types of commercial vessels:

- Large commercial vessels: This includes bulk carriers and container ships conducting import and export shipping. These vessels are piloted by POTL marine pilots. The largest of these vessels is the Maersk 'S-Class' container ship (347 m Length Overall, 43 beam and 14.5 m draught).
- Cruise ships: These are some of the largest ships handled across the world. They operate commercial tourism activities and may have thousands of passengers onboard. These ships are piloted by POTL marine pilots and have experienced bridge teams. The largest cruise ship to visit Tauranga is the Ovation of the Seas (348 m long, 49 m beam and 8.5 m draught).
- Small commercial vessels: These include vessels such as coastal and small international vessels such as tankers. These may be piloted by POTL marine pilots, or may hold a pilot exemption certificate granted by Maritime New Zealand and endorsed by the Harbour Master.
- Local commercial vessels: Small, locally operated commercial vessels that call at various locations around Te Awanui. This includes local fishing vessels, charter operators, water taxis and other small vessels used commercially. Generally, these vessels are small enough that they do not meet the threshold for compulsory pilotage.

5.15. RECREATION

This section relies on information provided in a report prepared by Mr Rob Greenaway of Rob Greenaway & Associates, titled '*Port of Tauranga Reconsenting Project Channel Dredging Recreation Effects Assessment*' (**Appendix Q**).

Te Awanui is treasured for its natural values, shelter (within the Harbour), accessibility, ability to be used for a wide variety of recreation activities (including commercial recreation), and the quality of the waves on the exposed coast and is therefore used extensively for recreation. The recreation activities of interest are:

- Swimming and diving,
- Boating, including sailing, power boating, fishing from boats and small boat activities, such as rowing, waka ama, kayaking, personal watercraft and stand-up paddle boards (mooring areas are shown in **Figure 26**),
- Fishing and shellfishing
- Beach activities, and
- Surfing.



Figure 26: Mooring areas, BOPRC Geographic Information System

Mr Greenaway states that AIS records for pleasure craft in and around Te Awanui indicate the main movements of recreational vessels are between the Harbour entrance and north

towards the Coromandel and Great Mercury Island, to Mayor Island and to several fishing and diving locations including Astrolabe, Motunau, east of Mayor Island and north of Karewa Island.

Species caught within and at the entrance of Te Awanui are predominately snapper, but also kingfish and baitfish.

Surfing is a popular recreational activity around Te Awanui with five regionally significant surf breaks around Te Awanui. Diving sites near the study area include Mayor Island, Karewa Island, Motiti Island, Penguin Shoal, Pudney Rock and Okaparu Rock.

5.16. LANDSCAPE AND NATURAL CHARACTER

Mr Stephen Brown prepared a Landscape Report (**Appendix N**) that includes a description of the current values of Tauranga Moana and the Pacific Ocean that could be affected by the Project, together with the Port area that it supports. Mr Brown's descriptions are designed to provide a general appreciation of the dredging and deposition areas, while also highlighting factors / matters that are relevant to his assessment of effects of the Project on landscape features and values.

The Port environment is made up of a typical 'hard-edged' industrial marine premises. The daily movements of container ships, log ships, fuel carriers and cruise liners contribute to a feeling of a busy port environment when looking at the area of proposed dredging.

The deposition areas employed by POTL (**Figure 3**) are part of the open ocean and are framed by ocean swells and surf close to the Maunganui beachfront. The shifting ocean is only interrupted by waves and surf. Elevated views from Mauao or from Moturiki Island or parts of the Marine Parade Reserve reveal some of the features below the surface of the sea, including volcanic reefs around the base of Mauao and the islands off Maunganui Beach below the surface of the ocean. The area makes up a mix of natural, industrial and residential uses that flow from one to another.

The peninsula of Sulphur Point is made up of reclaimed land that was started in 1969 in order to establish a port on the Tauranga side of the Harbour. This area now covers approximately 95 hectares. This landform is now dominated by POTL's container terminal, which extends from Mirrielees Road to the northern end of Sulphur Point. A variety of maritime operations such as vessel haul out facilities, repair yards, a ferry/barge landing and engineering workshops exist between the terminal and Te Awanui Drive. The Port's container terminal dominates the local landscape and the industrial, maritime and bulk retail features of the area further contribute to a utilitarian character. The trees and open space along the Marine Park, wastewater plant and other areas of shoreline help to screen the container terminal and the industrial areas, allowing some element of transition between the industrial character and the more natural values of Te Awanui.

Figure 27 presents the planning overlays in the RCEP at the Site. This includes three Outstanding Natural Features and Landscapes ('**ONFL**') being: ONFL 3 (Te Awanui), ONFL 5 (Matakana Island) and ONFL 10 (Mauao and Motuotau Island).



Figure 27: Outstanding natural features and landscapes

Further, two Areas of Significant Cultural Value ('**ASCV**') abut the Port's exclusive occupation area (**Figure 28**). These are: ASCV 4A (Te Paritaha) and ASCV 6 (Mauao, Moturiki Island and Motuotau Island Marine Area).



Figure 28: Areas of Significant Cultural values

There are also three regionally significant surf breaks within the immediate area of proposed dredging and disposal and two additional regionally significant surf breaks within the broader Port area.

Mr Brown's assessment of the natural character values for Stella Passage is Very Low to Moderate. Maunganui Roads and Harbour Entrance have a low natural character value for bathymetry / geomorphology, moderate for water quality, ecology and habitats and low for mammals. The deposition fields have a low natural character value for bathymetry / geomorphology, high to very high for water quality, ecology, habitats and mammals. **Table 15** summarises Mr Brown's assessment of the landscape, perceived natural character and amenity values of locations of significance around the navigational channel and deposition areas.

Table 15: Landscape, perceived natural character and amenity values of locations of significance

	Values rating		
	Landscape	**Perceived Natural Character**	**Amenity**
Whareroa Marae	Low	Very Low	Low
Mt Maunganui's Main Residential Areas	**Low** (the Harbour) / **Very High** (ocean)	**Very Low** (the Harbour) / **High** (ocean)	**Low-Moderate** (the Harbour) / **Very High** (ocean)
Pilot Bay	**Moderate-High**	**Low-Moderate**	**High**
Mauao	High	Moderate	High
The Western Side of Sulphur Point and its Marine Park	Low	Low	Low
Otūmoetai	**Moderate-High**	Low	**Moderate-High**
Te Paritaha o Te Awanui	**Moderate-High**	**Low-Moderate**	**Moderate-High**
Panepane Point and Matakana Island	**High**	**Moderate**	**High**
ONFLs 3, 5 and 10	High to very high		
ASCV-4a & ASCV-6	Low-moderate-high		

At nighttime, Stella Passage remains visually defined by the lighting on both the Maunganui and Sulphur Point wharves, including that on the container terminal's cranes and the ships berthed at the Port. Looking offshore from Main and Maunganui Beaches, this situation is somewhat different, with the nighttime seascape and night sky of the Pacific Ocean contrasting very markedly with the lighting found down Marine Parade and behind it. Yet, ships also sit offshore at nighttime, so that these 'islands' of light contrast with the 'dark sky' nature of most of the actual sea area.

5.17. ECONOMICS

Mr Peter Clough from the New Zealand Institute of Economic Research ('**NZIER**') prepared a report titled: "*Maintain channels for growth: Economic effects of dredging at Tauranga harbour*" dated February 2026 (**Appendix M**).

Mr Clough notes on page 6 of **Appendix M** that: "*The POTL plays an important role in facilitating trade, handling 51% of total value and 40% of gross weight of New Zealand*

merchandise exports each year. In the year ending June 2025, Tauranga was the largest port by container throughput (40% of New Zealand's total) and the largest port by bulk trade (with 26% of New Zealand's total). It had the largest number of ship visits of any port in the country for these two categories of freight (18% of New Zealand's bulk ship visits and 27% of container ship visits and also has the largest area of port operating land and largest container terminal area of any port in New Zealand. POTL and Northport are the only ports that currently accommodate ships of 14.5 m draught."

According to Deloitte's Ports and Freight Handbook (2025), in year ending March 2024 there were around 624 ship visits to POTL's container terminal, and 617 bulk cargo ship visits. This is equivalent to roughly two ships a day on average at the container terminal. The Port currently handles about 1.18 million Twenty -Foot Equivalent Unit (**'TEU')** per year[18].

The Port occupies a central location in Tauranga City, the largest city in the Bay of Plenty region. Tauranga City has experienced sustained growth greater than the national average on many key metrics. It has achieved higher than national rates of growth in population, total, per capita income, and total job numbers.

POTL is a substantial presence in the context of Tauranga's economy but its significance goes far beyond the value of its own operations. The value of infrastructure is in supporting other industries to create their own value. The value of the goods crossing the wharf at Tauranga, and the value added they generate with further transformation and use in New Zealand, would be a more complete measure of the value of the Port to New Zealand, compared to which POTL's revenues are only a small contribution.

For the year ending in March 2024, POTL employed 279 people, which would account for about 7% of the transport and logistics sector's employment within Tauranga and about 0.3% of national employment that year. Taking contractors into account, POTL's direct labour generation in the local economy could be more than double that recorded. However, Mr Clough indicates that when including occupations connected to the Port as contractors, the direct labour generation from POTL's operations could be more than double the figure indicated by the employment numbers alone.

POTL's 2024 annual report records operating revenues of $417 million and operating expenses of $219 million. These are rough comparisons as revenue is a gross figure, whereas Gross Domestic Product (**'GDP'**) or economic value added is the net of inputs used up, and operating expenses are not all spent within Tauranga. POTL's declared profit of $117 million and its employee expenses of $54 million equate to 1.5% of Tauranga's GDP.

[18] Deloitte's Ports and Freight Handbook (2024)

6. BENEFITS

Regional or national benefits are material in relation to the purpose of the FTAA and decision-making criteria under it.

The purpose of the proposed capital dredging is to allow the most efficient use of existing and proposed wharves by enabling the deeper draught container ships that can already transit the channel to berth alongside wharves currently not yet developed. The proposed works are beneficial to efficient operations and safety, allowing greater utilisation of available wharf space.

6.1. ECONOMIC BENEFITS AND OPPORTUNITY COSTS

In "*Maintaining channels for growth. A report for Port of Tauranga Limited*" (**'the Economic Report'**) NZIER assesses the economic effects of granting consents for POTL's capital and maintenance dredging, or alternatively of not granting them (**Appendix M**).

The economic benefits under the FTAA are principally about impacts on the measured economy but include economic consequences for activities into the future for other activities that benefit from the infrastructure it provides. The economic benefits of the Project lies not in the dredging itself, but in its contribution to the efficient functioning of the Port and its impact on the economy. The focus of the economic case is, therefore, that there is a significant opportunity cost of dredging consents not being granted.

Ships are becoming larger, capable of carrying larger loads, more fuel efficient and also faster. As ships increase in size, the cost per unit freight carried reduces compared to older, smaller ships. POTL's planned wharf extensions (consented as part of the Stella Passage Project) and associated land-side infrastructure is intended to enable the Tauranga Container Terminal to increase its capacity to around 2.6 million TEUs per year. Capital and maintenance dredging is crucial to create and maintain the depth and width in the shipping channels to allow access at all states of the tide by the largest ships currently visiting the Port and expected to predominate in future trade: 347 m length, 48 m beam and 14.5 m draught. In an earlier NZIER report on Economic impact of wharf expansion (2023)[19], NZIER used computable general equilibrium (**'CGE'**) modelling to estimate the inter-industry effects of constraints on the capacity of Tauranga to handle expected growth in freight flows. Although the current application's limited capital and mainly maintenance dredging will have different effects, NZIER refers to this earlier modelling as indicative of the economic impact of constraints on Port access and operations which detract from the planned benefits of wharf expansion.

NZIER states that they have used their CGE model of the regional and national economies (**Appendix M** page 12) "*to estimate the impact in ten years if there were no wharf expansion. This modelling allows the flow on effects of the investment, or the opportunity costs of non-investment, to be captured across the regions and sectors of the New Zealand economy. Estimates of changes in economic activity derived from this CGE modelling account for offsetting effects caused by an increase in one activity having adverse effects on another (e.g. increased demand for inputs by the new industry increasing the input's price and hence costs to other industries that use it, to the detriment of their profitability, production and future investment capability). Any values cited are therefore estimates of net (not gross) scale of economic impact.*"

Without continued channel dredging, the Port expansion will be restrained, and even current levels of activity will not be able to be sustained in future as channel sedimentation occurs, narrowing the channel at critical points to restrict ship movements. Dr de Lange (**Appendix**

[19] NZIER (2023). Economic impact of the wharf capacity constraint on the regional economies. A report for Port of Tauranga Ltd.

G) explains that if maintenance dredging were to cease and the maximum rate of observed sedimentation were sustained, after five years around 50% of vessels currently visiting POTL would be confined to accessing around high tide, and eventually it is likely that the majority of vessels accessing the Port currently would not be able to enter the Port. The NZIER report estimates the potential size of economic value at stake.

NZIER states that: "*The sectors most affected by failure of expansion limiting annual volumes to 1.4 million TEU would be dairy products, fruit and vegetables, meat products, wine and oil products, with a loss of labour income of $60 million for the dairy industry nationwide. If limited to 1.3 million TEU, loss of labour income by sector would be higher at $89.2 million.*"

The 2023 CGE modelling results indicate a high opportunity cost for the New Zealand economy from POTL not getting full use out of its expansion of the wharf. But the same issue of inability to make full use of infrastructure also applies to the **existing** wharf, regardless of whether or when wharf extensions occur. The absence of maintenance dredging over five years creates a constraint on access to the wharf, limiting access to only some states of the tide, especially for larger ships. That is a constraint to a substantial part of New Zealand's port infrastructure, the avoidance of which would be consistent with the purpose of the FTAA.

The extent of the constraint in the event that dredging cannot be undertaken depends on a range of variable factors which are discussed in **Appendix M**. The key point is that without maintenance dredging being consented, there will be significant restrictions to ships being able to access the Port of Tauranga within five years, and eventually the Port is likely to be rendered unusable by the majority of vessels that access the Port today. The key economic benefit of granting the Application, therefore, is the significant national and regional benefit of being able to continue to use the existing infrastructure of the Port for the purposes of imports and exports, and to enable the use of the Stella Passage development extension, if that consent is granted.

NZIER also discusses that even if cargo is diverted to other ports in New Zealand due to loss of capacity at Tauranga, increased costs of inland travel and/or warehousing is expected.

The benefits of the proposed capital and maintenance dredging lie in it enabling the efficient functioning of the Port and the impact of the Port's functions on the economy.

Capital and maintenance dredging is crucial to create and maintain the depth and width in the shipping channels to allow access at all stages of the tide by the largest ships currently visiting the Port, and those expected to predominate in future trade.

Without the Project:

- Large ships initially and subsequently smaller ones will be constrained in accessing the Port, particularly if arriving or departing well laden. Constraints may initially be limited to access during periods on either side of high tide reducing the speed of ship turnaround, and ultimately to any time;
- The delays in access for ships will result in delays in moving produce in or out of the Port, restricting the timeliness and value of goods moved;
- Annual volumes of exports through the Port will reduce;
- The Port would be unable to improve compliance with regulatory imperatives around reducing environmental impacts of emissions per tonne-km, both greenhouse gas emissions that affect global atmosphere and climate, and emissions of pollutants that affect local air quality and water quality.

The consequential economic effects of not consenting the Project are:

- Annual GDP across New Zealand would be lower[20];
- A reduction in the positive direct economic impacts (incomes for local businesses, employees and contractors supplying dredging services), leading to a reduction productivity, profitability and ability to invest in future business expansion, and adverse effects on community wellbeing;
- Adverse effects on the dairy sector, fruit and vegetable sector, meat producers, and wine and oil producers, with a significant loss of labour income for the dairy industry nationwide. Even if cargo is diverted to other ports in New Zealand due to loss of capacity at Tauranga, increased costs of inland travel and/or warehousing are expected; and
- Increased costs for shipping companies being translated into higher freight fees for customers transporting goods through the Port.

CVRs (**Appendix F**) from Ngāti Ranginui Fisheries Trust, Ngāti Hangarau, Ngāti Pūkenga and Ngāi Tukairangi include specific references to the economics report. The themes of the issues raised in the CVRs fall under the broad headings of issues around the analysis, omissions of potential impacts, and the distribution and equity considerations. NZIER respond to the concerns raised in Section 4.2 of their report (**Appendix M**).

Ngāti Pūkenga and Ngāi Tukairangi's concerns relate to the framing of the report's analysis. NZIER's analysis is built around results of CGE modelling which "*can estimate effects across the wider economy and account for changes in input prices and allocation of resources across sectors resulting from change in economic activity stimulated by the port*" (**Appendix M**). An alternative analysis framework that aligns more with the approaches suggested in the CVRs is cost benefit analysis which "*focuses on direct impacts of a project and, in principle, can be extended to include a range of effects on the natural environment*". NZIER opines (see section 1.1.1 of **Appendix M**) that cost benefit analysis is not as reliable as CGE in estimating inter-industry flows which are the main economic impact of preserving the capacity of the Port.

6.2. OTHER PROJECT BENEFITS

Economic costs of trade diversion include not just the additional resource costs of carriage to more distant ports, but also associated environmental costs, some of which can be valued (such as greenhouse gas emissions per additional tonne-kilometre travelled) and some of which can only be approximated (such impacts on local air quality and run-off into waterways, the adverse effects of which depend on the condition of the local receiving environments they pass through).

6.2.1. Carbon Footprint

The Ministry for the Environment's *Measuring Emissions Catalogue 2026*[21] was developed to help with measuring and reporting an entity or organisation's greenhouse gas ('**GHG**') emissions on a voluntary basis. Chapter 8 provide emission factors for freighting goods (in tonne kilometres, tkm) and for the actual freight vehicles (in km). Assuming 10 tonnes/TEU and applying this to the estimated 2.6 million TEU per year POTL's, as would be enabled by the planned wharf extensions consented as part of the Stella Passage Project and associated land-side infrastructure, would reduce carbon emissions by approximately 24%, over a million

[20] NZIER 2023 modelling estimated that under a capacity constraint of 1.3 million TEU, no wharf extension would result in a $749 million GDP in 2032 Of this decrease, Tauranga would account for $50 million. (Appendix M page 12). If the current capacity constraint was 1.4 million TEU, the annual GDP across New Zealand would be lower by $485 million, a difference in impact of $264 million. The smaller the current capacity of the wharf, the greater the difference the wharf expansion would make to economic activity.

[21] Measuring Emissions Catalogue 2026

tonnes CO_2-e/year, as indicated by the typical Greenhouse Gas Emission savings per shipping distance and ship size, assuming 26 million tonnes of cargo is shown in **Table 16.**

Table 16: Typical Greenhouse Gas Emission savings per shipping distance and ship size

Average shipping distance	Smaller ships (~3,200 TEU)	Larger ships (8,000+ TEU)	Annual saving
5,000 km	2.19 Mt CO_2-e	1.65 Mt	0.54 Mt
7,500 km	3.28 Mt	2.47 Mt	0.81 Mt
10,000 km	4.37 Mt	3.29 Mt	1.08 Mt
12,500 km	5.46 Mt	4.11 Mt	1.35 Mt
15,000 km	6.55 Mt	4.94 Mt	1.61 Mt

POTL has a carbon reduction plan and has set an initial short-term target of 5% reduction in greenhouse gas emissions per cargo tonne per annum and is targeting net zero emissions by 2050[22]. The ways that POTL seeks to reduce carbon emissions are:

- Facilitating bigger ships,
- The use of coastal shipping which has a lower carbon emission profile compared to road transport - between 0.017 and 0.020 kilograms of carbon tkm for coastal shipping versus 0.123 kilograms of carbon tkm for road transport, and
- Installation of electric automated stacking cranes, which produce approximately 75% fewer carbon emissions than an equivalent manual straddle operation.

POTL intends to increase transhipment where larger vessels will arrive and load or unload at the Port, and smaller vessels will ship the cargo to and from smaller ports around New Zealand. This type of hub-and-spoke network model for New Zealand ports is supported by major international shipping lines and exporters. Transhipment already represents one third of POTL's container volume, and has grown 50% in the last 10 years. Few ports in New Zealand have the capability to accommodate the larger vessels now calling at Tauranga. Enabling the Port to continue to grow in this role is therefore critical to maintaining an efficient and competitive national shipping network. The dredging will enable the hub and spoken model to be used, enabling the increasingly large ships to enter Tauranga, and then trans-shipment to occur. The hub-and-spoke model also delivers environmental benefits due to the lower emission profiles of larger vessels as set out above. In a hub-and-spoke scenario, a TEU moving from a South Island port to Shanghai via the Port of Tauranga could achieve approximately a 17% reduction in CO_2 emissions.

6.2.2. Reputation

In order for POTL to maintain its strong and reliable reputation, both nationally and internationally, the Port needs to be a reliable Port with short ship waiting times and efficient use of wharf space, all of which depend on dredging. Dredging is essential for POTL to ensure current shipping channels retain their current service levels. Without dredging, importers and exporters may be forced to use less competition routes such as having to ship goods via Australia to maintain international connectivity. Having to tranship cargo through Australian ports would add time, cost and complexity to New Zealand supply chains.

Other Project benefits include:

- Tourism benefits from cruise ships and from beach replenishment;

[22] Source: Stella Passage - Annexure A Dan Kneebrock - Statement of evidence RFI-1

- Beach replenishment benefits to recreational users and maintenance of the amenity value; and
    - If benthic species are displaced during dredging (collected during dredging activity) and become available to seabird species near the water's surface, this could positively affect these species by providing an additional food resource, providing a positive effect[23].

Generating incomes for New Zealanders is an important component of enabling people and communities to provide for their wellbeing.

In its consideration of benefits the Economic Report demonstrates the significance and scale of the Port for regional and national economic activity, drawing on the RMA's 'economic' provisions, such as section 5 references to "*enabling people and communities to provide for their economic, social and cultural wellbeing*" and section 7 (b)'s "*efficient use and development of resources*".

6.3. CONCLUSION

POTL considers that the proposed capital and maintenance dredging, and the associated disposal and removal of dredged material, will deliver significant regional and national benefits and is therefore directly aligned with the overarching purpose of the FTAA.

Most significantly, the benefit of the project is in enabling a current activity which results in significant economic value to New Zealand to continue to occur. Without the project, that activity will be limited significantly in the future, resulting in a significant economic cost. The project also supports the use of larger, more efficient vessels, reducing greenhouse gas emissions per unit of cargo moved.

The resulting increase in vessel throughput and Port productivity will strengthen the efficiency and resilience of New Zealand's freight network, particularly in tandem with the Stella Passage project if granted.

Although the project will generate direct economic benefits through local employment and contracting opportunities, the greatest value lies in the broader regional and national benefits arising from lower transport costs, more efficient trade flows, and enhanced economic productivity. These benefits are substantial, long-term, and national in scale.

[23] Appendix P – Avifauna

7. ASSESSMENT OF EFFECTS ON THE ENVIRONMENT

This Project is a re-consent. The monitoring of effects over many years of capital and maintenance dredging under existing resource consents has informed the assessment of effects for this application. The environmental effects are therefore well known and understood from a technical perspective, although tangata whenua have differing views of the cultural implications and significance of some effects.

Te Awanui has a long history of development and operating as a Port (**Appendix U**). The experts assessments of effects on various components of the environment presented in this Section of the report consider the incremental effect of the activities associated with the Project and are not based on a pre-development baseline.

7.1. INFORMATION REQUIRED TO ASSESS ENVIRONMENTAL EFFECTS

Information required to assess environmental effects (Clause 6 of Schedule 5 of the FTAA) is presented in **Table 15.**

Table 17: Information Required to Assess Environmental Effects

Section/Clause of the FTAA	Information Required	How this is addressed
Schedule 5, clause 6(1)(a)	An assessment of the actual or potential effects on the environment	Addressed in **Section 7** of this report.
Schedule 5, clause 6(1)(b)	If the activity includes the use of **hazardous installations**, an assessment of any risks to the environment that are likely to arise from such use.	No hazardous installations are proposed.
Schedule 5, clause 6(1)(c)(i)	If the activity includes the **discharge of any contaminant**, a description of — the nature of the discharge and the sensitivity of the receiving environment to adverse effects.	Addressed in **Sections 3** (description of activity) **5** (description of the receiving environment) and **Section 7** (assessment of effects) of this report.
Schedule 5, clause 6(1)(c)(ii)	Any possible **alternative methods of discharge**, including discharge into any other receiving environment.	Alternative technologies are discussed in **Section 3.5**, and alternative disposal sites are discussed in **Section 3.7.1.**
Schedule 5, clause 6(1)(d)	A description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect of the activity.	Addressed throughout **Sections 7** and 8 of this report.
Schedule 5, clause 6(1)(e)	Identification of persons who may be affected by the activity and any response to the views of any persons consulted, including the views of iwi or hapū that have been consulted in relation to the proposal.	Refer to Section 5.2 and Appendix D. These parties were notified of the application and responses received are recorded in Appendix C4. Records of notification of and consultation with Tangata whenua are

Section/Clause of the FTAA	Information Required	How this is addressed
		presented in Appendix C1; BOPRC in Appendix C2; and TCC in Appendix C3. Views have been incorporated into the discussions of the assessment of effects in Section 7.4 to 7.17.
Schedule 5, clause 6(1)(f)	If iwi or hapū elect not to respond when consulted on the proposal, any reasons that they have specified for that decision.	Not applicable.
Schedule 5, clause 6(1)(g)	If the scale and significance of the activity's effects are such that monitoring is required, a description of how the effects will be monitored and by whom, if the activity is approved.	Addressed in Sections 7 and 8 of this report.
Schedule 5, clause 6(1)(h)	An assessment of any effects of the activity on the exercise of a protected customary right.	Addressed in Section 2.4.

7.2. MATTERS TO BE COVERED IN ASSESSMENT OF ENVIRONMENTAL EFFECTS

Schedule 5, clause 7 of the FTAA sets out matters to be covered in Assessment of Environmental Effects as presented in **Table 18** and **Appendix B**.

Table 18: Matters to be Covered in Assessment of Environmental Effects

Section/Clause of the FTAA	Matters to be covered	How this is addressed
Schedule 5, clause 7(a)	Any effect on the people in the neighbourhood and, if relevant, the wider community, including any social, economic, or cultural effects.	Addressed in Section 7 of this report.
Schedule 5, clause 7(b)	Any physical effect on the locality, including landscape and visual effects.	Addressed in Section 7.17of this report.
Schedule 5, clause 7(c)	Any effect on ecosystems, including effects on plants or animals and physical disturbance of habitats in the vicinity.	Addressed in Section 7 of this report.
Schedule 5, clause 7(d)	Any effect on natural and physical resources that have aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations.	Addressed in Section 7.
Schedule 5, clause 7(e).	Any discharge of contaminants into the environment and options for the treatment and disposal of contaminants.	Addressed in Sections 3.7, 7 and of this report;
Schedule 5, clause 7(f).	Any unreasonable emission of noise.	Addressed in Section 7.8of this report;

Section/Clause of the FTAA	Matters to be covered	How this is addressed
Schedule 5, clause 7(g).	Any risk to the neighbourhood, the wider community, or the environment through natural hazards or hazardous installations.	Addressed in **Section 7.6** of this report.

The key environmental effects associated with the Project are discussed below under the following sections:

- Persons who may be affected by the activity
- Cultural Values
- Climate change
- Natural hazards
- Turbidity and Morphodynamics
- Airborne Noise
- Underwater Noise
- Water Quality
- Marine Ecology
- Marine Mammals
- Avifauna
- Biosecurity
- Economics
- Navigation
- Recreation, and
- Landscape and Natural Character.

7.3. PERSONS WHO MAY BE AFFECTED AND THEIR VIEWS

Schedule 5 clause 6(e) requires the assessment of an activities effects on the environment under clause 5(4) to include identification of persons who may be affected by the activity and any response to the views of any persons consulted, including the views of iwi or hapū that have been consulted in relation to the proposal.

The owners and occupiers of land adjacent to the Site are identified in **Section 5.2** and **Appendix D**.

Records of notification of and consultation with Tangata whenua are presented in **Appendix C1**; BOPRC in **Appendix C2**: and TCC in **Appendix C3**. Views have been incorporated into the discussions of the assessment of effects in Section 7.4 to 7.17.

7.4. CULTURAL VALUES

The Applicant understands that it is for the relevant Iwi and hapū to describe any cultural or historical associations with Te Awanui and the deposition sites. As part of the consultation process, Iwi and hapū were invited to provide CVRs to inform the assessment of effects. CVRs were received from the following parties listed in **Section 5.4** and copies of CVRs received are provided in **Appendix F** and summarised in **Appendix C1**.

Dredging and deposition of material involves the physical disturbance of the sea floor, and in addition to sacred sites and taonga, the integrity of the cultural landscape which is intertwined with the identity and heritage of iwi and hapū should be considered. Understanding effects should take into account the value of mauri, meaning the life force of

all living things that exist as interconnected energy supporting life. Te Awanui has mauri which development could affect, causing the environment to suffer.

Iwi and hapū have expressed concerns about the potential degradation of local ecosystems resulting from the Port activities. This includes the impact on marine life and water quality. Many species found in Te Awanui hold cultural significance and are integral to traditional practices of mana whenua, making protecting biodiversity important.

Groups consulted have raised concerns about the development affecting environmental sustainability and community wellbeing, and the potential effects on mahinga kai. Feedback has also highlighted the importance of fully considering cumulative impacts in order for assessments to be complete.

The importance of traditional viewshafts and the visual landscape, as well as constant exposure to industrial noise, odour and activities diminishing the mauri of sites of cultural significance have also been raised.

Examples of specific sites in the Project area that are known to have cultural values to tangata whenua that POTL has recognised require management or monitoring by the inclusion of Draft Conditions include Te Kuia Rock, Panepane and Te Paritaha.

Te Kuia Rock is located at the base of Mauao at the entrance to Te Awanui. POTL proposes in Draft Condition 14.4 that a minimum distance of 100 meters is maintained between any dredging activity and Te Kuia Rock to ensure that effects on Te Kuia Rock are avoided.

Te Paritaha and its pipi resource is a taonga to mana whenua. Various witnesses for tāngata whenua (including Te Runganga o Ngāi Te Rangi Iwi Trust, Ngāti Hē and Ngāti Ranginui Incorporated Society and Ngāti Ranginui Fisheries Trust) for other POTL dredging consent hearings have raised concerns about the decline of pipi at Te Paritaha. Many have associated the pipi decline at Te Paritaha to the POTL dredging.

Te Paritaha is an area of Significant Cultural Value (ASCV4a, BOPRC Coastal Environment Plan). Schedule 6 states:

> "*Te Paritaha is said to be the source of mauri for all other pipi beds in Te Awanui. (ASCV 4a. BOPRC Coastal Plan). "The role of whānau hapū and iwi as kaitiaki is to protect the mauri of Paritaha. Mauri in this regard refers to the integrity, form, functioning (including natural biological and ecological processes), resilience, physical and spiritual characteristics & qualities, mana-atua, mana-tangata, tapu life principle, tikanga and kawa practices, connectedness & interdependency and accessibility. This involves ensuring that the full physical extent of the integrity of Paritaha is acknowledged. In this way, the kaimoana that Paritaha supports is also protected*".

Draft Condition 14.4: The consent holder shall ensure that a minimum distance of 100 metres is maintained between any dredging activity and Te Kuia Rock located at 37 37 42.773 S,176 09 58.902 E.

Impacted Tangata Whenua parties are best placed to identify the cultural effects of the Project on their values. Their CVAs are accepted as credible and reliable and portray a considered and genuine view. Generally, Tangata Whenua are fundamentally opposed to the Project and identify adverse cultural effects associated with it. However, POTL has prepared a suite of conditions that are intended to respond to the cultural effects identified by Tangata Whenua parties.

7.5. CLIMATE CHANGE

Section 43(2) that refers to Section 13(4)(v) of the FTAA: Whether and how the project would be affected by climate change

> "*Scientists globally agree that climate change is increasing the frequency and intensity of extreme weather events, and that those impacts will continue to worsen in the future.*
>
> *While Aotearoa New Zealand's highly variable weather patterns can make it difficult for scientists to directly attribute individual storm events to climate change, there is a growing body of local evidence and research that the warming world is having an impact on the extreme weather we experience here.*
>
> *That can include both increasing the frequency of extreme weather events such as heavy rainfall and flooding, and making them more severe.* "[24].

The Intergovernmental Panel on Climate Change released it's sixth assessment report in 2021[25]. National Institute of Water and Atmospheric Research (**'NIWA'**) (now Earth Science New Zealand) has published regional climate change projection data compiled by a review of existing scientific papers and reports to provide a high-level snapshot of the projected changes for the National Climate Risk Assessment based on the Intergovernmental Panel on Climate Change 6th Assessment report[26].

There is considerable complexity and inherent uncertainty in climate modelling, and scientists have modelled several scenarios. NIWA used data from the Representative Concentration Pathway (**'RCP'**) 4.5 and RCP 8.5 scenarios to determine predictions. RCP 4.5 is considered a more plausible scenario than RCP 8.5. NIWA reports that with the RCP 4.5 scenario for 2040 intensity of (ex)tropical cyclones are projected to increase and extreme rainfalls are predicted to increase by 13.5^{o} for every 1^{o}C temperature increase.

While the expert's that have provided evidence to support this application have not commented on climate change, De Lange (page 5, 2026) acknowledges that "*Areas subject to dredging are naturally changing in response to processes such as weather events and variations in sediment supply*". Changes in climate are therefore expected to result in changes in weather events.

In their CVR (**Appendix F**), Ngāti Ranginui Iwi Incorporated Society record that climate change compounds existing pressures on Te Awanui, and recommends that rather than using short-term economic frameworks to govern Te Awanui, "*intergenerational thinking, indigenous environmental leadership, climate resilience and enduring accountability structures protecting and mauri of the harbour*" are implemented. Ngāti Ranginui Iwi Incorporated Society recommend "*A permanent fund via levy on containers and industrial activity entering POTL that supports ecological restoration and climate adaptation and funds tangata whenua environmental monitoring and mātauranga Māori research*". Climate change pressure and uncertainty also underpin the recommendation from TMICFT and others for regular mandatory review periods of the consent.

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[24] The science linking extreme weather and climate change | Ministry for the Environment

[25] Climate Change 2021: The Physical Science Basis | Climate Change 2021: The Physical Science Basis

[26] Projected regional climate change hazards | Earth Sciences New Zealand | NIWA

The existing consents allow up to 185,000 m^3 to be dredged on average every year for maintenance purposes. However, variability of weather events means that more dredging is expected to be required in some years to maintain the shipping channels than in previous years. Therefore, the Port wishes to increase the allowable annual volume of material to be dredged to 250,000 m^3 averaged over 10 years, with a cap of 350,000 m^3 in any year. This is expected to provide for the effects of climate change on maintenance dredging.

7.6. NATURAL HAZARDS

Section 43(2) that refers to Section 13(4)(v) of the FTAA: Whether and how the project would be affected by natural hazards

The National Policy Statement ('NPS') for Natural Hazards was published in December 2025 and came into effect on 15 January 2026, however, this NPS does not apply to infrastructure.

Dredging of the Port, could, over the long term, potentially be affected by coastal erosion, coastal inundation, earthquakes, volcanoes or tsunamis. Flexibility in the volume of maintenance dredging and associated deposition of material would provide for an increase in intensity and frequency of severe weather events, as discussed in Section 7.4. It is not possible to include provisions for dredging after a natural disaster. This would need to be dealt with separately at the time, should it be required.

This Project also includes a mechanism to mitigate coastal erosion of beaches in the vicinity of the Port, by, in consultation with the Tauranga City Council and BOPRC depositing suitable material at sites designed to provide replenishment of sand to the beaches. This approach has been effective in maintaining and restoring some of New Zealand's most popular beaches for several decades and thus, contributes to the social fabric of the communities that live proximate to the coastline, or who travel to it as part of their recreation.

7.7. TURBIDITY AND MORPHODYNAMICS

Dr de Lange (**Appendix G**) considers the characteristics of the sediment to be dredged, and the potential impacts during the excavation and disposal phases for different dredging methodologies focusing on turbidity. He examines the potential impacts for the post dredging phase, including changes to the tidal circulation and seabed morphology, and the implications for Te Awanui. Dr de Lange states that typical dredging activities may result in adverse impacts on turbidity and morphodynamics during three phases: during the excavation of the seabed; during the disposal of the extracted sediment (which includes reclamation utilising the sediment); and during the post-dredging or recovery period.

In their CVR Ngāti Ranginui Fisheries Trust raised concerns about the cumulative effects in the context of long-term environmental change and increased turbidity associated with an increase in storms, and proposed some mitigation measures. Ngā Hapū o Ngatī Ranginui Settlement Trust queried whether there would be further modifications to, and impacts on, the marine environment, and impacts on the health of Te Awanui. Ngā Pōtiki raised concerns about cumulative effects, morphological changes affecting a functioning and sustainable pātaka kai over time and consistent effects on the wider Harbour. Whanau a Tauwhao (Ki Rangiwaea) and Te Ngare Hapu state that: "*Sediment dredged from the entrance channel is almost exclusively disposed to the southeast, regardless of its natural transport direction…The result is that sediment which would otherwise contribute to the nourishment of Matakana Island, Panepane, and adjacent systems is intercepted, removed, or reallocated away from its natural pathway. Over time, this has the practical effect of creating a chronic and cumulative sediment deficit on the Matakana Island side of the system. That deficit is central to understanding the erosion observed at Panepane and the broader pattern of coastal process change described by hapū…. The expert review records approximately 200 metres of land loss at Panepane Point over a period of around 20 years*" (See **Appendix F2**). Dr de Lange considered these concerns in the drafting of **Appendix G,** and concludes that

changes in wave conditions in response to the La Nina extreme of ENSO resulted in the "*formation of a marginal flood channel along Panepane shoreline, which has contributed to shoreline erosion by transported sediment eroded by waves into the harbour*".[27]

7.7.1. Excavation phase effects

During the **excavation phase**, the main potential impacts are excavation of benthic biota, and the release of potential contaminants into the water column including suspended sediment (turbidity) and dissolved or absorbed materials such as heavy metals, hydrocarbons and pesticides. Turbid plumes of sediment during the extraction phase are generated from three primary sources: at the seafloor when the cutter head disturbs bed sediment, from overflow discharge of water pumped into the hopper, and in shallow conditions the propeller jet of the dredge vessel can disturb sediment on the seafloor and disrupt the settling process of sediment generated (**Figure 29**).

The predominant source of suspended sediment is usually the overflow discharge. This forms a dynamic plume that is higher density than the surrounding seawater, so that it flows down towards the seabed. Most of the sediment within the dynamic plume is deposited rapidly when the plume reaches the seabed, but fine sediment may remain in suspension if it is absorbed onto air bubbles formed by the overflow process, or due to high turbulence from currents or propellor wash. Due to the higher density of the plume, the plume tends to be confined to deeper channels (especially the near-bed cutter head and dynamic overflow plumes).

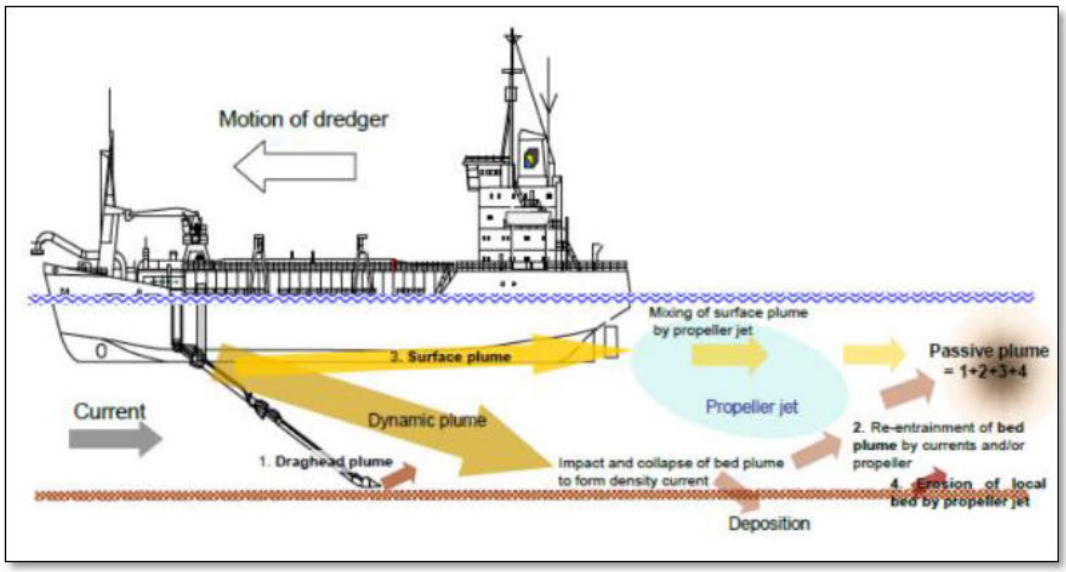


Figure 29: Sources of turbidity during extraction phase

Numerical modelling indicates that most of the suspended sediment generated during dredging is deposited on the seabed within the 600 m mixing zone. The modelling also states that when there are strong tidal currents turbulence could mix the small TSHD near-bed plume into surface waters, causing TSS to be elevated outside of the mixing zone. Dr de Lange identified that the surface water turbulence has not been observed during historical dredging at the PoT.

[27] Page 88 of Appendix G- Turbidity and Morphodynamics

Dr de Lange states in his report (**Appendix G**) that the impacts during the excavation phase are dependent on the production rate of the dredge (larger volumes of sediment moved per unit time generally produce larger impacts), and the type of dredge.

Mitigation of the impacts of suspended sediment plumes during extraction involve reducing the production rate of fine sediment within the overflow discharge and controlling the direction the plume can travel after leaving the source region by the dredge (mixing zone). The available options are:

- Reduce the entrainment of air bubbles into the overflow, such as using green-valve technology;
- Turn off the overflow so all the water and sediment pumped from the seafloor is retained in the hopper;
- Reduce the production rate by using a smaller TSHD or a BHD; and
- Only dredging when the tidal currents transport plumes away from areas of concern.

7.7.2. Disposal phase effects

During the **disposal phase**, the main potential impacts are burial of benthic biota, and the release of potential contaminants into the water column including suspended sediment (turbidity) and dissolved or absorbed materials such as heavy metals, hydrocarbons and pesticides. Sediment disposal involves only one source of suspended sediment, the discharge from the hopper, forming a dynamic plume. Assessment of the impacts of previous dredging activities at the Port show that the adverse impacts are confined within the boundaries of the disposal grounds, and that there is a rapid recovery post-dredging (dependent on the total burial depth). Numerical modelling indicates that the disposal plumes will be confined within the disposal sites, provided the sediment is released sufficiently far from the boundaries. Numerical modelling indicates most sediment is deposited on the seafloor within 100 m radius of the release point.

Both excavation and disposal phase impacts are transient, although there may be a cumulative effect such as the bioaccumulation and biomagnification of heavy metals resulting from contaminants released from sediment during dredging (further discussed in section **7.11** – marine ecology and **7.12** – marine mammals). Dr de Lange notes that the characteristics of the impacts for both phases are predominantly determined by the texture (size distribution) of sediment being dredged, the level of contamination contained within the dredged sediments, and the dredging technology and methodology used.

7.7.3. Post-dredging phase

The impacts during the **post-dredging phase** are predominantly determined by the changes made to the morphology (mostly the tidal channels), and the subsequent morphodynamics response, which involves an interactive system of changing currents and morphology. Dredging involves the extraction of sediment, and the subsequent disposal of the sediment. For Te Awanui, most sediment dredged since 1960 has been deposited in either offshore disposal grounds, or within reclamations. A small proportion has been used to renourish beaches and establish bird roosting areas. Outside of the areas of direct sediment deposition within Te Awanui, the dredging does not provide a source of sediment for accretion.

POTL proposed Draft Conditions 14.2 and 14.3 requiring bathymetric surveys at all dredge sites prior to and after dredging. The reporting of results shall include an analysis of the results of the bathymetric surveys showing areas and extent of geomorphological change.

During the post-dredging or recovery phase, the main potential impacts are:

- the tidal range by changing the friction and/or constrictions affecting the movement of the tide, which changes the water slope. Increasing tidal range increases current velocities, and vice versa;

- the duration of flood and ebb flow, which also changes the water slope. Decreasing duration of either ebb or flood flow increases current velocities, and vice versa;
- the wetted cross-sectional area of the channels. Decreasing cross-sectional area increases current velocities, and vice versa".

Whanau a Tauwhao (Ki Rangiwaea) and Te Ngare Hapu raised concerns about the historic and potential future effects of loss of sediment from Matakana Island and Panepane as a result of dredging.

Theory, modelling and observations for historic capital dredging in Te Awanui has demonstrated that within the Port, dredging has had **little impact on the tidal range**, **a small impact on the timing of the tide along the shipping channels**, and **significantly increased the channel cross-sectional areas** (with an associated increased in wetted perimeter length).

Numerical modelling of the proposed capital dredging predicts little change in the tidal characteristics, and hence, unsurprisingly, it predicts a reduction in tidal velocities for the dredged areas of the shipping channels proportional to the increased cross-sectional area. The modelling also shows, consistent with before and after observations of previous capital dredging, that there are no detectable changes to tidal characteristics and tidal velocities beyond the immediate area of the dredged channels.

Modelling was also undertaken to assess the impact of the 2015/2016 capital dredging on tidal currents. This used the 2023 bathymetry, which was also being using as a baseline to assess the impact of proposed dredging. The modelling indicated that current velocities increased within part of the Lower Western Channel following the capital dredging. This was a consequence of shoaling decreasing the channel cross-sectional area. The shoaling appears to have been due to erosion of Panepane by changed storm wave conditions during a higher incidence of La Niña conditions over the last decade, which increased the sediment transport into the Harbour. This highlights the difficulty of identifying the impacts of dredging on sediment transport, since the changes in transport due to the impacts of dredging on currents are much smaller than the changes associated with variations in natural processes.

Whilst there may be an alteration to current velocity from dredging the effects of dredging on channel stability, Te Paritaha and other coastal processes are considered to be **Very Low**.

Dr de Lange's recommended mitigations for reducing turbidity (detailed above) have been adopted and incorporated as a part of a dynamic turbidity monitoring and reduction strategy in the proposed consent conditions. Dr de Lange's findings have further been used to inform other expert reports such as Marine Ecology (**Section 7.11)**, Marine Mammals (**Section 7.12**), and Landscape and Natural Character (**Section 7.17**).

7.7.4. Peer review

Ngati Pukenga raised concerns about the sedimentation assessment and requested a peer review. POTL therefore commissioned Dr Terry Hume to undertake an independent technical peer review of the report prepared by Dr Willem de Lange titled "Assessment of Effects on Turbidity and Morphodynamics" (February 2026). The review, which is provided in **Appendix H**, also includes consideration of the underlying MetOcean Solutions modelling reports that inform the de Lange report.

Dr Hume concludes that, in his opinion, the report provides a sound assessment and is reasonable and fit for purpose in the context of POTL's dredging reconsenting fast-track application. Furthermore, he agrees with the overall interpretation that shoreline change at Panepane is primarily driven by sediment supply and wave, weather and longer-term climate patterns rather than dredging. He recommends that monitoring of coastal processes continue in the area encompassing Te Paritaha, the western channel, the shoreline tip of Panepane and channel flank, and the southeastern part of Matakana shoreline and offshore flood marginal channel. This recommendation has been accepted by POTL and implemented as draft Condition 22.

POTL is also not opposed to the depositing of dredging materials at or offshore of Panepane, although this is not covered by this Project. POTL would want to ensure that if it does deposit any material at Panepane, it will not result in unintended adverse effects, such as for Te Paritaha or being washed immediately back into the channel.

Draft Conditions

22. Monitoring of Surrounding Areas

22.1 The consent holder shall undertake annual bathymetric surveys of the Ebb-tide delta, the adjacent channel flank to Panepane point and adjacent topographical survey to determine the Mean High Water mark.

22.2 The consent holder shall undertake annual bathymetric surveys of Te Paritaha, Western Channel, Otumoetai Channel, Pilot Bay and Town Reach south of Stella Passage to the Harbour Bridge.

7.8. AIRBORNE NOISE

Mr Jon Styles of the Styles Group used computer modelling to predict and assess the airborne noise impacts from the Project both in the CMA and on nearby land (**Appendix R**) in terms of:

- The sensitivity of the zones and land use activities where Project levels may be audible (**Figure 30**),
- The permitted level of Port noise authorised by the relevant RCEP and TCP noise standards at each zone, and
- The extent to which Project noise levels may be audible above ambient noise levels inside the Port.



Figure 30: TCP zoning arrangements

Ngāi Tukairangi and Waitaha request that POTL undertakes noise monitoring and mitigation associated with dredging noise. Waitaha specifically requests specific consideration of nighttime management controls.

Mr Styles' assessment has been informed by a comprehensive noise modelling exercise that, in turn, is informed by monitoring data obtained from previous dredging noise measurements.

Mr Styles has determined that the relevant standards for dredging activities are the construction noise standards[28]. The proposed activities are anticipated to take less than 20 weeks to complete, so the relevant standard is the long-term construction noise standard. The likely noise impacts at several key sites are identified in **Table 19**.

[28] The construction noise standard is designed for temporary activities. The capital dredging activity is proposed to occur for approximately one year and maintenance dredging is proposed to occur as needed.

Table 19: Predicted noise effects at different locations

Location	Permitted Construction Standard	Recommended noise limit in the Construction Noise Standard	Assessment of noise effects	Recommendations
Port Industry and Rail Zone inside the Inner Noise Control Boundary	75 dB L_{Aeq} from 7:30 am to 6:00 pm 45 dB L_{Aeq} from 6:00 pm to 7:30 am	70 dB L_{Aeq} between 7:30 am and 6:00 pm 75 dB L_{Aeq} between 6:00 pm and 7:30 am	Noise levels inside the Inner Noise Control Boundary are predicted to range from 60 dB L_{Aeq} to 45 dB L_{Aeq} at the border with the Outer Noise Control Boundary. This readily complies with the permitted construction noise standard for the Port Zone. Noise levels are considered reasonable at all times	Mr Styles recommends that the noise limits in the Construction Noise Standard apply, except that no limits be applied at buildings owned or controlled by the Port.
Outer Noise Control Boundary: High Density Residential Zone, Commercial Zone and Active Open Space Zones	70 dB L_{Aeq} from Monday to Saturday 45 dB L_{Aeq} at night and on Sundays	70 dB L_{Aeq} between 7:30 am and 6:00 pm 45 dB L_{Aeq} between 6:00 pm and 7:30 am	Noise levels in this area are predicted to be no more than 50 dB L_{Aeq}. Noise levels of mid-channel dredging are likely to only be audible over vessel traffic when vessel traffic is low and sea conditions are calm. It is noted that all sensitive receivers within this area are required to be acoustically treated to minimise the effects of noise from the Port. With this in mind, Mr Styles considers that dredging noise received within this area will be reasonable. The predicted noise level will comply with the permitted construction noise standard under the TCP.	No specific management requirements identified.
Residential areas outside of the Outer Noise Control Boundary	Noise from construction work in the CMA and Port Zone: up to 70 dB L_{Aeq} from Monday to Saturday and 45 dB L_{Aeq} at night and on Sundays Between 20 December and 10 January construction	Same as permitted construction standard.	The most exposed residential receivers are expected to receive dredging noise levels of approximately 50 dB LA_{eq}. This fits within the permitted daytime standard. Noise measurements show that noise levels from dredging are only likely to be audible to the closest receivers during times of low vessel traffic and calm seas. Mr Styles concludes that the proposed dredging will comply with the daytime standards at these locations even during the elaborated holiday period and	1) Impose a requirement to comply with the noise limits in the Construction Noise Standard; 2) Enable dredging works during specified daytime hours; 3) Require dredging works within the areas identified in **Figure 31** to only be undertaken during the specified daytime hours unless a

Location	Permitted Construction Standard	Recommended noise limit in the Construction Noise Standard	Assessment of noise effects	Recommendations
	noise must comply with the Residential Zone noise limits: 50 dB L_{Aeq} from 7:00 am to 10:00 pm 40 dB L_{Aeq} from 10:00 pm to 7:00 am		that daytime noise levels received will be reasonable. The construction noise standard recommends a nighttime noise limit of 45 dBL_{Aeq} for residential receivers in order to ensure protection from sleep disturbance. Mr Styles concludes that nighttime dredging works in the channel to the west of Pilot Bay will require mitigation to comply with the nighttime noise limit at the most exposed residential receivers. Mr Styles has recommended specific mitigations to address this issue (detailed in column to right). Mr Styles concludes that noise levels from dredging will be reasonable if compliance with the 45 dB L_{Aeq} limit is maintained and the recommended mitigations are adopted.	Noise Management Plan ('**NMP**' can be provided that demonstrates that the selected vessel can comply with nighttime noise standards. (See **Section 8** and **Appendix T** for details on how these recommendations have been incorporated into draft Conditions.)
Whareroa Marae and the Urban Marae Community Zone	70 dB L_{Aeq} between 7:30 am and 6:00 pm 45 dB L_{Aeq} between 6:00 pm and 7:30 am	Same as permitted construction standard.	Up to 45 dB L_{Aeq},when the operations are undertaken using a BHD at the closest position inside Stella Passage relative to the Marae. This complies with the applicable construction noise standard. Daytime noise is not expected to be audible above the background noise environment. The dredging complies with the nighttime noise standard, which is designed to protect non-acoustically treated noise sensitive receivers from sleep disturbance.	The predictions indicate that the Project will be able to comply with the relevant construction noise standards. No specific recommended mitigations are identified.
Mauão Maunga	Up to 55 dB L_{dn} (for port operations at Mauão Reserve)	The Construction Noise Standard does not provided recommended limits for open space zones without occupied buildings.	The highest predicted noise levels of up to 60 dB $L_{Aeq(1hr)}$ are expected to occur at the western base of Mauão when dredging is very near Mauão. Noise levels at Te Tihi o Mauão are predicted to be less than 45 dB $L_{Aeq(1\ hr)}$.	No specific recommendations are proposed to control noise effects on Mauão.

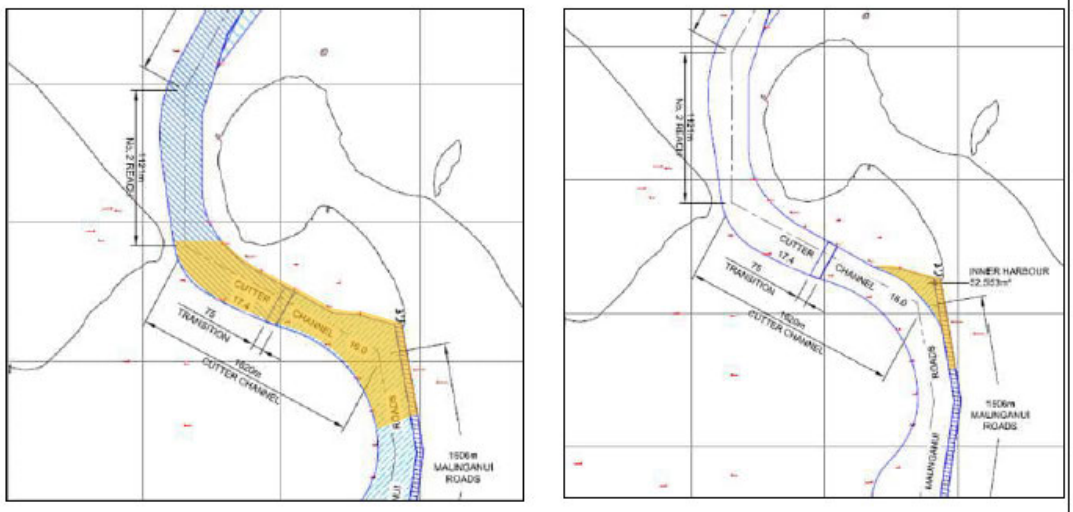
Location	Permitted Construction Standard	Recommended noise limit in the Construction Noise Standard	Assessment of noise effects	Recommendations
			Typical noise is expected to be between 40 - 45 dB $L_{Aeq(12\ hr)}$. Dredging work is predicted to only be audible when the TSHD is actively dredging very near Mauão. These periods are expected to be short and interspersed with quieter periods when the vessel is moving to and from the disposal area or working in the inner Harbour or outer channel. The predicted noise is expected to comply with the permitted standard and to be similar in character to existing noise.	
Matakana Island	Up to 55 db L_{dn}	The Construction Noise Standard does not provide recommended limits for open space zones without occupied buildings.	It is predicted that the noise level at Panepane Point when dredging is being carried out at the channel entrance to be up to 65 dB $L_{Aeq(1\ hr)}$, dissipating quickly further inland. Typical noise levels are expected to be between 45 - 50 dB $L_{Aeq(12\ hr)}$. Dredging work is likely to be audible when dredging is occurring close to Panepane Point, but this will be interspersed with quieter periods when the dredge is travelling to and from the disposal site. The audible effects on Panepane Point and Matakana Island will be temporary and only occur for a short period of the overall dredging campaign and will be similar in character to existing commercial and recreational activities.	No specific recommendations are proposed to control noise effects on Matakana Island.

Mr Styles considers that there is no need for ongoing noise monitoring to demonstrate the Project can comply with the Project Noise Standards given the noise model has been informed by accurate data, and taking into account, the predicted margin of compliance.

The only exception applies to any nighttime works within the identified area of Cutter Channel (**Figure 31**). Mr Styles recommends that a Noise Management Plan ('**NMP**') be provided to demonstrate works can comply with the relevant noise limits before any nighttime works commence. Mr Styles expects that the NMP will need to be informed by additional noise measurements and/or noise modelling to demonstrate compliance. This will be addressed in the NMP if night works are required.

Figure 9 Daytime dredging only

***Between the hours of 0630- and 2000 on weekdays and between 0730 and 1800 on weekends, unless works outside of these hours are authorised by an NMP**



Maintenance dredging *Capital dredging-*

Figure 31: Areas to only be dredged during daytime hours to ensure compliance with nighttime noise limits

Mr Styles concludes that the noise effects from the Project can be controlled to meet the relevant noise limits for 'long-term duration' construction work in the Construction Noise Standard. This is subject to adopting the recommendations in **Table 18**. Assuming compliance with the relevant standards and the application of the recommended mitigations, Mr Styles concludes that the noise generated by the Project will be reasonable for all receivers.

POTL proposed Draft Conditions 14.16 to 14.19 to ensure noise recommendations are implemented.

Draft Conditions:

14.16 The consent holder shall comply with **Project Noise Standards** specified in **Condition 14.17** when measured and/or assessed one (1) metre from the façade of any occupied building in accordance with NZS 6803:1999 *Acoustics - Construction* Noise. The Project Noise Standards do not apply at any property or building under the ownership or control of the consent holder (or its entities or subsidiaries).

14.17 The Project Noise Standards (*see **Advice Note 6***) are listed in **Table 1** and **Table 2** and in **Condition 14.18.**

Table 1: NZS 6803 recommended long term duration noise limits for construction noise received at any residential or rural dwelling, or any building where it is necessary to manage sleep disturbance

Time of week	Time period	Noise limit L_{Aeq}	Noise limit L_{AFmax}
Weekdays	0630-0730	55 dB	75 dB
	0730-1800	70 dB	85 dB
	1800-2000	65 dB	80 dB
	2000-0630	45 dB	75 dB
Saturdays	0630-0730	45 dB	75 dB
	0730-1800	70 dB	85 dB
	1800-2000	45 dB	75 dB
	2000-0630	45 dB	75 dB
Sundays	0630-0730	45 dB	75 dB
	0730-1800	55 dB	85 dB
	1800-2000	45 dB	75 dB
	2000-0630	45 dB	75 dB

Table 2 - NZS 6803 recommended long term duration noise limits for construction noise received at occupied industrial or commercial buildings for all days of the year

Time Period	Long-term duration
	L_{Aeq}
0730-1800	70 dB
1800-0730	75 dB

Draft Condition:

14.18 Works inside the area shown in **Figure 1** [Figure 30 above] must only be undertaken between the hours of 0630 and 2000 on weekdays and between the hours of 0730 and 1800 on weekends. Works may occur outside of these hours where a Noise Management Plan that complies with the requirements of condition 14.19 is developed and certified in accordance with the process in condition 7.1.

14.19 Any Noise Management Plan pursuant to Condition 14.18 shall demonstrate that the Vessel and plant selected for the work will comply with the Project Noise Standards (**Tables 1** and 2) that apply during the proposed hours of work. The Noise Management Plan shall identify any controls (i.e. operating in specific meteorological conditions, or other physical or management-based mitigation measures) that may be required to ensure compliance with the Project Noise Standards. The works must be carried out in accordance with the certified Noise Management Plan.

Mr Styles considered feedback from the CVRs and responded in detail to these in Section 8.3 of **Appendix R.** Noise concerns raised in the CVRs, additional to nighttime noise levels which are discussed above, include:

- Potential impacts on Huria Marae;
- Potential impacts on Motuopae; and
- Truck, rail and freight noise.

7.9. UNDERWATER NOISE

Modelling of underwater noise to inform effects on the marine environment was undertaken based on capital dredging using two different types of dredgers: TSHD and a BHD. Dr Pine understands that either the Albatros, or a TSHD of similar size to the Albatros, will be used within and outside the Harbour, while the BHD will be largely confined to within the Harbour. From a noise effects perspective, the TSHD poses a greater impact risk than the BHD and was therefore the focus of the noise assessment. The underwater noise assessment focused on the potential effects on marine mammals and therefore used international guidelines for noise effects on marine mammals. Soundscape changes were also assessed.

Mr Pine reviewed feedback that related to underwater noise effects recorded in the CVR's from Ngāti Hangarau, Ngā Pōtiki a Tamapahore Trust and Ngāi Tamarāwaho. Feedback focused on cumulative noise effects and the request for active noise monitoring. Dr Pine responds in detail to these concerns in Section 5 of **Appendix S.**

7.9.1. Noise effects on marine mammals

The modelling showed no risk for auditory injury onset or temporary threshold shift in marine mammal species that may frequent the dredge area beyond 1 m from TSHD *Albatros* while it was actively dredging. Low severity behavioural changes in marine mammals occurring outside the Harbour entrance may occur during the TSHD dredging within 1,666 m (dolphin species, delphinids) or 3,497 m (baleens). There is a 50% risk of low severity behavioural responses occurring within 1,987 m for baleen whale species and 528 m for dolphins. For seals, low severity behavioural responses may occur within 1,948 m, with more moderate responses occurring within approximately 530 m. During the quietest noise conditions (5th percentile), onset of auditory masking effects could occur within approximately 5,500 m from a TSHD actively dredging. More than 50% of an animal's listening space may be reduced within approximately 1,687 m (otariids, for example), 1,682 m (phocids), 1,500 m (dolphins) and 1,438 m (baleen whales) of the TSHD actively dredging.

Dr McConnell discusses the potential effects of noise on marine mammals in more detail in **Section 7.11**.

7.9.2. Soundscape changes

Capital or maintenance dredging was found to cause negligible changes to the existing anthrophony of the Harbour outside the Port Zone. For example, changes to the daily Leq (average) levels outside the Port Area were below +1 dB re 1 µPa (unweighted). Averaged over 23 positions within and or outside the Port Zone, mean increases to the daily Leq levels from the 2023 maintenance dredging campaign were an average 1.1 ± 0.2 dB re 1 µPa (unweighted), 1.2 ± 0.2 dB re 1 µPa (LF-weighted), 1.9 ± 0.3 dB re 1 µPa (HF-weighted) and 2.0 ± 0.3 dB re 1 µPa (OW-weighted). Averaged over a complete month of maintenance dredging, soundscape changes were largely contained within the Port Zone, in both monthly Leq and cumulative sound exposure metrics.

The effects arising from the Project will therefore be similar to the modelling of the 2023 maintenance dredging campaign, as a similar sized TSHD will be used.

It is important to note that these changes are based on AIS data, which is widely known to underrepresent true vessel activity because it misses most recreational vessels. Passive acoustic monitoring within the Harbour revealed a high degree of recreational boating

activity, both within and outside the Port Zone. Including the 'missed' vessel traffic will mean that the contributions from dredging will be even less.

The change in soundscape generated by the dredging is expected to be negligible in habitats outside the Port Zone – especially when considering that the AIS data that it is based upon does not include all vessel traffic.

Dr Pine did not identify or recommend any mitigation or monitoring required to manage underwater noise effects.

POTL has, however, included Draft Condition 14.7 that states: "*The consent holder shall ensure that the vessels and dredge equipment used for the works are regularly maintained, including lubrication and repair of winches, generators, propulsion components and other potential noise sources in order to minimise the levels of underwater noise that are generated by dredging.*"

7.10. WATER QUALITY

This assessment draws directly on Streamlined Environmental Limited's report *'Water quality aspects of Port of Tauranga dredging reconsenting', Final for Consultation after responding to cultural values reports F3 (3June 2026).*

Dr Stewart identifies that dredging and disposal of sediment can impact the following main aspects of water quality:

- increased turbidity from the resuspension of fine particles into the water column;
- release of contaminants within the sediment leading to potential eutrophication or toxic effects for benthic species, people and other marine species; and
- changes in the temperature, pH, salinity or dissolved oxygen (**'DO'**) in the water column.

7.10.1. Turbidity

Increased turbidity can impact water clarity and decrease the efficiency of photosynthesis, cause abrasion to fish gills, and can cause adverse smothering effects to benthic organisms when it settles.

Dr Stewart used measurements undertaken during maintenance dredging campaigns to show that surface sediments at dredged sites in the shipping channel are generally sandy with low silt content (<2.5%).

Turbidity data were collected by POTL during maintenance dredging campaigns from October 2015 to July 2022. For the majority of the time (93%) Dr Stewart reported no exceedance of the ANZECC (2000) default trigger level of 10 Nephelometric Turbidity Units (**'NTU'**) downstream of the dredge. For the times (7%) when turbidity exceeds ANZECC (2000) default trigger levels, effects are likely to be transient but minor.

Modelling indicates that using a TSS ecological threshold concentration of 70 mg/l that Bridge Marina and Whareroa Marae estuary foreshore would not be exposed to sediment plumes exceeding the threshold. Modelling states that Te Paritaha did receive TSS above the threshold concentration, but only for one or two days during a 62-day simulation. However, this modelling was based on a much larger Trailer suction Hopper Dredge than is proposed to be used. Therefore, modelling indicates no effects on sensitive taxa, such as pipi (*Paphies australis*) are expected.

In order to monitor and manage turbidity caused by the dredging activities POTL maintain six continuous turbidity monitoring stations in the Harbour during dredging campaigns. These provide a datapoint every 15 seconds and are used to inform the dredging process by monitoring against set triggers for a management response (providing effective intervention during the dredging process). Turbidity limits for the dredging process have been set at three conservative management limits (based on a rolling average over 6 hours):

1) Level 1 of 15 NTU. If breached an investigation will be undertaken to find the source.

2) Level 2 of 20 NTU. If breached the dredging process will be changed until below this level.

3) Environmental limit of 35 NTU. If exceeded, no further dredging should occur.

POTL proposes Draft Conditions 19.1 to 19.13 to implement recommendations for the management of turbidity.

7.10.2. Release of contaminants within sediment

For the sediment monitoring undertaken by POTL for this assessment, TN and P sediment concentrations appeared to be increasing with proximity to the Port. Therefore, the risk of the release of nutrients from dredged sediment into the water column is higher for sites closer to the Port than those further away. Water quality data for Te Awanui suggests that algal growth is low. Importantly, the Toll Bridge Marina site has median chlorophyll *a* concentrations at the lower end of sites within the Harbour, suggesting algal growth (as one indicator of eutrophication) at this site is very low, noting that indicators based on macroalgae coverage are variable. Low chlorophyll *a* concentrations may reduce the risk of the relatively short duration and spatial spread of the dredged plume significantly contributing to eutrophication, with effects likely to be less than minor.

Sediment collected for this assessment from the dredge sites has toxicants present at low concentrations indicative of low toxicity (below ANZG 2018 DGVs) and this is consistent with receiving environment sites in the Te Awanui. Further, shellfish toxicant concentrations are well within safe consumption limits. Therefore, the risk of toxicants entrained in the dredged sediment and leaching into the water column in concentrations above water quality guidelines is extremely low, with the effects on water quality likely to be negligible.

Pipi flesh was collected along a series of transects (**Figure 32**) and analysed for heavy metals, OCPs, PAHs and PCBs in 2023. No OCPs, PAHs or PCBs were detected (**Table 19**). Some concentrations of arsenic were measured to be above the DGV of the Australia and New Zealand Food Standards Code. However, the guideline refers to inorganic arsenic, which is typically 10% or less of total arsenic. The presence of metals in the Harbour is likely a result of a combination of natural sources and human activity. Generally, contamination in pipi flesh remains low, and ongoing dredging does not appear to have caused elevation contaminant levels to occur in pipi. Given the high level of water flow and replacement during each tide, the effects on water quality from the disturbance of sediment-bound contaminants is likely to be negligible.

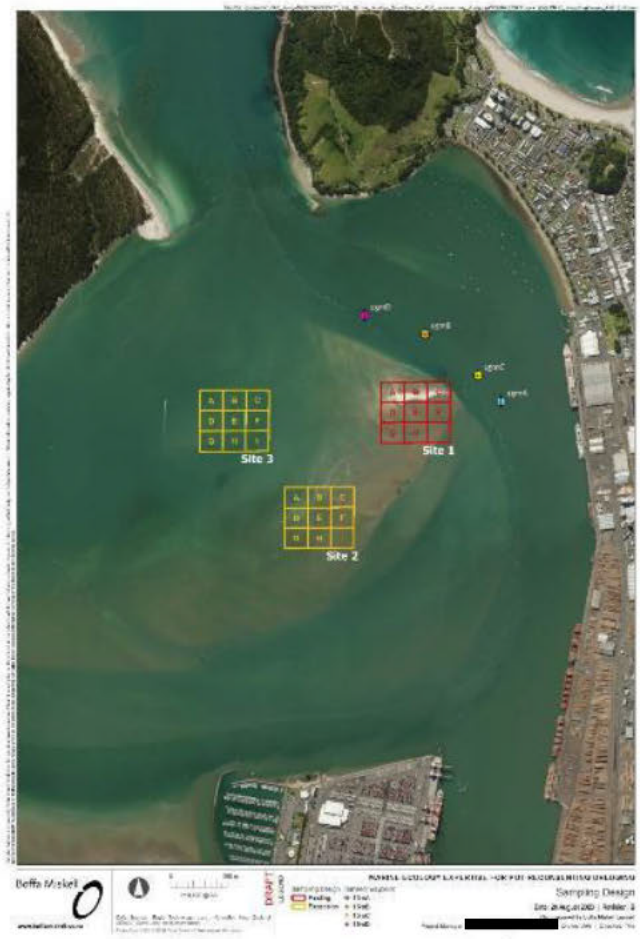


Figure 32: Measurement transects for pipi contamination study

Table 20: Measured contaminants in pipi flesh

	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	Polychlorinated biphenyls (mg/kg)
Grid/transect	DGV = 1 (for inorganic arsenic)	DGV=2	DGV = 2	DGV = 0.5	DGV = 0.5
Grid 1	1.69	0.101	< 0.02	<0.01	< 0.02
Grid 2	2	0.147	0.053	<0.01	< 0.02
Grid 3 A-B-C	1.87	0.23	0.028	0.012	< 0.02
Grid 3 D-E-F	2.1	0.22	0.019	0.01	< 0.02
Grid 3 G-H-I	1.86	0.16	0.03	< 0.01	< 0.02
Transect B	2.1	0.17	0.02	0.011	< 0.02
Transect D	2	0.23	<0.019	<0.01	< 0.02

Dr Stewart also showed that toxicants measured in sediments from the channel and sites of importance (e.g. Te Paritaha pipi bank) and in proximity to the Port to inform this assessment were generally low and below the DGV but increasing with proximity to the Port.

The release of contaminants in sediment into the water column runs the risk of causing eutrophication (nutrients and organics). Higher sediment nutrient concentrations are found closer to the Port area and are similar to the organic nutrient levels in upper Tauranga estuaries, therefore the risk of eutrophication is increased with dredged material close to the Port. However, algal growth within the Harbour is low, which reduces the risk of eutrophication spread from dredging. Overall, the risk of eutrophication spread from the Project is assessed to be less than minor.

Dredging has the potential to result in ecotoxological effects on marine life (metals/metalloids and organic toxicants) and potential human health effects from the consumption of contaminated marine species (metals/metalloids, organic toxins, microbial pathogens) through the disturbance of contaminated sediment. Measurements taken of sediment toxicity shows that toxicant levels – including organic toxicants, TOC, and metal/metalloid concentrations are generally very low, below detection limits and well below the DGV. Shellfish monitoring shows that the risk of toxicity from shellfish ingestion is very low. The sediment in dredge sites has low toxicity and therefore the risk of enhanced toxicity from toxicants leaching into the water column above water quality guidelines is likely negligible.

7.10.3. Temperature, pH, salinity or dissolved oxygen

To inform this assessment, water temperature, pH, salinity, and DO were measured by POTL upstream, downstream and alongside the vessel during the dredging and disposal process. The water quality monitoring undertaken for this assessment shows negligible effects for water temperature, pH, salinity, and DO from dredging and disposal. Changes in temperature, pH, salinity and DO can occur as a result of the dredging and disposal process. Measurements taken for this consenting process found that there were negligible differences in these metrics across the sites and throughout the dredging and disposal process. Water quality monitoring indicates that dredging and disposal are likely to have a negligible impact on water temperature, pH, salinity and DO. Given these conclusions, Dr Stewart advised that no measures need to be adopted to avoid, remedy or mitigate the Project's impact on pH, salinity and DO.

7.10.4. Responses to cultural values reports

Dr Stewart discusses issues related to water quality identified in the CVRs in Section 5.2 of **Appendix I**). Common issues highlighted in the CVRs included a lack of assessment on cumulative and long-term (even inter-generational) effects, uncertainty, the potential for mahinga kai to be unsafe to eat, a western-science centred approach in the assessment and proposed conditions that do not consider cultural values.

Cumulative and long-term effects

Dr Sewart agrees that cumulative and long-term effects are a valid concern over a proposed 35-year consent term. He states that

> "*Water quality in the harbour has been routinely monitored by BoPRC for a long time and this will be continued. These data allow for current status and long-term temporal change assessments, which inform BoPRC of potential issues with water quality and potential remediation required. This is a catchment-scale approach so considers all inputs to Tauranga Harbour. The effects of the dredging on water quality are localised and transient due to the rapid exchange of water through tidal and wind processes. During dredging and disposal, controls are in place (through proposed consent turbidity monitoring conditions) that ensure the plume is contained and does not adversely affect water quality in the wider environment.*

As the dredging campaigns will be sporadic and not continuous, and effects on water quality are transient, there will be considerable time between campaigns for an equilibration of the water quality around the dredging and disposal areas, effectively "resetting" the baseline water quality. Therefore, I consider that the risk of cumulative effects on water quality over the long-term to be low.

Long-term deposition and accumulation of sediment from dredging or disposal may have the potential to lead to cumulative effects from contaminants entrained in the sediment leaching into the water column. However, the sediment plume from dredging is well contained within the channel, so the likelihood of sediment accumulation at sites further afield is low. Proposed consent conditions ensure that high silt sediment (with the potential for dispersal and to contain the highest concentrations of contaminants) is deposited on the seaward side of the ocean site H. Further, contaminants in the dredged sediment are currently at concentrations well below effects concentrations."

Dr Stewart therefore considers the cumulative effects of sediment deposition leading to adverse effects on water quality to be low.

Uncertainty

Where appropriate, Dr Stewart used statistical analyses to show a significant (or lack of significant) difference between "upstream" and "downstream" turbidity. Dr Stewart states that this defines uncertainty in these analyses and clearly puts into context the significance of assumptions and conclusions drawn from that data. Dr Stewart also confirms that conservative approaches are used in his assessment to address uncertainty, specifically for turbidity with using the ANZECC (2000) guideline and management limit approaches.

Mahinga kai may be unsafe to eat

Dr Stewart notes that:

"*Shellfish were used as species to assess potential human health risks from sediment-associated contaminants the shellfish may bioaccumulate. Shellfish are sessile commonly consumed species that are known to accumulate contaminants in suspended solids through filter feeding. As they are sessile filter feeders they are highly effective sentinel species and indicators of environmental stress and contamination at specific sites. A such, they are a worst-case scenario compared to other species that are mobile and/or do not bioaccumulate contaminants through filtration of water and the associated suspended solids.*

An assessment of changes over time was also undertaken.

Dr Stewart reports that a wide range of metals and organic contaminants were measured and these have been generally consistent through time. All studies included metals/metalloids, polycyclic aromatic hydrocarbons, polychlorinated biphenyls and organochlorine pesticides. The BOPRC temporal dataset showed that many organic contaminants and the metal 'lead' have been reducing over time, due to historical bans imposed for these chemicals.

Dr Stewart states, on page 85 of Appendix I, that:

"*Importantly, FSANZ food safety standards are only available for a selection of the contaminants measured for which there are sufficient toxicological data to provide robust consumptive risk. The results show that concentrations in the shellfish (in the Harbour and also at Paritaha) are well below FSANZ maximum limits, and as such, the shellfish are considered safe to eat.*"

Western-science centred assessment and conditions

Dr Stewart confirms that the proposed conditions are based on western science assessments as these are quantitative metrics that can be measured and assessed by BOPRC with clear avenues for enforcement of non-compliance issue by BOPRC, if required.

7.11. MARINE ECOLOGY

Dr De Luca (**Appendix J**) states that the primary marine ecological effects from the Project include dredging increasing concentration of TSS (primarily from overflow discharge from the dredge) the deposition of sediment on soft sediment and rocky reef habitats and the mortality of benthic invertebrates within the dredging area and disposal area.

A range of marine ecology matters were raised by hapū through submitted CVRs (**Appendix F**). While the specific framing differed between groups, there is considerable overlap in the issues identified, particularly in relation to Te Paritaha pipi beds, kaimoana abundance, sedimentation effects, cumulative impacts, and monitoring frameworks. These themes were considered in Dr De Luca's assessment as summarised in Section 15 of her report (**Appendix J**).

This purported link between POTL activities and seafood declines is a common concern from iwi/hapu. It is Dr De Luca's opinion that these two occurrences are not ecological or scientifically linked, but rather that these events have been recognised as occurring in the same time frame, perhaps leading people to identify a cause and effect link, which in Dr De Luca's opinion is not correct.

Dr De Luca's assessment of the effects on marine ecology was undertaken in line with the EIANZ guidelines, in order to determine the overall level of effect of the Project. Dr De Luca undertook the assessment at two spatial scales, being the Reconsenting of Capital and Maintenance Dredging scale and the southern Te Awanui scale. This involved not only looking at the effects of the Project in relation to two different spatial scales, but also considering the different ecological context and values of Reconsenting of Capital and Maintenance Dredging versus the entire Southern Harbour and describing how these ecological values will/will not be impacted.

Increased turbidity from dredging and disposal due to resuspension of fine silt particles in the benthic sediment can lead to physical effects on biota through smothering and/or light attenuation (for example on seagrass and shellfish).

Pipis are of particular concern because of their value as kaimoana and because they can only feed efficiently at very low suspended sediment concentrations. Ngāi Tamarāwaho, Ngāti Ranginui Fisheries Trust, TMICFT and Ngāi Tukaitangi raised concerns relating to the decline in pipi populations. Dr De Luca notes that the modelled suspended sediment concentrations at Te Paritaha are short-lived, infrequent, and remain well below thresholds associated with adverse ecological effects. Existing monitoring programmes, undertaken in collaboration with iwi (including TMICFT), provide a robust basis for assessing ecological effects on pipi and other kaimoana species. Monitoring data indicates pipi populations are dynamic and reflects natural life history processes, including cohort turnover, with recent surveys showing progression toward adult dominated populations. Dr De Luca concludes that pipi will therefore not be adversely affected.

The TSS concentration and duration of exposure from dredging for this Project is also below the avoidance threshold of 100 mg/L for fish and as such fish will also not be adversely affected.

Smothering of soft sediment benthic invertebrate communities that dominate the disposal sites by sediment is a potential effect related to the deposition of suspended sediment particles, but it is expected that effects of sedimentation will be negligible with the controls in place to minimise TSS beyond the mixing zone.

Dredge spoil has the potential to disperse from the soft sediment disposal site and deposit on nearby subtidal reef communities. Reef benthic communities at Motuotau Island (the closest subtidal reef adjacent to the disposal area) exhibits stability, diversity, and structural complexity, comparable to other reefs in the area. The 2022 and 2024 surveys of Motuotau Island did not find any changes in the community structure that could be attributed to the Port's dredging activities, nor did earlier surveys. With a magnitude of assessment of **Low**

the level of the effect of sediment deposition on nearly reef communities is **Low**. Dr De Luca has, however, recommended ongoing monitoring of the potentially affected reef communities, which has been included in the draft conditions.

This risk of increased turbidity is reflected in the current consent conditions which are primarily designed to monitor and control turbidity (through managing suspended solids release into the receiving environment).

Chemical analyses of the sediments that are likely to be dredged and disturbed during the proposed campaign show that metal, PAHs, and OCs concentrations are below ANZGDGV concentrations of concern. These concentrations have remained below DGV for a number of years. Therefore, overall, there would be negligible contamination of water quality due to low concentrations of contaminants in disturbed sediments, even during dredging activity. Given the high degree of water flow and exchange/replacement on each tide, the longer term effects on water quality from sediment bound contaminants are likely to be negligible. The risk of deposition of suspended contaminated sediment from the dredging activity and disposal activity has a magnitude of assessment of Very Low, the level of the effect of contaminant resuspension is Very Low.

The benthic invertebrates living where the dredging will take place will suffer complete mortality from the mechanical dredge process. No difference in diversity or abundance of channel floor benthic species between the channels to be dredged and wider Harbour mean that the dredged area would be rapidly colonised through natural processes. Dr De Luca concludes that for the disturbance and mortality of soft sediment benthic invertebrates, (which have a high ecological values) and a **Low** magnitude of effect, the level of the effect is **Low**.

Dr De Luca also discusses biosecurity effects and the effects of underwater noise. The marine ecology effects of the proposed reconsenting of capital and maintenance dredging is summarised in **Table 20**.

Table 21: Summary of Marine Ecology Effects of the Project

Effect	Ecological Value	Magnitude of Effect	Level of Effect without mitigation	Mitigation
Dredging of sediment effect on benthic invertebrates in the existing dredge locations - at Southern Harbour scale and dredge location scale.	High	Low (1-3 years) Very Low (>3 years) (Communities will be reset every time the benthic sediment is dredged. Dredged areas will be recolonised over time in a natural recovery cycle).	Low Very Low Less than minor.	Not required.
Dredging of sediment effect on TSS (within the dredge locations).	High	Low and temporary	Low Less than minor.	Not required.
Dredging of sediment effect on contaminant availability in sediment (within the dredge locations).	High	Low and temporary	Low Less than minor.	Not required.
Dredging of sediment effect on fish (within the dredge and Southern Te Awanui scale).	High	Negligible	Very Low Less than minor.	Not required.
Dredging of sediment effect on Te Paritaha pipi (at the Te Paritaha scale).	High	Low	Low Less than minor.	Not required.
Deposition of dredge spoil effect on soft sediment benthic invertebrate	High	Low (1-3 years) Very Low (>3 years)	Low Very Low Less than minor.	Not required.

Effect	Ecological Value	Magnitude of Effect	Level of Effect without mitigation	Mitigation
communities (at the disposal area scale).				
Deposition of dredge spoil effect on subtidal reef communities (at the disposal area and adjacent habitat scale).	High	Low	Low Less than minor.	Not required.
Effects of dredging and disposal on Invasive Marine species (at the Southern Te Awanui scale).	High	Negligible	Very Low Less than minor.	Not required.
Effects of dredging and disposal noise on fish and invertebrate marine organisms (excluding marine mammals).	High	Low	Low Less than minor.	Not required.
Cumulative effects of dredging and disposal of dredge spoil.	High	Low (1-3 years) Very Low (>3 years)	Low Very Low Less than minor.	Not required.

In summary, Dr De Luca finds that all effects on marine ecological values are either a low or very low level of effect at both the southern Te Awanui and dredge/disposal area assessment scales.

Dr De Luca recommends:

- Monitor and manage dredging methodology to ensure elevated TSS above effects thresholds occurs only within the mixing zone and TSS is below ecological effects thresholds beyond the mixing zone (especially at Te Paritaha).
- Continue with bi-annual surveys of pipi communities on Te Paritaha.
- Continue two-yearly surveys of reef benthic communities at Motuotau Island adjacent to disposal sites.
- Continue monitoring for invasive species, primarily on hard structures/rocky reef.

PoTL propose Draft Conditions 19.1 to 19.13 to monitor and manage TSS. Ongoing monitoring of Te Paritaha pipi bed and Motuotau Reef are included in Draft Conditions 21.1 to 21.5. Monitoring of invasive species is undertaken by BOPRC. Draft Conditions 17.1 to 17.2 and 18.1 to enable additional research and analysis to be completed and for additional mitigation to be required should the risk of introducing non-indigenous species to new areas be identified.

Mātaitai Reserve

Dr De Luca's assessment included the Te Maunga o Mauao Mātaitai Reserve area, where she considered the effects of the Project on kaimoana. Dr De Luca opines that there is no evidence to indicate POTL's activities have, or this Project would, caused incremental loss of kaimoana species in the Te Maunga o Mauao Mātaitai Reserve. As such, her assessment of effects in relation to the Mātaitai Reserve is the same as what it is for southern Te Awanui and the dredge/disposal area which is that effects will be low, with no mitigation required.

7.12. MARINE MAMMALS

Dr Helen McConnell assessed the actual and potential effects of dredging activities on marine mammals. Dr McConnel assessed the likelihood (remote, low, moderate, high and certain)

of any residual effects occurring, assuming the adoption of the mitigation measures this was determined using the Macdiarmid et al 2014 methodology[29].

Dr McConnell considered potential effects raised by local iwi/hapū groups through CVRs, including the cultural significance of marine mammals. Cultural effects and associated management recommendations of relevance to marine mammals are discussed in Section 7 of **Appendix K**.

Seven potential effects were identified: underwater noise and vibrations, habitat modification, ship strike, exposure to contaminants, marine debris, artificial lighting, and cumulative effects. Dr McConnell's findings for each potential effect are discussed below.

CVRs raised concern about the effects of underwater noise on marine mammals. Increased levels of **underwater noise** can cause masking effects (a reduced ability of marine fauna to perceive natural acoustic signals) which can reduce their ability to navigate, forage, communicate and avoid predators among other things. The degree of masking depends on the level of frequency overlap between human-generated noises and noises that animals use to perceive their environment. Low frequency noises travel more readily through the water than high frequency noises and therefore are more likely to move far away from their point of origin. The biological significance of a noise effect will depend on the significance of the affected habitat and the duration of the effect. Dr McConnell also notes that some species are known to compensate for noise effects by changing their vocalisations such as by altering the frequency of vocalisations or increasing their calling rate.

National Marine Fisheries Service guidance indicates that the threshold required to alter marine mammal behaviour is 120 dB_{rms} re 1 µPa for continuous noises such as dredging. However, actual impacts are species dependent.

Noise from dredging is characterised as continuous, broadband sound where the main energy is low frequency (typically below 1 kilohertz) with peak levels below 500 hertz. TSHD operations typically fall within the range of 160 to 188 dB re 1 µPa at a distance of 1 m from the source, with BHD being between 154 – 179 dB re 1 µPa at 1 m. This is in line with the expected noise level from transiting shipping vessels (176 to 188 dB re 1 µPa at 1 m). Dredging activities typically overlap in time and space with vessel traffic associated with the Port and it is difficult to distinguish between the noise generated by the dredging vessel and noise generated by vessel traffic.

Dr McConnell indicates that based on Dr Pine's modelling of underwater noise (**Section 7.8**), no risk of auditory injury was identified. Masking effects are determined by calculating 'listening space reduction'. m is the surrounding space over which an animal can typically detect biologically important sounds such as for the detection of prey, predators or to communicate with members of their own species. However, anthropogenic noise can reduce this area by interfering with these sounds. Dr McConnell predicts that 'the active dredge will be audible above the existing soundscape for all marine mammal species to 8 km away'.

Dr McConnell states that 'accounting for the different functional hearing groups of marine mammals, the cumulative noise effects of the Project are predicted to generate very small differences over the existing soundscape.' While dredging clearly elevates the background noise levels, the increases are not far reaching to the surrounding area. Dredging noise has the greatest impact in areas that are confined by the surrounding geography, such as Stella Passage and the Harbour entrance.

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[29] MacDiarmid, A., Boschen, R., Bowden, D., Clark, M., Hadfield, M., Lamarche, G., Nodder, S., Pinkerton, M., Thompson, D. 2014. Environmental risk assessment of discharges of sediment during prospecting and exploration for seabed mineral. NIWA Client Report: WLG2013-66. Report prepared for Ministry for the Environment.

Dr McConnell concludes that 'animals will only be exposed to masking and behavioural effects temporarily when they approach within 5.5 km of the active dredge' and that 'any effects on marine mammals from the Project are therefore unlikely to elevate risks to marine mammals above those already present from existing dredging and/or commercial shipping' (p. 55).

Iwi/hapū recommended live hydrophone monitoring during dredging with implementation of trigger thresholds, shutdowns and fauna response monitoring. Dr McConnell states that hydrophones are sometimes warranted to underpin shutdown requitements for projects that carry a real risk of auditory injury or occur in areas of important habitat with resident population of conservation dependent species. Neither of these factors apply to the Project, and Dr McConnell considers real time hydrophone monitoring unnecessary.

Dr McConnell recommends the following mitigations to minimise the effects on marine mammals from dredging noise:

- Dredge equipment will be regularly maintained, including lubrication and repair of winches, generators, propulsion components and other potential noise sources. Maintenance records should be made available for inspection; and
- Compliance with the Marine Mammal Protection Regulations 1992 (**'MMPR'**) which stipulate the requirements for operating vessels around marine mammals.

With the adoption of the recommended mitigation measures, Dr McConnell concludes that the likelihood of adverse effects on marine mammals from dredge noise will be low and the magnitude of predicted effects will be (at most) minor.

POTL propose Draft Condition 14.5 to ensure that: "*All vessels associated with the exercise (hereafter referred to as 'a Vessel') (see Advice Note 3) of this resource consent shall comply with the Marine Mammal Protection Act Regulations 1992*". Draft Condition 14.7 is also intended to minimise the levels of underwater noise.

Dredging activities can result in **habitat modification** both through the generation of increased turbidity and by altering the habitats of benthic species through the removal of seabed material. There is little evidence to suggest that marine mammals are adversely affected by suspended sediment as they are tolerant of turbidity and typically don't rely heavily on vision for foraging and navigation.' As a matter of fact, marine mammals have been observed generating turbidity as a foraging behaviour.

The dredging of sediment also removes benthic habitat associated with benthic biota that can be a primary source of food for some marine mammal species. The disturbance of the seabed, therefore, has the potential to impact the quality and availability of benthic prey, which can thereby impact the health of the marine mammals that feed on them. Dr McConnell concludes that the risk to marine mammals from habitat modification is negligible.

Ship movements occurring where marine mammals are present runs the risk of collision between ships and marine mammals. Dr McConnell notes that the risk to marine mammals from an incidental **vessel strike** decreases as speed decreases, with a 79% chance that the impact will kill it at 15 knots and less than 50% percent chance of a ship strike being lethal at speeds of 11.8 knots or less. POTL has indicated that a typical TSHD will tend to travel at a speed of approximately 2 knots during active dredging, at a maximum speed of 14 knots travelling to the disposal site and a maximum of 15 knots when returning from the disposal site.

Assuming compliance with the MMPR regulations, which is a legal requirement for POTL operations – Dr McConnell considers the likelihood of ship strike during dredging operations to be low and the magnitude of potential effects to be negligible.

POTL proposed Draft Conditions 23.1 to 23.3 that requires marine mammal sighting are recorded and reported.

Dredging can resuspend sediments, which has the potential to stir up **contaminants** in the marine environment. Contaminants in the marine environment at high levels pose health risks to many marine mammals.

In the instance of dredging, the likelihood of marine mammal exposure to contaminants is largely dependent upon the quality of the sediment to be dredged. Concentrations of PAHs, PCBs and TBT have all been found to be below laboratory detection limits. Testing in 2020 for heavy metal contamination in the benthic sediments found that the contamination levels of arsenic, Cadmium, Chromium, Cu, Lead, Nickel and Zinc were all below the DGV as recommended by the Australia and New Zealand Guidelines for Fresh and Marine Water Quality. Further, no marine mammal species are entirely reliant on the AOI for foraging habitat. Dr McConnell concludes that 'bioaccumulation is unlikely to occur as any contaminated areas that are subject to resuspension would represent a very small proportion of foraging habitat for marine mammals'. Dr McConnell considers the likelihood of adverse effects on marine mammals from chemical contaminants during the Project to be very low and the magnitude of predicted effects to be negligible.

Any maritime vessel, including dredges, are a potential source of **marine debris** that can harm marine mammals through ingestion or entanglement.

Dr McConnell recommends the following mitigation measures to minimise the adverse effects on marine mammals from marine debris:

- Adoption of appropriate waste management protocols during all components of the proposed dredging activities, including:
- All cordage debris (e.g. ties, lashings, etc.), plastic strapping and other non-biodegradable waste that is generated as part of the proposed dredging must be collected, securely stored and disposed of at an approved solid waste facility onshore;
- If any loose debris does enter the water, it must be promptly retrieved if safe to do so;
- Any lost equipment should be retrieved from the seabed, water column or foreshore if it is safe and practical to do so;
- All Project vessels must have covered waste bins and debris retrieval nets onboard; and
- A commitment to collect and retrieve obvious objects of marine debris during the course of dredging and to safely dispose of these onshore.

Overall, Dr McConnell considers the likelihood of marine debris effects from the Project to be very low and the magnitude of effects to be negligible.

POTL is proposing Draft Condition 14.8 to manage potential adverse effects from marine debris: "*The consent holder shall ensure that:*

(a) All dredge Vessels have covered waste bins and debris retrieval nets;

(b) Any waste or equipment that enters the water from the dredge Vessel(s) is promptly retrieved (if safe to do so) and disposed of onshore; and

(c) Marine debris recovered during the process of dredging is retrieved for safe disposal onshore."

Artificial lighting required during nighttime dredging can potentially attract prey species to the area of the dredge vessel. This can, in turn, attract marine mammals. Dr McConnell opines that the likelihood of artificial lighting effects on marine mammal species is very low and the predicted magnitude is negligible.

Iwi/hapū raised concerns that cumulative effects, particularly from simultaneous operations from both this Project and Stella Passage, were not adequately addressed in the assessments While in this assessment, the potential cumulative effects on marine mammals takes a qualitative approach (in the absence of widely available quantitative tools), Dr McConnell discusses cumulative noise effects and other potential threats that marine mammals may face across their wider distribution (e.g. disturbance from vessel traffic, and habitat degradation). Dr McConnell also recognises that cumulative effects will be of most relevance

to threatened species and provides a more detailed evaluation for killer whales and bottlenose dolphins; the two threatened species most likely to interact with the proposed dredging operations. Dr McConnell considers the following **cumulative effects** to be of relevance to the Project: acoustic effects, disturbance from vessel traffic, habitat degradation and entrapment or bycatch. Dr McConnell considers that the likelihood of cumulative effects is low and the magnitude of effects is negligible.

Table 22, which replicates Table 9 from Dr McConnell's report, summarises the potential effects on marine mammals from the proposed activity, recommended mitigations, the likelihood of effect and the magnitude of effect.

Table 22: Summary of Assessment of Effects Results for Marine Mammals (McConnell, p.60)

Potential Effect	Recommended Mitigations	Likelihood of Effect	Magnitude of Effect
Underwater noise and vibrations	Regularly maintained dredge equipment. Maintenance records available for inspection. Compliance with MMPR	Low	Minor
Habitat modification	None	Very low	Negligible
Ship Strike	Compliance with MMPR	Low	Negligible
Exposure to contaminants	None	Very low	Negligible
Marine debris	Adopt waste management protocol Comply with Resource Management (Marine Pollution) Regulations 1998 Collect and retrieve marine debris whilst dredging	Very low	Negligible
Artificial lighting	None	Very Low	Negligible
Cumulative Effects	None, but any efforts to decrease the overall duration of the dredging campaign would benefit	Low	Negligible

7.13. AVIFAUNA

This section relies on information provided by Dr Della Bennet in "*Wildland Consultants (May 2026). Assessment of Potential Effects on Marine Avifauna due to Channel Dredging at the Port of Tauranga. Wildland Consultants Contract Report No. 6654c. Prepared for Port of Tauranga Ltd. 36pp*" (**Appendix P**). Dr Bennet undertook an assessment on potential effects from the dredging activity on shorebird and pelagic avifauna, including kororā/northern blue penguins (*Eudyptula minor iredalei*, At Risk ¬- Declining).

A description of the existing habitat and species resident in Te Awanui is presented in **Section 5.12.**

Dr Bennet reviewed relevant literature and the Noise, Water Quality, Marine Ecology and Marine Mammals reports to assess the response of shorebirds and pelagic seabirds to dredging

activities, and different penguin species to noise, including dredging, and shipping activity. The assessment is also based on the evaluation of 24 years of bird observation data.

Dr Bennet assessed the:

- Physical effects of dredging.
- Effects on estuary birds.
- Effects on seabirds.
- Effects on kororā/northern blue penguins.

Dr Bennet found that dredging will increase the **turbidity** of the extraction and receiving area. However, the effects will be localised and short-term. Through the dredging process and disposal of material, benthic fauna which have been collected during dredging will be released into the water column and will provide potential foraging opportunities for shorebirds and seabird species. For example, turbidity can increase the concentration of fish near the surface of the water, which can increase the foraging behaviour of terns. However, depending on the level of turbidity within the dredging and deposition area, visual foragers, such as kororā, may be inhibited from foraging within the immediate area as prey may be harder to see. Nevertheless, potential modification of foraging areas due to any suspended sedimentation from dredging activities, including offshore disposal of dredged material, should be minor as it is believed that the sediment mixes and settles reasonably quickly.

Increased noise can impact bird populations through physical damage (hearing loss), increased stress, and an alteration to behaviour (such as attraction, tolerance, aversion and flight). Dr Bennet concludes that because the noise character and intensity caused by the Project will be similar to current Port activities, the impact of noise from dredging will be significantly less than that caused by commercial and recreational Harbour traffic. The review findings indicate that only minor, temporary disruptions will occur, due to noise-intensive activities.

Estuary birds live and forage within the estuarine environment and are therefore impacted by the health of the ecosystem, including toxicity. Ngāti Ranginui Fisheries Trust raised concern that birds may be impacted by daily intake / bioaccumulation of contaminants consumed through shellfish. Dr Bennet indicates that bioaccumulation of contaminants can take weeks, months or years depending on the contaminant in question and the concentration of contaminants. Further, birds have some capability to excrete contaminants. It is Dr Bennet's opinion that based on the Dr De Luca's contaminant studies of pipi flesh, that the risk to estuary birds from contaminants is less than minor.

Ngāti Pūkenga submit that a comprehensive avian contaminant risk assessment, based on the full suite of analytes relevant to urban harbour sediments, is required before the “negligible risk” conclusion can be accepted. Ngāti Pūkenga, Ngāti Ranginui, Ngai Tamatawhero, Ngāti Hangarau and Ngāi Tukairangi raised concerns that lighting from night dredging may affect birds, especially kororā. Dr Bennet notes that the light-spill from the dredging activity could increase foraging opportunities for seabirds, including kororā/northern blue penguins, by attracting fish and zooplankton to the surface. Dr Bennet, however, recommends that vessel lighting should be minimised in light intensity, avoid short wavelength (if practicable), shielded, and reduced over-spill to limit the attraction to seabirds at night to the vessel. Dr

Bennet confirmed that this is adequately addressed by a general lighting condition in the draft conditions.

Ngāti Pūkenga states that the artificial lighting assessment understates cumulative risk. Dr Bennet, however, found that the addition of the dredging activity to the already existing sky-glow will have a negligible effect, due to the commercial and residential lighting that is already altering the marine environment.

Ngāti Ranginui Fisheries Trust identified potential effects on kororā/blue penguins and Ngāti Hangarau identify seabirds and kororā as inherited treasures (taonga tuku iho). Kororā were

> Draft Condition 14.22: 14.22 The consent holder shall ensure that, aside from the Vessel's own navigation lights and those required for workplace health and safety, lighting is only used to illuminate the works areas and is managed so it does not cause a distraction, dazzling, or temporary blinding to other water users, or interfere with fixed or the Vessel's own Aids to Navigation.

assessed in more depth than other species as they do not have the ability to avoid dredging activity when moving between roosting sites within the Harbour and foraging sites outside of the Harbour. Dr Bennet found that kororā can forage in areas where turbidity congregates fish and zooplankton and can navigate by looking above and below water to move through their environment. It should be noted that kororā already nest within the Harbour and surrounding islands and forage within the area and are therefore habituated to the environmental conditions of a working port. Dr Bennet notes that kororā also navigate around underwater noise fields and can swim up to eight km per hour to pass through noisier areas. Their ability to move through noisier areas would only temporarily affect communication, and any masking effect would be minor. No additional mitigation measures for kororā were identified by Dr Bennet.

Overall, Dr Bennet found that the proposed activities will, with the recommended monitoring and management of water quality and noise proposed by Dr Stewart and Mr Styles respectively, have **less than minor** effects on avian biodiversity in the Harbour and surrounding marine environments.

The CVRs (see **Appendix F**) raised several concerns related to avifauna. These are addressed in detail in Appendix 1 to A**ppendix P**.

7.14. BIOSECURITY[30]

The Project could introduce additional biosecurity risks through three primary mechanisms:

1. Novel or additional marine pests that arrive from outside of the Bay of Plenty Region on ships entering Te Awanui from elsewhere;
2. Larger dredged channels allow larger vessels from a wider range of locations to visit the Port, potentially introducing pests that do not already occur within the Harbour;
3. Transfer of marine pests along with dredged material from dredging sites to disposal sites.

Ngāi Tamarāwaho, Waitaha, Ngāti Ranginui Fisheries Trust, Ngāi Tukairangi Hapū, Ta Whānau ā Tauwhao (Ki Ōtāwhiwhi) and Ngāti Hangarau raised biosecurity concerns in the CVRs (**Appendix F**).

[30] This section relies on information provided in: Fletcher L. 2024. Port of Tauranga reconsent of dredging activities: assessment of environmental effects – marine pest risks. Nelson: Cawthorn Institute. Cawthorn Report 4019. Prepared for Port of Tauranga Limited.

The first two risk factors relate to vessels entering the Port from elsewhere and bringing in pests. In the case of point one, the risk arises from bringing in support vessels such as survey vessels and crew boats, which are likely to be New Zealand based vessels, but possibly not based in the Bay of Plenty Region. The dredge vessels themselves are also likely to be brought in from outside of the Bay of Plenty (and possibly outside of New Zealand). The Biosecurity Report by the Cawthorn Institute indicates that:

> *'Dredge vessels . . . are likely to have several risk mechanisms, including ballast water, entrained sediments and hull biofouling . . . [and] also tend to have a large number of 'niche areas', which may pose a higher level of biosecurity risk than vessels with a more basic hull design due to their increased surface area and complexity.'*

Te Kapu Ō Waitaha highlight, in their CVR, that marine pests are a cultural issue, and that '*[a] new marine pest incursion or spread event could shift an affected area from Mauri Oho to Mauri Rere, particularly if it affects kaimoana, reef habitat, Te Paritaha, Motuotau or wider harbour function*'.

Dr Fletcher and Dr Cahill state that the biosecurity risk posed by bringing in vessels to undertake dredging will be dependent upon the specific vessels' voyage and maintenance history. Dr Fletcher and Dr Cahill recommend the following mitigations to minimise the risk arising from bringing in vessels to undertake and support dredging activities:

- Comply with national and regional hull biofouling legislation (including Craft Risk Management Standard long-stay requirements and the Ballast Water Management Convention);
- Domestic vessels entering from outside of the Bay of Plenty Region should follow an approved Biofouling Management Plan;
    - Risk mitigation measures include: in-water biofouling surveys (and potentially cleaning), ballast water exchange en route, and inspecting, cleaning and decontaminating spaces that may hold sediment.

With the above mitigations adopted, Dr Fletcher and Dr Cahill conclude that the biosecurity risk from vessels moving into the region will be **less than minor**.

In terms of the risk posed by altered shipping patterns, the Cawthorn report states that the Port is already New Zealand's largest export port and therefore already globally connected with visits from vessels from around the world. Therefore, Dr Fletcher and Dr Cahill assess the risk from altered shipping patterns to be **negligible** and conclude that this risk will be adequately managed by adherence to the Craft Risk Management Standard and Ballast Water Management Convention.

Dredged material from the dredging site can contain NIS which are then transported to the disposal site as a part of the dredging process. Further, the disturbance of the seabed by dredgers may increase the susceptibility of the seabed to colonisation by NIS. Ngāi Tukairangi Hapū highlight the uncertainty regarding whether capital dredging would facilitate the spread of established marine pests from their current locations to new areas of the Harbour. Dr Cahill agrees that there is a level of uncertainty regarding whether marine pests survive in dredge spoil. However, he notes that dredging activity has been ongoing and there are several factors that intuitively work against survivability in dredge spoil. While some translocated organisms may be crushed or smothered during the disposal process, it is unknown exactly how certain this is, and may be dependent upon species and environmental factors. Dr Fletcher and Dr Cahill note that the relatively close proximity of the disposal sites to the dredging sites minimises this risk, as most NIS would likely be able to colonise the disposal sites without assistance from a dredge ship. Further, the disposal sites are established sites for spoil disposal that have been in use over a long period of time, further reducing the risk of the novel translocation of species.

To mitigate the biosecurity risks associated with dredge spoil disposal, Dr Fletcher and Dr Cahill recommend the following:

- Use NMHRSS survey data to inform and update the risk profile of the disposal of dredge material at the disposal sites;
- Should any high-risk species be detected within the dredging area, additional assessments of biosecurity risk should be undertaken by a suitably qualified expert.

With the above mitigations in place, Dr Fletcher and Dr Cahill consider the biosecurity risk from dredge disposal to be **minor**.

POTL have included Draft Conditions 16 to 18 to implement Dr Fletcher and Dr Cahill's recommendations.

Dr Cahill included responses to the considerations in CVRs in an Addendum to **Appendix L.** In their CVR, Ngāi Tukairangi Hapū highlight that dredging has the potential to exacerbate the impacts of marine pests, such as the Mediterranean fanworm and Asian paddle crab and highlight areas for some degree of uncertainty. Dr Cahill agrees impacts of Mediterranean fanworm on pipi beds have not yet been determined, and would require robust laboratory and / or field studies. Intuitively, Mediterranean fanworm may compete with pipi for food and may have other effects on the shellfish.

Ngāi Tukairangi Hapū also highlight uncertainty regarding whether the proposed maintenance dredging programme would perpetuate and escalate the biosecurity risk already resulting from POTL vessel activity. Dr Fletcher and Dr Cahill primarily considered the dredging activity itself, rather than effects from enabling ongoing operation of the Port. Vessel movements constitute the largest overall risk for the spread of marine pests. If the Port reduced or stopped vessel movements indefinitely, then future biosecurity risks would be expected to decline. Practically, any 'displaced' vessels would then call at other ports in Aotearoa New Zealand, and the overall risk to Aotearoa New Zealand would essentially remain unchanged (assuming environmental conditions are equally suitable for invasive species to establish at other ports). Secondary domestic spread (e.g. by recreational vessels, fishing vessels, aquaculture stock movements) could subsequently transport marine pests into the Harbour, albeit with lower overall risk because additional steps would be required (i.e. sequential events with independent probabilities).

Ngāi Tukairangi Hapū raised the uncertainty regarding biosecurity treatment effectiveness in real-world scenarios. Dr Cahill confirms that the effectiveness of biosecurity treatments is context dependent, and it is correct to state that in the real-world individual treatments are unlikely to be 100% effective. Biosecurity systems are designed to have multiple layers, each with imperfect risk mitigation, but in combination affording high degrees of risk reduction. Colloquially, this is referred to as a 'Swiss cheese' model. The options for risk mitigation described in **Appendix L** are consistent with best available practice residual levels of risk described in the report, and areas of uncertainty are highlighted in the report.

7.15. NAVIGATION

Mr Bermingham (Navigatus Consulting) undertook a Navigational Safety Assessment for proposed capital and maintenance dredging within Te Awanui (**Appendix O**). Navigatus has evaluated the risks associated with the proposed works within the context of the environmental conditions within the Port and Harbour with particular emphasis on large commercial maritime traffic and interaction with other maritime activities in the area – both commercial and recreational.

Mr Bermingham's assessment is based on the works being primarily undertaken by TSHD with some works along the wharf face or where harder material is encountered may be undertaken using a GD which will load a hopper barge alongside. A similar method was used in phase one capital dredging in 2015/2016.

In compiling this report, Navigatus conducted a review of an independent 2021 Tauranga Port and Harbour Maritime Risk Assessment and identified potential changes to the risk profile for identified risks as a result of the proposed dredging. These risks were then evaluated and considered against standard maritime risk controls and additional controls identified to reduce risks to be As Low As Reasonably Practicable ('ALARP'). This assessment then compares the results of the safety assessment after risk treatments are applied against the ALARP criterion. It also assesses the environmental impact using the defined criteria for an AEE under the RMA.

Navigatus also undertook detailed research, an on-water site visit, interviews with POTL staff and risk analysis during 2024 in support of prior Port planning.

Mr Bermingham recommends controls prior to and during dredging. These include that a Dredge Management Plan be prepared to establish protocols for how dredging will be managed and to ensure both environmental and safety requirements. Mr Bermingham states that ongoing communication with stakeholders and consultation with the Harbourmaster will be an important part of this plan. Given the limited scale and routine nature of the works, Mr Bermingham notes that simply advising local boating clubs of the plans should suffice. The benefit of this will be largely that of communicating to these parties what the plan is, and how to keep their vessels/members safe.

Both generic and local Notices to Mariners should be utilised to inform mariners of dredging operations on an ongoing basis. Dredge operators should maintain contact with Port Control and communicate with Port Control before moving their vessels. POTL's proposed Draft Conditions include a Dredge Management Plan in Draft Conditions 15.1 to 15.5.

Mr Bermingham recommends formally notifying key stakeholders of the location, duration and nature of dredging before it commences. POTL has included this in Draft Conditions 9.1 to 9.3.

Mr Bermingham also recommends that vessels should be properly secured to ensure they do not come adrift and cause navigational hazards. Items on the vessels must also be secured to ensure that no equipment can come loose and cause a navigational hazard.

Mr Bermingham also recommends that lighting should only be used to illuminate the works area and should be managed so it does not cause distraction, dazzling, or temporary blinding to other water users, or interfere with other Aids to Navigation.

POTL proposes Draft Conditions 14.20 to 14.23 to manage risks to navigational safety.

14.20 The consent holder shall ensure that, at all times, items on the dredging/works Vessels are secure to ensure no equipment, materials or packaging can come loose and cause a navigational hazard.

14.21 The consent holder shall ensure that any dredging/works Vessels are properly secured when not crewed to ensure they do not come adrift and cause a navigation hazard. In addition, the Vessels should also be secured such as to prevent unauthorised persons moving the Vessels. Should a vessel used by the consent holder in the exercise of this Resource Consent become adrift, the consent holder shall immediately on becoming aware of the vessel becoming adrift, move to recover and secure the vessel. The Harbourmaster shall be notified (by the consent holder) of the vessel becoming adrift and, after it is recovered and secured, of the cause of the vessel becoming adrift and the measures the consent holder will take to prevent any future reoccurrence.

14.22 The consent holder shall ensure that, aside from the Vessel's own navigation lights and those required for workplace health and safety, lighting is only used to illuminate the works areas and is managed so it does not cause a distraction, dazzling, or temporary blinding to other water users, or interfere with fixed or the Vessel's own Aids to Navigation.

14.23 The consent holder shall ensure, at all times, that no items, equipment, materials or packaging can be lost overboard from the dredging / works Vessels and so cause a navigational or environmental hazard.

14.24 If the consent holder or Vessel crew identify that any equipment, packaging or other materials on board Vessels being used by the consent holder in the exercise of this resource consent have been lost overboard and could cause a navigational or environmental hazard, the consent holder shall:

(a) Immediately notify the Harbourmaster and Port Control (Customer Service Centre);

(b) Provide details (location and objects of concern); and

(c) Make the best efforts to immediately minimise the hazard to navigation or the environment and have recovered the equipment, packaging or other materials that have been lost from the vessel.

The capital and maintenance dredging proposed do not represent a meaningful change to the status-quo in terms of navigational safety; either for large commercial vessels with a marine pilot embarked or for other maritime users of the Harbour.

The proposed activities are not expected to result in changes to the existing navigational safety risk profile. Routine maritime risk controls are able to manage the types of risk identified and these achieve ALARP. Therefore, no additional controls beyond those already required by exiting resource consents during dredging works are considered necessary.

These risks, and the overall impact of the proposed activities on navigation, have been assessed and described using terms for the scale of effects as developed over time under the RMA framework. In terms of environmental impact, the overall effect of the changes in relation to navigational safety is assessed to be less than minor.

Further to the completion of a draft technical report in March 2026, CVRs were received from a number of tangata whenua parties. Mr Bermingam considered the CVRs where there was a

navigational matter raised within these, and whether any changes to **Appendix O** were required in response to the CVRs received.

Mr Bermingam noted that some of these reports raised concerns regarding an increase in vessel activity and the cultural impact of additional maritime controls. Examples of these concerns as expressed include:

> "*Vessel Activity and Ongoing Disturbance: the Project also involves increased vessel presence associated with dredging operations and continued Port activity.*"[31]
>
> "*Where channels are deepened, widened, maintained and managed for larger vessels, the harbour is increasingly organised around shipping.*"[32]
>
> "*Increased vessel traffic*"[33]
>
> "I*ncreased vessel traffic (both dredging vessels and larger ships / increased vessels enabled by dredging) in Te Awanui can impact Ngāti Ranginui access to Te Awanui and ability to access ara.*"[34]
>
> "*Tangata whenua review and input into the Dredging Management Plan (proposed by POTL), which will include measures to address increased vessel traffic in Te Awanui.*"[35]

Mr Bermingham notes that the consent application that this report relates to addresses proposed maintenance dredging and only very limited capital dredging. As such, in itself, the work addressed in this report does not represent a material change to the status-quo in terms of; number of vessels, navigational safety for any maritime users of the Harbour, or scope of maritime controls required.

7.16. RECREATION

Te Awanui and the Maunganui coastal area is a highly significant marine and coastal recreation setting, used for a wide range of recreation pursuits and valued for its high-quality natural values, harbour shelter, ocean beaches and easy access.

Interviews with a wide variety of stakeholders (listed in section 5 of Mr Greenaway's report (**Appendix Q**) were undertaken to understand the concerns that stakeholders have regarding the Project. This was combined with a literature review to characterise the most likely adverse effects, and their scale.

Iwi/hapū indicate in the CVRs the relevance and importance of the cultural significance of waka ama and waka taua activity, and the ability to confidently gather quality and abundant kai moana. While **Appendix Q** does not review the cultural values of the study area, particularly Māori cultural values, it incorporates feedback on a draft consultation version of this report from Ngāi Tamarawaho, Waitaha, Ngāti Ranginui Fisheries Trust, Ngāti Hangarau and Ngāi Tukairangi. It is noted that many cultural and recreation values are intertwined, and recreation activities can be an expression and exercise of cultural values, such as whanaungatanga. This report can inform a cultural assessment by describing relevant aspects of the study area as they relate to recreation – such as water quality and navigation safety, however, the further layers of personal and cultural association need to be added by the relevant individuals and communities.

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[31] Ngā Pōtiki

[32] Ngāi Tamarawaho

[33] Tauwhao/Otawhiwhi

[34] Ngāti Ranginui as Tauranga Moana, 11 May 2026

[35] Ngāti Ranginui as Tauranga Moana, 11 May 2026

Dredging can introduce **marine pests**, which can negatively impact recreation. Managing the biosecurity risks has been assessed By the Cawthorn Institute (**Appendix L**) and POTL has proposed consent conditions which include several biosecurity provisions (**Appendix T**).

Crowding of the Harbour by recreational and commercial craft is a growing concern for Harbour users. Safe access across the main channel by waka taua, and for waka ama generally, was identified in CVRs as a particular concern. Mr Greenaway has reviewed the Navigation Safety report prepared by Navigatus (**Appendix O**) and concludes that the proposed dredging does not represent a significant change in the status quo in terms of **navigational safety for recreational users**. Mr Greenaway recommends the development of a formal advisory system between POTL and recreational user groups to alleviate navigational safety concerns. Mr Greenaway assesses the effect of the proposed dredging on navigational safety for recreational users as negligible.

Mr Greenaway notes that interviewees reported a perceived increase in **tidal current speeds** in the Harbour over time and showed interest in the potential impacts of dredging on tidal currents beyond the dredge areas. Mr Greenaway assessed the findings of Dr de Lange's report on turbidity and morphodynamics (**Appendix G**) and concluded that 'the net effect of capital and maintenance dredging on recreational requirements for depth and navigable current speeds is minor or less.'

Mr Greenaway reviewed the MetOcean Shoreline Change Assessment reports on changes to the southern end of the Matakana Beach shoreline and the configuration of **Panepane Point**. Historical photographs in this report clearly show the Panepane Point hook of sand has greatly altered and shrunken between 2004 and 2024. Interviewees indicate that the shelter created by the bay in the 2004 condition was previously a destination for small harbour craft such as waka ama and kayaks, with the Point itself being a shellfish gathering area. These changes can be said to have had an impact on recreation within the Harbour. Dr de Lange finds that effects of dredging on sediment transport in the Harbour are obscured by changing storm wave conditions, particularly a higher incidence of La Niña conditions over the last decade. Dredging effects appear to have only minor impacts beyond these natural processes.

Ecological values such as the presence of fishes underpins many recreational activities within the Harbour (fishing, shell fishing, diving, etc). Information contained within received CVRs indicates the significance of the ability to confidently gather kai moana as a central cultural value to iwi. Mr Greenaway refers to the findings of Dr De Luca's assessment (**Appendix J**) that recommends managing turbidity and the risk of marine pests, and undertaking ongoing monitoring of sensitive marine ecological habitats.

Overall, Mr Greenaway finds that:

- Te Awanui is increasingly congested with recreational and commercial craft, and this is likely to be the single largest concern of recreational users.
- There is a range of perceptions about the effects of harbour dredging on recreation opportunities, and a previous lack of ongoing communication appears to have led to various misconceptions about the potential adverse effects of dredging, particularly with regard to changes to marine species abundance, marine and coastal features such as Centre Bank, Panepane Point and the Matakana ocean beach, and tidal current speeds.
- The use of clean spoil in beach replenishment is widely recognised as important and beneficial.
- Better communication between the Port and Harbour users will benefit both groups.

POTL has included the following conditions relevant to recreational use:

- Notification of recreational users is included in Draft Condition 9.2,
- Managing turbidity is provided for in draft Conditions 19.1 to 19.4,
- Beach replenishment is provided for in Draft Conditions 14.12 to 14.15,
- Airborne noise is managed through Project noise standards and nighttime measures provided in Draft Conditions 14.16 to 14.19, and

- Navigational standards are addressed in Draft Conditions 14.20 to 14.24.

With the mitigation provided for through the draft conditions, Mr Greenaway concludes that the effects of capital and maintenance dredging on recreation values and opportunities are considered no more than minor.

7.17. LANDSCAPE AND NATURAL CHARACTER

The existing landscape and natural character are discussed in **Section 5.16**.

In their CVRs (**Appendix F**), Ngā Hapū o Ngatī Ranginui Settlement Trust, Ngā Pōtiki, Ngāti Ranginui Fisheries Trust, Ngāi Tamarawaho, Ngāti Hangarau and Ngāi Tukairangi raised concerns about landscape and natural character effects associated with the Project. These concerns are discussed in Section 8 of **Appendix N**, and have informed the assessment of biophysical natural character effects, perceived natural character effects, landscape effects, amenity effects and nighttime effects on Stella Passage, Maunganui Roads and Pilot Bay, the Cutter Channel, the Entrance Channel and the Ocean Deposition and Main Beach Replenishment Areas by Mr Brown. The key themes raised in the concerns include:

- Inadequate recognition of cultural values and effects;
- Lack of adequate assessment and mitigation of adverse cultural impacts on the City Plan's viewshafts and the amenity values of Te Awanui more generally;
- Effects on other sightlines and landscapes of significance to local hapu and iwi;
- Basing assessments on a degraded (current) baseline;
- General comments around how landscapes are defined;
- The cultural significance of relationships with physical visibility and scenic amenity and how they are altered over time;
- Cumulative effects; and
- Ongoing beach sand depletion at Waikorire.

Ngāti Ranginui Fisheries Trust and Ngāi Tukairangi also proposed conditions that have been considered.

The stages associated with this assessment comprise:

a) Description of the existing environment embracing the areas of dredging and deposition near the Port, and adjoining parts of Mt Maunganui and Tauranga City;
b) Identification of any natural features and values of significance in terms of the landscape and coastal environment of Tauranga Moana, the Pacific Ocean, and their margins (with particular reference to relevant statutory instruments);
c) Identification of any amenity values associated with the Tauranga Moana, the Pacific Ocean, and their margins;
d) Assessment of the actual and potential effects that dredging and deposition give rise to at present;
e) Assessment of any additional or different effects that future dredging and deposit would have during the proposed consent period;
f) Identification of any measures that would avoid, remedy or mitigate those effects to the point that they are less than minor; and
- Identification of any additional measures that could be employed by the POTL to ensure that the 'proposed' dredging and deposition, together with Port activities and structures, generate a positive environmental outcome.

Mr Brown notes that Points b) and c), above, would normally address any cultural values associated with the Tauranga Moana and Pacific Ocean. This is particularly important, given Whareroa Marae's close proximity to the existing Port and Stella Passage, together with the close association that Ngāi Te Rangi, Ngati Ranginui and Ngāti Pukenga have with the main body of Te Awanui. Mr Brown recognised that a number of landscapes, features and marine areas are identified in statutory documents as being important from both a broad multi-cultural perspective and Māori / iwi standpoint. These include such prominent landscapes

and features as parts of the Harbour and Mauao. In such instances, Mr Brown's report addresses their values, together with effects on them, from a broad landscape standpoint, without delving more forensically into their cultural values.

Mr Brown's assessment of the current state of the Tauranga Moana and Pacific Ocean is discussed in **Section 5.15**.

The proposed activities are not expected to result in any change to the range of effects that are visited on the various harbour ocean views already subject to dredging and deposition under existing consents. Mr Brown therefore focuses on the effects that are already derived from POTL's consented operations, together with those that would accrue with the capital dredging.

The assessment process has regard to the existing landscape / environment and its values, the relative visibility and prominence of the dredging / deposition, and their related effects on landscape, natural character and amenity values. These effects are addressed in two parts, initially focussing on the biophysical values of those parts of Te Awanui and the Pacific Ocean near the current area of dredging and deposition in terms of their:

- Bathymetry and geomorphological values,
- Water quality values,
- Ecological values,
- Habitat values for marine mammals, and
- Habitat values for avifauna.

The second area of assessment addresses perceptual landscape and natural character values related to areas of human activity and occupation that are near, or exposed to, the Port and Stella Passage, the Maunganui Roads, the Cutter Channel, and the ocean deposition sites.

The artificial profile of Sulphur Point and the modified geomorphology of Stella Passage were created between 1965 and 1989, with changes to geomorphology occurring in conjunction with capital dredging dating back to the 1970s. Studies undertaken by MetOcean indicate that the alignments of Stella Passage, the Maunganui Roads and Cutter Channel have remained closely aligned with the channel first formed in conjunction with the development of Sulphur Point from 1969 onwards.

Table 23 summarises the effects associated with the dredging and deposition regime.

Table 23: Landscape and Natural Character Effects

	Biophysical Natural Character Effects:	Perceived Natural Character Effects:	Landscape Effects	Amenity Effects:	Nighttime Effects:
1. Stella Passage	Low	Very Low	Very Low	Very Low	N/A
2. Maunganui Roads & Pilot Bay	Low	Very Low	Very Low	Very Low	Very Low
3. The Cutter Channel	Low – Very Low	Very Low	Very Low	Very Low	Very Low
4. The Entrance Channel	Low – Very Low	Very Low	Very Low	Very Low	Very Low
5. The Ocean Deposition & Main Beach Replenishment Areas	Low – Very Low	Very Low	Very Low	Very Low	Very Low

Mr Brown concludes that: "*the very limited **capital dredging** now proposed would have a physical impact on specific parts of Te Awanui, together with part of the existing entrance channel off Mauao, these activities would generate biophysical, perceived natural character, landscape and amenity effects that are unlikely to alter the core characteristics and values of Te Awanui and its terrestrial margins, or Mt Maunganui's wider coastal*

environment and landscape. Instead, it is anticipated that the effects of the future operations proposed by PoTL would be small-scale, quite isolated, and of a very low to negligible order, overall."

Mr Brown (**Appendix N**) goes on to conclude that the **maintenance dredging** and **deposition** would have a very low to low (ie. **less than minor**) level of effect in relation to:

- ONFLs 3, 5 and 10;
- ASCV-4a and ASCV-6;
- Te Awanui in general;
- The Pacific Ocean near Mt Maunganui and Mauao;
- Those urban and suburban areas that are both near and exposed to Te Awanui and the Pacific Ocean, including residential areas within Mt Maunganui, at Otūmoetai and on the margins of the Tauranga Central Business District; and
- Whareroa Marae, much more specifically.

Overall, Mr Brown therefore considers that the capital and maintenance dredging works, together with deposition and beach replenishment, proposed by POTL are appropriate in terms of the statutory provisions addressed in his report.

Given the typically very low order of effects that the proposed dredging and deposition would have on Mt Maunganui's landscape and natural character values, Mr Brown does not identify any measures that would mitigate the effects of the proposed activities. No conditions are, therefore, proposed as a consequence of his assessment.

8. DRAFT CONDITIONS

FTAA Sections 81, 82, 83, 84 and 84A, Schedule 5 Clause 18 and RMA sections 108 and 108AA

This section lays out the statutory framework under which conditions for a resource consent under the FTAA are set, and goes on to discuss the draft conditions proffered with this application.

POTL has consulted various parties, including tangata whenua and the BOPRC on the draft expert reports and draft conditions. This section discusses how input from consultation has shaped the draft conditions.

8.1. STATUTORY FRAMEWORK

Decisions on substantive applications are made by Expert Consenting Panels under Section 81 of the FTAA. Schedule 5, Clause 18 requires the provisions of Parts 6, 9 and 10 of the RMA to apply.

Section 83 of the FTAA states that "*When exercising a discretion to set a condition under this Act, the panel must not set a condition that is more onerous than necessary to address the reason for which it is set in accordance with the provision of this Act that confers the discretion.*" Schedule 5, clause 18 also applies the RMA conditions framework. The applicant, however, can proffer a condition that could not otherwise be imposed given the constraints in section 108 and 108AA[36] of the RMA and section 83 of the FTAA (Augier condition[37]). The Expert Consenting Panel could accept, include and take such conditions into account in their decision-making and setting of conditions.

POTL has included an Augier Advice Note that applies to the specific sub-conditions relevant. Most of the proposed Augier conditions include financial payment to a third party.

8.2. MITIGATION AND MONITORING RECOMMENDED BY EXPERTS

Section 7 of this report assesses the actual and potential effects of the Project, based on the technical assessments commissioned by POTL.

This Project is a re-consent. The monitoring of effects over many years of capital and maintenance dredging under existing resource consents has informed the assessment of effects for this application. The environmental effects are therefore, well known and understood.

The technical assessments recommend measures to avoid, minimise or mitigate potential adverse effects, as well as aspects of the environment that should be monitored. These are set out in **Table 24** with an indication of how they have informed the Draft Conditions, which are provided in full in **Appendix T**. The draft conditions include a provision (Draft Condition 7.1 to 7.2) that provides a mechanism for documents required under the conditions to be

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[36] RMA section 108AA(1): A consent authority must not include a condition in a resource consent for an activity unless—

(a) the applicant for the resource consent agrees to the condition; or

(b) the condition is directly connected to 1 or more of the following:

(i) an adverse effect of the activity on the environment:

…. or

(c) the condition relates to administrative matters that are essential for the efficient implementation of the relevant resource consent.

[37] *Frasers Papamoa Ltd v Tauranga City Council* [2010] 2 NZLR 202 (HC)

certified by the BOPRC, and defines a suitably qualified and/or experienced expert (Draft Condition 8).

8.3. BOPRC BIOSECURITY

The Team Leader Biosecurity at BOPRC has been consulted regarding biosecurity conditions and agrees that instead of POTL undertaking separate monitoring, the monitoring already undertaken by the BOPRC could be relied on to inform the management of biosecurity risks associated with the dredging. BOPRC propose that POTL contribute an annual amount of $10,000.00 towards this monitoring. The Team Leader - Biosecurity at BOPRC agrees with Draft Conditions 16 to 18.

Table 24: Proposed mitigation and management measures and how they inform draft conditions

Actual and Potential Effect	Proposed Mitigation Measure	Draft Condition number	Comparison with conditions in existing resource consents
Potential adverse effects on Te Kuia Rock (cultural value)	Dredging activities maintain a minimal distance of 100 m from Te Kuia Rock	14.4	The same as RC 65806 Condition 8.5. No non-compliances recorded.
Te Paritaha pipi resource is a taonga to mana whenua.	Monitoring of Te Paritaha. Funding is also provided to tangata whenua to undertake monitoring of kaimoana as they see appropriate.	21.5	RC 65806 Condition 7.14 required baseline surveys and annual monitoring of kaimoana sites, including Te Paritaha. The draft condition proposed would ensure a continuation of monitoring in a manner that provides the data required to determine trends.
Variability in natural processes events potentially increasing sedimentation of shipping channels	Increased flexibility in volumes of maintenance dredging compared the existing Resource Consents, noting that earlier resource consents also had flexibility to accommodate occasional larger quantities.	13.3	None
Sediment plumes during extraction causing turbidity that could have adverse effects on benthic biota, and marine mammals.	Monitor turbidity and implements management measures including ceasing dredging until remedy has been implemented. See conditions 19.1 to 19.13.	19	In RC 65807 turbidity monitoring is managed by Condition 10.2 to 10.5 and 10.8
Airborne noise	Project Standards set in conditions. Nighttime works prohibited in identified areas unless a Noise Management Plan has been certified and implemented.	14.16 to 14.19	RC 65806 and RC 65807Advice Note 3 Permitted activity levels for noise emitted by activities in the Harbour are contained in Rules 20(2)(4)(a) and (b) of the Bay of Plenty Regional Coastal Environment Plan.
Underwater noise	Dredge equipment shall be regularly maintained, including lubrication and repair of winches, generators, propulsion components and other potential noise sources in order to	14.7	None

Actual and Potential Effect	Proposed Mitigation Measure	Draft Condition number	Comparison with conditions in existing resource consents
	minimise the levels of underwater noise that are generated by dredging		
Decrease in abundance and health of pipi at Te Paritaha	Continue with bi-annual surveys of pipi communities on Te Paritaha.	21.5	Pipi communities on Te Paritaha are currently monitored under Condition 7.14 of RC 65806.
Decrease in health of reef benthic communities	Continue two-yearly surveys of reef benthic communities at Motuotau Island adjacent to disposal sites.	21.1 to 21.3	RD 65606 Condition 12.8 12.8 The Consent Holder shall undertake bi-annual surveys, at a minimum of three sites near Motuotau Island, to monitor the potential impact of dredge spoil dumping on reef biota. The minimum objective is to carry out a photographic and video transect survey at the established monitoring sites near Motuotau Island.
Marine mammals	All vessels to comply with the Marine Mammal Protection Act Regulations 1992.	14.5	None
Light distracting, dazzling, or temporary blinding other water users, or interfering with other Aids to Navigation. Te Kapu Ō Waitaha and Ngāi Tukairanga requested that conditions should require lighting controls and Ngāti Hangarau state that artificial lighting must be strictly managed.	Ensure that lighting is only used to illuminate the works areas and is managed so it does not cause a distraction, dazzling, or temporary blinding to other water users, or interfere with other Aids to Navigation.	14.22	None
Introduction of NIS from biofouling. In their CVR, Ngāi Tamarāwaho record that 'biosecurity conditions must be precautionary, adaptive and transparent,	Vessels entering Te Awanui having sailed from outside of New Zealand's territorial waters and having not berthed in another port in New Zealand prior to entering Te Awanui the Consent Holder shall ensure the Vessel complies with	16.1	None

Actual and Potential Effect	Proposed Mitigation Measure	Draft Condition number	Comparison with conditions in existing resource consents
with pre-arrival vessel information, surveillance, reporting to the hapū and response protocols for taonga species and mahinga kai areas', and that the Fast-track approval panel must require 'strong biosecurity controls'. Te Whānau ā Tauwhao highlights biosecurity risks associated with ballast water discharge from arriving vessels (Ki Ōtāwhiwhi) ballast water exchange en route are already mandated for vessels arriving from overseas and could be required in Biofouling Management Plans for vessels arriving from other parts of Aotearoa New Zealand. On page 34 of its CVR, an effects matrix for biosecurity is provided, which also focuses on risks from ballast water. This matrix is generally consistent with a Western science perspective if ballast water risks were unmitigated	both the Craft Risk Management Standard (CRMS 2023) and International Convention for the Control and Management of Ships' Ballast Water and Sediments.		
	Each vessel to have a Biofouling Management Plan that will be reviewed by BOPRC. If BOPRC determines that the vessel presents an elevated risk from biosecurity, then an in-water survey and removal of biofouling shall be undertaken. The same shall apply to the ballast water and/or water in the hopper.	16.2 to 16.7	None
	Provisions to enable BOPRC to require cleaning of non-compliant vessels.	17.1 to 17.2	None
	Notify Biosecurity NZ and BOPRC if a high-risk species is identified in the dredge material, on a vessel hull, or at a disposal site.	18.1	None
Introduction or spread of marine pests due to disposal of dredged material at the disposal sites.	BOPRC monitors NIS and requests a Risk Management Assessment when the risk profile associated with a biosecurity issue in or adjacent to the areas of the Harbour being dredged or the disposal sites.	16.5 to 16.7	None
Increase risk of collision	Notify Harbourmaster and the Coastguard of dredging campaigns.	9.2	RC 65806 Condition 6.3 6.3 At least 10 working days prior to the start of dredging the consent holder shall notify (in writing) the Coastguard and the Harbourmaster and shall post

Actual and Potential Effect	Proposed Mitigation Measure	Draft Condition number	Comparison with conditions in existing resource consents
			notices in the Bay of Plenty Times advising the general public of the following: • the intention to start dredging; • the area to be dredged; • the period during which dredging is expected to occur; and • any restrictions that will apply to navigation during the dredging.
Risk to navigational safety of recreational water users.	Notify recreational entities of dredging campaigns.	9.2	None

8.4. CONDITIONS RECOMMENDED IN CULTURAL VALUES ASSESSMENTS

The CVRs included 214 suggested mitigation measures, which have been collated with responses from POTL in Appendix G to **Appendix C1**.

Appendix G to Appendix C responds to CVRs received in May 2026, the feedback received during the pre-lodgement consultation in June-July 2026 and the Stella Passage Development process including, in particular, the oral evidence provided in July 2026. Following consideration of that feedback and the subsequent discussions with tangata whenua parties, POTL made changes to its proposed mitigation package previously circulated. Those changes are reflected in the responses contained in Appendix G

The overarching issues associated with the conditions that have been raised in the CVRs include:

- Ngāi Tamarāwaho, Ngāi Tukairangi, TMICFT, Ngāti Pūkenga, Ngā Pōtiki, Ngāti Hangarau, Ngāti Ranginui Fisheries Trust and Ngāti Ranginui Iwi Incorporated Society have all requested some form of **formal relationship / steering group /governance / oversight / working group /kaitiakitanga agreement**. TMICFT, Ngāi Tukairangi, Ngāti Ranginui Iwi Incorporated Society, Ngāi Tamarāwaho and Ngāti Pūkenga request some form of **restoration funding** be made available. Pirirākau Tribal Authority seeks a POTL commitment to fund a Pirirākau led cultural reconnection programme targeting rangatahi and whānau within the rohe, focused on mahinga kai practice, marae-based environmental education, and Te Awanui-based cultural activity. This is framed as a social licence investment proportionate to the profit derived from container throughput, not as a consent condition but as a named partnership outcome to be negotiated directly between POTL and PTAI

  The conditions aim to build on the Stella Passage Development mitigation package to create a co-ordinated approach to monitoring and resourcing. The **Stella Passage Development Advisory Group** (**'SPDAG'**) was established to provide for the requests such as individualised notifications, iwi-specific reporting formats, and bespoke response structures. The proposed framework provides an implementable mechanism while enabling ongoing engagement.

  Furthermore the mitigation package provides for direct funding to the Tauranga Moana Iwi Customary Fisheries Trust (TMICFT), alongside funding through the Stella Passage Development Advisory Group (SPDAG). This approach recognises the respective roles of TMICFT and SPDAG.

  POTL has been cognisant of empowering Tangata Whenua parties to apply mitigation funds as they feel appropriate. For this reason, many mitigation items have been provided for through funds to be administered through the Tangata Whenua led entities, the TMICFT and the SPDAG, that can prioritise to ensure the best outcomes Te Awanui in support of an integrated and holistic Te Awanui management approach.

  The SPDAG, established under the Stella Passage Development consent, provides a structured mechanism for tangata whenua to set priorities over time, including mauri monitoring, cultural indicators, kaimoana restoration, independent investigations, restoration initiatives, and other cultural programmes as matters emerge.

  Funding for the TMICFT and the SPDAG provides for tangata whenua to identify and prioritise restoration, monitoring and enhancement initiatives over time. Funding through draft conditions 11.1 to 11.3 of this consent is proposed in proportion to the assessed effects of the activity and supports ongoing tangata whenua-led initiatives. Broader harbour-wide management, governance and system recovery objectives extend beyond the scope of this application and the RMA framework.

  POTL has offered **conditions 4.1 - 4.3** to enable the ongoing functioning of the SPDAG.

- Ngāi Tamarāwaho and Ngāti Ranginui Fisheries Trust requested review and input to the **Dredge Management Plan**. Ngāi Tūkairangi requested that an independent review of dredging methodology should assess whether alternative equipment or operational sequencing can reduce sediment disturbance within and adjacent to kaimoana habitat at Te Paritaha. Any practicable alternatives identified should be implemented unless POTL can demonstrate otherwise to the consent authority. The draft conditions include **Condition 15.4** that states

  "*15.4 Prior to each capital dredging campaign the consent holder must share the DMP with the SPDAG and must.*

  a) invite the SPDAG to provide comment on the DMP and provide at least twenty (20) working days for the SPDAG to provide comment.

  b) take into account any advice and/or recommendations provided by the SPDAG within the timeframe provided.

  c) If any advice and/or recommendation is not to be adopted in the final DMP, provide the SPDAG with a written explanation as to why."

  For maintenance dredging, POTL does not propose that the DMP be subject to review by tangata whenua. This position is based on the following considerations:

  - Operational responsiveness: Maintenance dredging is required to respond to episodic and often unpredictable storm driven infill events, where timely intervention is necessary to maintain navigational safety and Port operability. Requiring formal approval prior to each maintenance campaign would introduce delay inconsistent with these operational requirements.
  - Established effects envelope: Maintenance dredging occurs within an existing, well understood operational regime that has been subject to long term monitoring. The environmental effects, including sediment behaviour and turbidity, are predictable and can be effectively managed within established limits and controls.
  - Existing monitoring and adaptive management framework: The proposed consent conditions include comprehensive monitoring, reporting, and adaptive management requirements, including ongoing engagement with the SPDAG on monitoring outcomes and any exceedances.
  - In relation to vessel movements, any increase in traffic within Te Awanui is appropriately managed through existing maritime operational frameworks, including Port Control oversight, Harbourmaster authority, and compliance with applicable navigation rules and Harbour bylaws, which govern vessel scheduling, movement, separation, and operational safety. These systems provide an established and responsive mechanism to manage cumulative and variable vessel activity.

- Waitaha, Ngāti Hangarau, Ngāti Pukenga, Ngāi Tamarāwaho, Ngāti Ranginui Iwi Incorporated Society, Pirirākau Tribal Authority and Ngāi Tukairangi all propose conditions related to mātauranga Māori and a cultural monitoring framework. Ngāti Hangarau has requested access **to the Site,** and Ngāi Tamarāwaho have requested a plan providing for access for **cultural monitoring,** and that cultural indicators should trigger responses and that adaptive management must be triggered by cultural indicators as well as technical exceedances to protect mauri, tikanga, access and cultural confidence. TMICFT, Ngāti Pūkenga and Ngāti Ranginui Iwi Incorporated Society have requested monitoring that integrates mātauranga Māori (with an equal weighting) and western science. Ngā Pōtiki request a monitoring framework that incorporates Ngā Pōtiki indicators of environmental health. TMICFT propose powers for cultural monitors. Te Kapu Ō Waitaha requested that conditions include (a) a taonga species incident protocol (b) immediate notification to Waitaha of marine mammal, bird, fish or shellfish mortality events (d) vessel observation and response procedures, (e) cultural reporting of species observations and (f) inclusion of taonga

species in Waitaha Mauri Report Cards. Pirirākau Tribal Authority state that cultural monitors should be funded and present during maintenance dredging campaigns, not limited to capital works. Cultural monitoring of the dredge operations, which are limited to capital dredging, are provided for in **Condition 10**.

- Ngāi Tamarāwaho request that POTL to provide annual **reporting** on dredging and disposal volumes and locations, turbidity and sediment data, Te Paritaha monitoring, kaimoana monitoring, biosecurity, noise and lighting complaints or incidents, access restrictions, cultural monitoring, adaptive management actions, restoration fund expenditure and progress against cultural indicators. The proposed consent framework provides appropriate reporting requirements aligned with the activity. This includes pre-dredging notification of operations and post-dredging completion reporting, as well as reporting of key monitoring results such as Te Paritaha pipi monitoring and Panepane surveys. In addition, the Dredge Management Plan includes processes for managing complaints and incidents associated with dredging activities. The SPDAG, established under the Stella Passage Development consent, provides a structured mechanism for tangata whenua to set priorities over time, including mauri monitoring, cultural indicators, kaimoana restoration, independent investigations, restoration initiatives, and other cultural programmes as matters emerge. Funding through this consent is proposed to support these functions and enable the SPDAG to respond to evolving priorities over the life of the consent. Furthermore, funding through the TMICFT supports customary fisheries, cultural monitoring and tangata whenua-led restoration initiatives. This framework provides a practical and proportionate mechanism to incorporate intergenerational and cultural perspectives, while maintaining a clear, flexible, and implementable regulatory structure.

- Ngāi Tamarāwaho requested independent audits of consent compliance. Condition 24 provides that BOPRC may serve notice to POTL of its intention to **review conditions** of the consent in June each year. One of the purposes of the review is to address any effects on cultural values identified by the SPDAG or parties involved in cultural monitoring that have not yet been identified or result from the implementation of the resource consent

- Ngāi Tamarāwaho requested precautionary dredging controls near sensitive areas, any consent framework must identify how active protection will be given practical effect for **Te Paritaha**, mauri, wāhi tapu, customary access, cultural monitoring and Ngāi Tamarāwaho decision making. The technical assessments conclude effects will be negligible or absent based on the proposed measures representing an appropriate and proportionate application of the precautionary approach. POTL has proposed targeted monitoring and controls to protect sensitive receiving environments. This includes real-time water quality monitoring during dredging and specific monitoring of pipi at Te Paritaha and reef habitats near deposition sites. These measures provide a practical and implementable approach to manage effects and safeguard key environmental and cultural values. The SPDAG, established under the Stella Passage Development consent, provides a structured mechanism for tangata whenua to set priorities over time, including mauri monitoring, cultural indicators, kaimoana restoration, independent investigations, restoration initiatives, and other cultural programmes as matters emerge. Funding through this consent is proposed to support these functions and enable the SPDAG to respond to evolving priorities over the life of the consent. Furthermore, funding through the TMICFT supports customary fisheries, cultural monitoring and tangata whenua-led restoration initiatives.

    - The Pirirākau Tribal Authority raises concern regarding the **absence of consultation** and specifically that this is not merely procedural. It means no effects assessment has been conducted for the **Pirirākau receiving environment**. The effects on

Pirirākau are therefore, in their view, unquantified, unmonitored, and unmitigated. The Application includes technical assessments, monitoring, and adaptive management measures for potentially affected receiving environments. The proposed consent conditions provide for ongoing cultural monitoring, engagement, funding and review through TMICFT and SPDAG

- Ngāti Ranginui Fisheries Trust request the development of an **Outcomes Framework** and that it should include a clear process for ongoing consenting projects at the Port. POTL supports development of an Outcomes Framework, including a **process for future consenting**. However, linking consent progression to its completion or agreement is not appropriate, as it introduces uncertainty as to the timeframe for being able to implement the consent. Given the operational need for dredging in order for the Port to operate, it is not appropriate to introduce this level of uncertainty in relation to the project.

- Ngāti Hangarau requested iwi/hapū input to enable active partnership and fulfil role as kaitiaki to ensure safe **passage of marine mammals** who are genealogically linked through whakapapa. Marine mammal protection is addressed through existing regulatory requirements and standard operational controls. The proposed consent condition framework supports kaitiakitanga, including in relation to marine mammals, through the SPDAG and TMICFT as a tangata whenua-led initiatives, providing a mechanism for ongoing input into management, monitoring, and adaptive responses

- TMICFT requested that any beneficial reuse or placement of dredged sand material is provided to marae foreshore areas as a priority, with Whareroa marae as the first priority for sand utilisation mitigation, being the most impacted marae site. The technical assessments supporting the Application do not identify adverse effects on Whareroa Beach as a result of the proposed activities that require mitigation through beach renourishment. Any beneficial reuse proposal would be managed through the approval processes provided for within the proposed consent conditions (see draft condition 14.9 to 14.15). TMICFT also requested that any beneficial reuse or placement of dredged rock or boulder material is considered through a cultural values lens and only where it supports the health, protection, and abundance of the taonga of the moana for future generations. Any future proposal for beneficial reuse of dredged rock or boulder material would, however, be subject to separate assessment, where required as no such proposal is included in this consent application.

- The many theme specific conditions requested in the CVRs have been addressed in each of the expert reports.

9. STATUTORY ASSESSMENT

9.1. INTRODUCTION

Schedule 5 clause 17(1) of the FTAA sets out the matters for decision-makers to consider and assess in relation to applications for resource consents, as:

> "*(a) the purpose of this Act; and*
>
> *(b) the provisions of Parts 2, 3, 6, and 8 to 10 of the Resource Management Act 1991 that direct decision making on an application for a resource consent (but excluding section 104D of that Act); and*
>
> *(c) the relevant provisions of any other legislation that directs decision making under the Resource Management Act 1991.*"

9.2. PURPOSE OF THE FAST-TRACK APPROVALS ACT, 2024

Application form Part 4: Subpart 1 and section 43(1)(b)(i) of the FTAA.

When considering applications under the FTAA, Expert Consenting Panels are required to give the greatest weight to the purpose of the FTAA, which is:

> "*to facilitate the delivery of infrastructure and development projects with significant regional and national benefits.*"

The Economic Effects Assessment (**Appendix M**) underscores the significance of the existing Port operation. It is important to note that the Port is already an infrastructure asset of regional and national significance, as it is an international freight gateway for imports and exports and one of only two ports able to accommodate the largest container vessels that visit New Zealand.

The Port's significance goes far beyond POTL's direct economic contributions to the economy. It is a critical enabler of economic activity because the Port infrastructure supports other industries to create their own value.

Capital and maintenance dredging are required to ensure continued safe passage of the various vessels that utilise the Port facilities.

The Project's benefit is therefore in maintaining the Port's capacity, such that the existing and future planned activities can proceed. Consequently, the purpose of the FTAA will be most appropriately given effect to through approval of the Project. Additional benefits relate to tourism and beach replenishment.

9.3. THE RESOURCE MANAGEMENT ACT 1991

Clause 17(1) to Schedule 5 of the FTAA requires decision-makers to take account of Parts 2, 3, 6 and 8 to 10 of the RMA.

9.3.1. Part 2 of the RMA: Purpose and Principles

Clause 5(1)(g) of Schedule 5 to the FTAA, specifies the requirement to assess an application for resource consent against Part 2 of the RMA is limited to sections 5, 6 and 7, with section 8 of the RMA being excluded.

Section 6 of the RMA deals with matters of national importance

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

(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development

The RCEP does not contain a schedule that addresses or identified Areas of Outstanding Natural Character or High Natural Character within the Coastal Environment. Appendix F of the operative Bay of Plenty RPS, however, contains Coastal Environment and Natural Character maps, with the Project area shown on maps 9 and 11. Appendix G includes Natural Character Attributes. In Appendix G Mauao (M) has a high level of natural character, the Tauranga Northern Harbour (THN) has a very high level of natural character and Tauranga Southern Harbour (TSH) has a high level of natural character. The RPS contains several objectives and policies that address the preservation of natural character values and the protection of outstanding natural landscapes, in accordance with Sections 6(a) and (b) of the RMA (see **Section 9.7**).

The effects on natural character are assessed by Mr Brown in **Appendix N** as summarised in **Section 7.17**. Mr Brown finds that due to the existing environment of frequent ship movements, the proposed operations would have a '**negligible**' impact on the natural character of Te Awanui. This, in our opinion, means that the Project is not an inappropriate activity in the context of section 6(a) of the RMA and thus is not an activity that needs the environment to be protected from.

(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development

ONFLs are described in **Appendix N** and summarised in **Section5.16**. and assessed in **Section 7.17**.

The following ONFLs are potentially affected by the Project:

- ONFL 3 - Te Awanui
- ONFL 5 - Matakana Island, and
- ONFL 10 Mauao and Motuotau Island.

Mr Brown concludes that capital dredging is unlikely to alter the core characteristics and values of Te Awanui and its terrestrial margins, or Mt Maunganui's wider coastal environment and landscape. Instead, it is anticipated that the effects of the future operations proposed by POTL would be small-scale, quite isolated, and of a **very low** to **negligible order**, overall.

Mr Brown adds that the maintenance dredging and deposition would have a very low to low (ie. **less than minor**) level of effect in relation to ONFLs 3, 5 and 10. This, in our opinion, means that the proposed dredging and disposal of dredged material is not inconsistent with section 6(b) of the RMA.

(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna

Marine ecology is described in **Section 5.10**, marine mammals in **Section 5.11**and Avifauna in **Section 5.12**, with the assessment of effects on these values summarised in **Sections 7.11, 7.12** and **7.13** respectively.

Te Awanui and its surrounds are home to ten '*significant habitats of indigenous fauna*' as defined by the **RPS**. These are:

1. Sandy offshore areas;
2. Rocky reef of Moturiki and Motuotau;
3. Margins of Mauao;
4. Tanea Shelf;
5. Pilot Bay Relocated Boulder Reef;
6. Harbour Entrance Gorge;
7. Western Channel;
8. Centre Bank;
9. Wharf Structures; and
10. Seagrass Beds.

Dr De Luca found that all of the effects of dredging and deposition on marine ecology values would be **less than minor (Appendix J)**. Dr McConnell found that underwater noise and vibrations would have a **minor effect**, while habitat modification, ship-strikes, exposure to contaminants, marine debris, artificial lighting would have **negligible effects** on marine mammals. Dr McConnell concludes that cumulative effects on marine mammals would also be **negligible**. Dr Bennet found that the proposed activities will have **less than minor** effects on avian biodiversity in the Harbour and surrounding marine environments. Given the direction set by the Supreme Court, and the level of adverse effects that are anticipated, we are of the opinion that the Project will not cut across the level of preservation required by section 6(c) of the RMA.

(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers

The proposed capital and maintenance dredging and deposition of dredged material will have no adverse effects on the public access to and along the CMA. Beach replenishment from strategically located disposal sites will, in fact, improve the condition and therefore accessibility of the Mount Maunganui beaches. Mr Bermingham undertook a navigational safety assessment (**Appendix O**) and recommends measures to be implemented through conditions including that vessels and all equipment on them are secure at all times and that lighting is used in a manner that does not affect other water users. With these provisions in place, no change to the navigational safety risk in the Harbour is predicted.

With the relevant conditions in place, public access to and along the coastal and marine area, including on the water, will therefore be maintained during the exercise of the activities that are the subject of this application.

(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga

Tauranga Moana Tauranga Tāngata were identified (**Appendix C1**) and invited to prepare Cultural Values Assessments (**Appendix 7**). The cultural values identified, issues raised and conditions proposed have been taken into account in the preparation of the expert studies, the planning assessment and the assessment of the application against the criteria in the FTAA. The CVRs present that Te Awanui/Tauranga Harbour is of significance to Tangata Whenua in that it shapes their identify.

Section 6(e) requires an evaluation of how the Project effects the relationship that Tangata Whenua have with Te Awanui/Tauranga Harbour, which requires consideration of the location of Tangata Whenua in relation to the Project, and the nature and significance of their relationship with the Te Awanui. It would be inappropriate to disregard or re-interpret the assessments that Tangata Whenua have provided in the CVAs.

The draft conditions include relationship requirements and funding towards the restoration of Te Awanui that respond to the collective values of Tangata Whenua in Te Awanui.

The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga have therefore been recognised and provided for.

(f) the protection of historic heritage from inappropriate subdivision, use, and development

historic heritage— (a) means those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, deriving from any of the following qualities:

(i) archaeological:
(ii) architectural:
(iii) cultural:
(iv) historic:
(v) scientific:
(vi) technological; and

(b) includes—

(i) historic sites, structures, places, and areas; and
(ii) archaeological sites; and
(iii) sites of significance to Māori, including wāhi tapu; and
(iv) surroundings associated with the natural and physical resources

Cultural historical heritage resources have been identified by Tauranga Moana Tauranga Tāngata (**Appendix C1**) in their Cultural Values Assessments (**Appendix 7**). The historical heritage resources identified, and associated conditions proposed have been taken into account in the preparation of the expert studies. Historical heritage has therefore been recognised and provided for.

(g) the protection of protected customary rights

PCRs are discussed in **Section 2.4.1**. Experts have assessed the actual and potential effects of the Project on marine ecology including fish and shellfish, and are not expecting any adverse effects. Given the level of adverse effects that are anticipated, we are of the opinion that the Project will not trigger the protection required by section 6(g) of the RMA.

(h) the management of significant risks from natural hazards

Risks from natural hazards are discussed in **Section 7.6**. Dredging of the Port, could, over the long term, potentially be affected by coastal erosion, coastal inundation, earthquakes or tsunamis. Flexibility in the volume of maintenance dredging and associated deposition of material has been included in the Project to provide for this.

This Project also includes a mechanism to mitigate coastal erosion of beaches in the vicinity of the Port, by, in consultation with BOPRC depositing suitable material at sites designed to provide replenishment of sand to the beaches. Given this, we are of the opinion that the Project gives effect to section 6(h) of the RMA. We are of the opinion that the Project contributes to the management of risks from natural hazards.

Section 7 of the RMA provides matters that all persons having functions under the powers of the RMA should have particular regard to in achieving the purpose of the RMA, namely:

(a) kaitiakitanga:

Tauranga Moana Tauranga Tāngata were identified (**Appendix C1**) and invited to prepare Cultural Values Assessments (**Appendix 7**). The cultural values identified and conditions proposed included how to provide for kaitiakitanga in the execution of the project. The SPDAG, established under the Stella Passage Development consent, provides a structured mechanism for tangata whenua to set priorities over time, including mauri monitoring, cultural indicators, kaimoana restoration, independent investigations, restoration initiatives, and other cultural programmes as matters emerge. This is included in the draft Conditions. Funding through this consent is proposed to support these functions and enable the SPDAG to respond to evolving priorities over the life of the consent. This framework provides a practical and proportionate mechanism to incorporate intergenerational and cultural perspectives, while maintaining a clear, flexible, and implementable regulatory structure. Particular regards has therefore been given to Kaitiakitanga.

(aa) the ethic of stewardship:

The ethic of stewardship came about as a non-Māori rendition of Kaitiakitanga[38] and refers to caring for and responsibly managing natural and physical resources on behalf of present and future generations, recognising long-term environmental responsibilities and avoiding unnecessary degradation, waste or irreversible harm where possible. Te Awanui is a physical resource subject to the ethic of stewardship. POTL's application show that the methodology for the activities is appropriately designed to minimise adverse environmental effects. The technical reports supporting the application demonstrate how this will be achieved.

(b) the efficient use and development of natural and physical resources:

Appendix M discusses the efficient use and development of the Port, which is summarised in **Section 6**. Given the conclusions drawn in Section 6, we are of the opinion that particular regard has been given to the efficient use and development of natural and physical resources.

(ba) the efficiency of the end use of energy:

Not applicable to this application.

(c)the maintenance and enhancement of amenity values:

Visual amenity values are assessed in **Appendix N**, and summarised in **Section 7.17**. Overall, Mr Brown considers that the effects of capital and maintenance dredging works, together with deposition and beach replenishment, proposed by POTL are appropriate in terms of the associated statutory provisions. Given the typically very low order of effects that the proposed dredging and deposition would have on Mt Maunganui's landscape and natural character values, Mr Brown does not identify any measures that need to be applied to avoid, remedy or mitigate the effects of the proposed activities.

Airborne noise is assessed in **Appendix R**, and summarised in **Section 7.8**. Mr Styles assessment found that noise generated during daytime hours would comply with the applicable Noise Standards. At night, however, noise could exceed acceptable levels when activity is in the Cutter Channel section of the Harbour. POTL therefore proposes that dredging is limited to daytime hours in this area, unless a NMP that assesses the noise to be generated and identifies mitigation measures is developed, certified and implemented. We are of the opinion that with this nighttime noise management measure in place, the Project

[38] Report to the Minister for the Environment's Resource Management Act 1991 Principles Technical Advisory Group, February 2012

would maintain the noise amenity value of the Project area; reflecting that particular regard has been given to section 7(c) of the RMA.

(b) intrinsic values of ecosystems:

Marine ecology (**Appendix J**), marine mammals (**Appendix K**) and avifauna (**Appendix P**) have been assessed for this application.

The definitions in Section 2 of the RMA states that "*intrinsic values, in relation to ecosystems, means those aspects of ecosystems and their constituent parts which have value in their own right, including—*

(a) their biological and genetic diversity; and

(b) the essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience". This essentially refers to ecological values that exist independently of human use.

In **Appendix J** Dr De Luca identifies ten habitats as "significant habitats of fauna" according to the criteria in Appendix F, Set 3 of the Bay of Plenty RPS. Dr De Luca also identified that seagrass (*Zostera muelleri* subs. *Novazelandica*) (At Risk - declining) and marine mammals that are occasionally present in the Harbour. Dr De Luca concludes that "*the primary marine ecological effects from the Project include dredging increasing the concentration of suspended sediment (TSS) (including potentially contaminated sediment), the deposition of sediment on soft sediment and rocky reef habitats and the mortality of benthic invertebrates within the dredging area and disposal area.*

All effects on marine ecological values are assessed as a Low or Very Low level of effect at both the southern Te Awanui and the dredge/disposal area scales. There is no requirement for mitigation, other than the dredging management proposed to minimise TSS."

Management of turbidity is addressed in Draft Condition 19 (**Appendix T**).

Given the foregoing, we are of the opinion that particular regard has been given to the intrinsic value of ecosystems and that the Project can be advanced in a manner that gives effect to this aspect of the Act's purpose.

(c) maintenance and enhancement of the quality of the environment:

The POTL aims to maintain the quality of the environment by proffering Draft Conditions that aim to monitor key aspects of the environment as well as Draft Conditions that actively manage actions to prevent any degradation of the natural and anthropogenic environment. Key management measures address biosecurity, noise, water turbidity, waste management and risks to navigation. This, in our opinion, reflects the need for particular regard to be given to the maintenance and enhancement of the quality of the environment.

(d) any finite characteristics of natural and physical resources:

No characteristics of natural and physical resources are considered to be finite.

(e) the protection of the habitat of trout and salmon:

Not applicable to this application.

(f) the effects of climate change:

The consideration of climate change has affected the quantities of material for maintenance dredging included in this application. This and the attention that the Applicant has paid to

ensuring that deposition can occur in a manner that improves resilience of the beaches to coastal erosion means that particular regard has been paid to the section 7(i).

(j) the benefits to be derived from the use and development of renewable energy.

Not applicable to this application.

Section 5 of the RMA states that the purpose of the RMA is to *"promote the sustainable management of natural and physical resources"*.

It goes on to define sustainable management as: "*managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—*

(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The proposed capital and maintenance dredging would enable the continued efficient functioning of the Port. Given Port of Tauranga's market share of New Zealand cargo this ensure continued benefits for the wider region and the New Zealand economy as a whole. The Project will, therefore, make a notable positive contribution to the ability of New Zealanders to provide for their economic and social wellbeing and needs, now and in the future. That this is the case is signalled by long-standing recognition in the RCEP.

The adverse environmental effects of the Project are assessed – from a Western science perspective - as low to very low, in many cases before any mitigation is applied. Many of the mitigation measures recommended are proven, by their successful use in previous Port dredging. As such, the Project will safeguard the life-supporting capacity of air, water, soil, and ecosystems.

Impacted Tangata Whenua parties are best placed to identify the cultural effects of the Project on their values. Their CVAs are accepted as credible and reliable and portray a considered and genuine view. Generally, Tangata Whenua are fundamentally opposed to the Project and identify adverse cultural effects associated with it. However, POTL has prepared a suite of conditions that are intended to respond to the cultural effects identified by Tangata Whenua parties.

9.3.2. Part 3 of the RMA: Duties and restrictions under this act

Part 3 of the RMA contains provisions that detail when a resource consent is required in relation to land (section 9), the CMA (section 12) and discharges (section 15). The resource consents required to undertake the Project activities are discussed in **Section 4** of this report.

9.3.3. Part 6 of the RMA: Resource consents

Key considerations of Part 6 of the RMA that direct decision-making on an application are sections 104 (Consideration of applications), 105 (Matters relevant to certain applications), 107 (Restriction on grant of certain discharge permits) and 108 (Conditions of resource consents).

Any actual and potential effects on the environment of allowing the activity (Section 104(1)(a) of the RMA) are discussed under **Section 7** of this report. Management measures recommended by experts have been incorporated into draft conditions (**Section 8** and **Appendix T**). From a western science point of view, the Project is not anticipated to result

in any unacceptable adverse effects on the environment with the mitigation measures included in the draft conditions. No measures to offset or compensate for any adverse effects on the environment (Section 104(1)(ab) of the RMA) are therefore proposed.

Resource consent applications under the FTAA must be assessed against the relevant provisions of the applicable Statutory documents. Those documents are listed in **Section 5** of the RMA and are (Schedule 5, Clause 5(2)):

- *"a national environmental standard:*
- *other regulation:*
- *a national policy statement:*
- *a New Zealand coastal policy statement:*
- *a regional policy statement or proposed regional policy statement:*
- *a plan or proposed plan; and*
- *a planning document recognised by a relevant iwi authority and lodged with a local authority."*

Section 104(2) states that "*When forming an opinion for the purposes of paragraph (a), a Consent Authority may disregard an adverse effect of the activity on the environment if a NES or plan permits an activity with that effect*."

As discussed in **Section 4.5**, it is noted that the Project is able to meet the Permitted Activity standards for air pollution.

We now summarise our assessment of the Project against the applicable provisions of the relevant statutory instruments, as is required by Section 104(1)(b) of the Act, namely:

- National Policy Statements (**Section 9.4**);
- National Environmental Standards (**Section 9.5**);
- Bay of Plenty Regional Policy Statement (2014) (**Section 9.6**);
- Bay of Plenty Regional Coastal Environment Plan (2019) (**Section 9.7**);
- Tauranga City Plan (**Section 9.8**);
- Other matters – relevant iwi management plans (**Section 9.9**).

National Environmental Standards (Section 104 (1)(b)(i) of the RMA) are discussed in **Section 9.5** of this report). No other regulations have been identified as applicable to this application (Section 104(1)(b)(ii) of the RMA). NPSs (Section 104(1)(b)(iii) of the RMA) are discussed in **Section 9.4** of this report. The NZCPS (Section 104(1)(b)(iv) of the RMA) is discussed in **Section 9.4.2** of this report. The Bay of Plenty RPS (Section 104(1)(b)(v) of the RMA) is discussed in **Section 9.6** of this report and the Bay of Plenty RCEP (Section 104(1)(b)(vi) of the RMA) is discussed in **Section 9.7**. Assessment against the TCP (Section 104(1)(b)(vi) of the RMA) is included in **Section 9.8** and other matters (Section 104(1)(c) of the RMA) are presented in **Section 9.9** of this report.

Section 104B of the RMA relates to the determination of applications for discretionary activities. Although controlled (Section 104A) and restricted discretionary (Section 104C) activities are included in this application, the bundling principle has been applied.

Section 105 of the RMA refers to matters relevant to certain applications. Section 105 (1) requires the application for a discharge permit or coastal permit to have regard to:

> *(a) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and*
>
> *(b) the applicant's reasons for the proposed choice; and*

(c) any possible alternative methods of discharge, including discharge into any other receiving environment.

Discharge consists of suspended sediment, which is found in the overflow from the dredge, as well as discharge of dredged material to offshore deposition sites. **Section 3.7** of this report describes the disposal sites and the applicant's reasons for proposing each of them. **Section 5** of this report describes the sensitivity of the receiving environment and **Section 7** includes an assessment of the effects of discharges.

Section 107 of the RMA relates to restrictions on the granting of certain discharge permits. None of the effects prohibited by Section 107 are anticipated as a result of this Project.

Section 108 of the RMA guides the imposition of consent conditions. Draft conditions are discussed in **Section 8** and **Appendix T**.

9.3.4. Part 8 of the RMA: Designations and heritage orders

This application does not include designations or heritage orders.

9.3.5. Part 9 of the RMA: Water conservation orders

This application does not relate to any water conservation orders.

9.3.6. Part 10 of the RMA: Subdivisions and reclamations

This application does not include any subdivisions or reclamations.

9.4. NATIONAL POLICY STATEMENTS

Issued under the RMA, NPSs provide national direction for matters of national significance relevant to sustainable management. NPSs enable Government to prescribe objectives and policies for matters of national significance which are relevant to achieving the sustainable management purpose of the RMA. A NPS may also give particular direction to local authorities as to how they need to give effect to the policies and objectives of the NPS. Eight NPSs are operative.

The NPS for **Greenhouse Gas Emissions from Industrial Process Heat** applies to emissions from fossil fuel fired heat devices. The Project does not include any fossil fuel fired heat devices. The NPS-GHG is not relevant to the Project.

The NPS for **Highly Productive Land** is intended to ensure the protection of favourable soils for food and fibre production, now and for future generations. This applies to soils that are identified as 'highly productive land' by Regional Councils, or until maps are finalised, land that is classified as Land Use Category 1, 2, or 3. No mapped highly productive land or land mapped as Land Use Classification 1,2, or 3 will be affected by the Project. The NPS-HPL is not relevant to the Project.

The NPS for **Indigenous Biodiversity** provides direction for councils to protect, maintain and restore indigenous biodiversity. It applies only to indigenous biodiversity in the terrestrial environment. No activities are proposed in the terrestrial environment. The NPS for Indigenous Biodiversity is not relevant to the Project.

The NPS for **Renewable Electricity Generation** sets out the objective and policies to enable the sustainable management of renewable electricity generation. Electricity generation is not a part of the Project. The NPS for Renewable Electricity Generation is not relevant to the Project.

The NPS on **Electricity Transmission** sets out the objective and policies for managing the electricity transmission network. It recognises the need to operate, maintain, develop and upgrade the electricity transmission network as a matter of national importance. The Project will not impact any electricity transmission infrastructure. The NPS on Electricity Transmission is not relevant to the Project.

The NPS on **Urban Development** ensures New Zealand's towns and cities are well-functioning urban environments that can adapt to and meet the needs of diverse and dynamic communities. It applies to planning decisions by local authorities that affect an urban environment. No impacts to an urban environment are proposed. The NPS on Urban Development does not apply to the Project.

9.4.1. National Policy Statement for Freshwater Management ('NPS-FM')

The NPS-FM sets direction for the management of freshwater. This includes receiving environments for freshwater, including the CMA (to the extent that it is affected by freshwater). The approach to implementing the NPS-FM is founded on the concept of Te Mana o te Wai. It is clear from the analysis in **Section 7.5** and **7.7** that freshwater, particularly as the result of storms, impacts the frequency and volume of dredging that is required to maintain design depths.

Policies 4[39], 5[40], 14[41] and 15[42] are relevant to the Project.

Policy 4 is relevant to the Project because variability in weather events include an increase in the frequency of intense storms can impact the volume of freshwater and sediment entering Te Awanui over the course of the year. This, in turn, impacts the volume and frequency of dredging that is required to maintain design depths for the Port's operations. As a receiving environment for freshwater from storms, the Harbour (and by extension the Port) has to manage the ultimate effects from freshwater impacts as a result of climate change. Dredging activities after large storm events redistribute sediment and maintain the existing sediment distribution and prevent the Harbour from becoming inundated with silt, which maintains the habitats of Harbour-dwelling flora and fauna. The Project is consistent with Policy 4.

Policy 5 relates to maintaining and enhancing the quality of freshwater. Te Awanui is an ultimate receiving environment for freshwater throughout the region. This means that the quality of freshwater coming into the Harbour impacts the quality of the water in the Harbour itself. Dredging activities do not directly impact any freshwater ecosystems, however, it is important that dredging not contribute to the degradation of the near-coast ecosystems. Dredging is to be undertaken in a way that minimises turbidity and sediment and the disposal of dredged material is to be placed in such a way as to allow for the re-nourishment of ecosystems that may have experienced removal of sediment as a result of storms. The Project is consistent with Policy 5.

Policy 14 relates to information (including monitoring data) about the state of water bodies and freshwater ecosystems, and the challenges to their health and well-being being regularly reported and published. Regular monitoring and reporting is proposed to be undertaken in conjunction with the dredging activities. This reporting will provide a vision of the long-term health of Te Awanui and enable groups that operate within the Harbour to adjust their activities in response to the information gathered through this monitoring. The Project is consistent with Policy 14.

Policy 15 relates to communities being enabled to provide for their social, economic, and cultural well-being in a way that is consistent with the NPS-FM. The Port is critical not only to the economic activity of the Bay of Plenty, but it is the most active port in the entire

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[39] Freshwater is managed as part of New Zealand's integrated response to climate change.

[40] Freshwater is managed (including 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 water bodies and freshwater ecosystems is maintained and (if communities choose) improved.

[41] 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.

[42] Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement.

country. The proposed dredging activities are important to maintain the viability of the Port as a part of the national economy. The Project is consistent with Policy 15.

9.4.2. New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement (**'NZCPS'**) sets out national objectives and policies to achieve the purpose of the RMA as it relates to the coastal environment. It applies to the CMA and areas that are within, nearby or affected by the CMA. Policies 2, 6, 9, 11, 12, and 22 are relevant to the Project.

Objective 3 and Policy 2[43] relates to ensuring that the relationship that tangata whenua has with the coastal environment is recognised and respected. As it relates to subpart (e) of this policy, **Section 9.9** of this SAR has reviewed the Project against relevant iwi management plans lodged with BOPRC. Significant taonga and customary fishing sites exist within the area of likely effect from the Project. Consultation undertaken is recorded in Appendix C and the conditions provide mechanisms for ongoing involvement in the Project.

Objective 6, Policy 6[44] (amended in 2025) focuses on how activities in the coastal environment can be managed in a balanced way to facilitate future growth while protecting the coastal marine environment. In particular, Policy 6(1)(b) talks about enabling built development and public infrastructure to provide for future population growth and 6(2)(c) directs that Councils recognise that some activities have a functional need to be located in the coastal marine environment. Ports must exist in the CMA, and dredging must occur in the CMA in order for the Port to operate at the capacity that it currently does and to provide for future anticipated growth and ship sizes. This is considered critical for providing for the current and future needs of people throughout New Zealand. The Port is a critical link for New Zealand's export and import activities. The Project is consistent with Policy 6.

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[43] In taking account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi), and kaitiakitanga, in relation to the coastal environment:

(a) Recognise that tangata whenua have traditional and continuing cultural relationships with areas of the coastal environment, including places where they have lived and fished for generations;

(c) With the consent of tangata whenua and as far as practicable in accordance with tikanga Māori, incorporate mātauranga Māori in regional policy statements, in plans, and in the consideration of applications for resource consents, notices of requirement for designation and private plan changes;

(d) Provide opportunities in appropriate circumstances for Māori involvement in decision making, for example when a consent application or notice of requirement is dealing with cultural localities or issues of cultural significance, and Māori experts, including pūkenga, may have knowledge not otherwise available;

(e) Take into account any relevant iwi resource management plan and any other relevant planning document recognized by the appropriate iwi authority or hapū and lodged with the council, to the extent that its content has a bearing on resource management issues in the region or district; and

(f) Provide for opportunities for tangata whenua to exercise kaitiakitanga over waters, forests, lands and fisheries in the coastal environment through measures such as:

(i) Bringing cultural understanding to monitoring of natural resources;

(ii) Providing appropriate methods for the management, maintenance and protection of the taonga of tangata whenua

(iii) Having regard to regulations, rules or bylaws relating to ensuring sustainability of fisheries resources such as taiāpure, mahinga mātaitai or other non-commercial Māori customary fishing

[44] (1) In relation to activities in the coastal environment:

(b) Consider the rate at which built development and the associated public infrastructure should be enabled to provide for the reasonably foreseeable needs of population growth without compromising the other values of the coastal environment

(2) Additionally, in relation to the coastal marine area:

(c) Recognise that there are activities that have a functional need to be located in the coastal marine area, and provide for those activities in appropriate places;

Policy 9[45] relates to the activities of Ports, it supports 'an efficient national network of safe ports'. This policy makes it clear that port activities are considered critical to national development and economic sustainability. Policy 9(b) talks about how councils should consider enhancing a port's capacity for shipping. The Project is specifically to maintain and enhance the Port's shipping capacity. Policy 9 supports the Project.

Policy 11 relates to protecting indigenous biodiversity.

Policy 11(a) requires avoiding 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.

The effects of the Project on indigenous biodiversity and natural habitats are assessed in **Section 7** of this report. Seagrass, orca and bottlenose dolphins meet the descriptors of NZCPS 11(a).

Seagrass

The seagrass beds (*Zostera muelleri subsp. novazelandica*) which is an At Risk - Declining taxa are found adjacent to Whareroa marae, along the Ōtūmoetai shoreline and within the wider Waipu Estuary, in addition, small patches are found on Te Paritaha. Seagrass is a flowering marine plant located in sheltered coastal and estuary ecosystems. Seagrass provides numerous ecosystem services, including habitat, food and nursery areas for a range of fish species (supporting increased biodiversity). Seagrass is particularly susceptible to elevated turbidity and the deposition of sediment which can reduce seabed light levels impacting primary production.

The seagrass bed adjacent to Whareroa marae is the closest to the Port. It remains in good condition despite the close proximity to the previous dredging campaigns. This seagrass area has been stable over time, despite a decline in the early 1990s which is a feature of all seagrass in Te Awanui and nationally. Seagrass adjacent to Whareroa marae was not impacted by the 2015-2016 capital dredging campaign.

The dredging controls used in those works were successful in limiting turbidity by limiting dredging to the out-going tide with limited overflow. The dredging controls for the TSHD proposed for this Project are no overflow when dredging on the incoming tide and a maximum of 15 minutes on the outgoing tide. This methodology change is required on this campaign to balance the work across the full tidal spectrum and minimise the duration of the dredging campaign. The TSHD will be fitted with a green valve or similar technology to reduce turbidity

[45] Recognise that a sustainable national transport system requires an efficient national network of safe ports, servicing national and international shipping, with efficient connection with other transport modes, including by:

(a) Ensuring that development in the coastal environment does not adversely affect the efficient and safe operation of these ports, or their connections with other transport modes; and

(b) Considering where, how and when to provide in regional policy statements and in plans for the efficient and safe operation of these ports, and the development of their capacity for shipping and their connections with other transport modes.

caused by any overflow. This will enable protection of seagrass beds, especially adjacent to Whareroa marae.

In their CVR, Ngāi Tamarāwaho commented on the restoration of the supporting function of reefs, hardshore, seagrass and saltmarshes, and whether the Harbour system that sustains kai and mauri is being restored or further pressured. The Marine Ecology Assessment concludes there are low-very low levels of effect from the proposed reconsenting of Capital and Maintenance Dredging. Dr De Luca's expert opinion is that the Port's Capital and Maintenance Dredging does not place further pressure on marine habitats (section 12, Table 14 of **Appendix J**).

Marine Mammals

Orca, also known as killer whales, are listed as 'Nationally Critical' by the New Zealand Threat Classification Scheme on account of its very small population size. Dr McDonnell (**Appendix K**).

Bottlenoise dolphin are 'Threatened' (nationally endangered under NZTCS)..

Dr McConnel reports that based on an assessment of the DOC sightings and stranding data and the available scientific literature marine mammals are not resident in Te Awanui. Bottlenose dolphins and killer whales do, however, are occasional visitors to Te Awanui. They also have a regular presence outside Te Awanui where sightings rates are higher.

Dr McConnell's assessment concluded that underwater noise and vibrations caused by the Project would have a minor effect on marine mammals. Habitat modification, ship strikes, exposure to contaminants, marine debris, artificial lighting and cumulative effects would have a negligible effect on marine mammals.

NZCPS Policy 11(b) requires the Project avoid significant adverse effects and avoid, remedy or mitigate other adverse effects on

- *Areas of predominantly indigenous vegetation in the coastal environment*

In Te A wanui, seagrass and mangrove forests would trigger this policy.

i) Habitats in the coastal environment that are important during the vulnerable life stages of indigenous species,

In Te Awanui, sandbank areas for pipi recruitment and settlement and seagrass beds for fish nursery grounds trigger this policy.

ii) Ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal welnds, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarch.

The southern basin of Te Awanui contains intertidal areas, rocky reef habitats, seagrass/eelgrass and saltmash.

iii) habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes.

In Te Awanui, the Te Paritaha pipi beds and rocky reefs for kaimoana harvesting are relevant to this policy.

iv) ecological corridors, and areas important for linking or maintaining biological values identified under this policy.

There is evidence of effective ecological corridor functionality in terms of stable ecosystems within the sub estuary systems that feed into and are flushed through Te Awanui.

The evidence presented by POTL's experts is that any adverse effects on the matters that fall within the remit of Policy 11(b) will be minor or less. It follows, therefore, that the Project can be advanced so as to give effect to this Policy.

Policy 12[46] seeks to control the introduction of harmful aquatic organisms. 12(2)(b) specifically calls out the discharge of organic material from dredging as one risk activity for the introduction of harmful aquatic organisms. **Section 7.14** discusses the likely effects of dredging on the introduction of harmful aquatic organisms. It is expected that this monitoring and control will limit the potential of the proliferation of harmful aquatic organisms in the Port. The Project is consistent with Policy 12.

Policy 13[47], Clause 1 is "*To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use and development:*

(a) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment;…

Mr Brown explains in **Appendix N** that: "*coastal environments that are highly natural will be much more sensitive and susceptible to the effects of change than those that are already highly developed and modified. Yet, whereas landscape values can often be 'driven' by one or two key factors (e.g. the dramatic profile of Mauao and local / iwi connections with the maunga), natural character values tend to 'step' in line with the combined natural qualities of any environment – covering its water bodies, geomorphology and landforms, vegetation cover, land uses / activities and wider 'context'. Locations of high natural character value will generally reflect high levels of naturalness across all of these layers. Consequently, natural character effects are derived from changes to the characteristics of a coastal environment, either in part or whole, that affect its elements, features, patterns, and*

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[46] (1) Provide in regional policy statements and in plans, as far as practicable, for the control of activities in or near the coastal marine area that could have adverse effects on the coastal environment by causing harmful aquatic organisms to be released or otherwise spread, and include conditions in resource consents, where relevant, to assist with managing the risk of such effects occurring.

(2) Recognise that activities relevant to (1) include:

(b) The discharge or disposal of organic material from dredging, or from vessels and structures, whether during maintenance, cleaning or otherwise and whether in the coastal marine area or on land

[47] Policy 13 Preservation of Natural Character

(1) To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:

(a) avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and

(b) avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment; including by:

(c) assessing the natural character of the coastal environment of the region or district, by mapping or otherwise identifying at least areas of high natural character; and

(d) ensuring that regional policy statements, and plans, identify areas where preserving natural character requires objectives, policies and rules, and include those provisions.

(2) Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:

(a) natural elements, processes and patterns;

(b) biophysical, ecological, geological and geomorphological aspects;

(c) natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;

(d) the natural movement of water and sediment;

(e) the natural darkness of the night sky;

(f) places or areas that are wild or scenic;

(g) a range of natural character from pristine to modified; and

(h) experiential attributes, including the sounds and smell of the sea; and their context or setting

processes. These effects become adverse when such changes diminish that coastal environment's biophysical and/or perceived degree of naturalness."

The effects on natural character are assessed by Mr Brown in **Appendix N** as summarised in **Section 7.17**. Mr Brown finds that due to the existing environment of frequent ship movements, the proposed operations would have a '**negligible**' impact on the natural character of Te Awanui. This means that the Project is avoiding all effects on natural character in accordance with Policy 13 (a).

Policy 15(b) similarly goes on to require protection of "*the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development*" via avoidance of "*significant adverse effects*" and avoidance, remediation, or mitigation of "*other adverse effects of activities on other natural features and natural landscapes in the coastal environment*". For the reasons set out in section 7.17 of this report, the Project can be advanced so as to be consistent with Policy 15(b).

Policy 22[48] seeks to limit the effects of sedimentation on the coastal marine environment. Dredging activities have the potential to increase sedimentation effects in the coastal marine environment. It is very likely that both capital and maintenance dredging will largely be undertaken using TSHD. Through the use of green valve technology, restrictions on overflow and limiting work to certain tides the effects of turbidity can be managed. Turbidity levels will be monitored throughout the dredging process and a framework of controls is in place within the consent conditions which will respond if the turbidity levels begin to rise to levels that may negatively impact the surrounding environment. The Project is consistent with Policy 22.

9.5. NATIONAL ENVIRONMENTAL STANDARDS

Ten National Environmental Standards ('NES') are currently in place under the RMA. If an activity does not comply with an NES, it requires a resource consent. NESs are enforced by local authorities.

The NES for **Commercial Forestry** relate to commercial forests. It does not apply to this Project.

The NES for **Electricity Transmission Activities** apply to the operation, maintenance, upgrading, relocation, or removal of an existing transmission line. It does not apply to this Project.

The NES for **Freshwater** sets requirements for activities involving freshwater in order to manage water quality. These standards apply if any natural inland wetland[49] is affected. No

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[48] (1) Assess and monitor sedimentation levels and impacts on the coastal environment

(2) Require that subdivision, use, or development will not result in a significant increase in sedimentation in the coastal marine area or other coastal water.

[49] Per the definition in the NPS-FM: Natural inland wetland means a wetland (as defined in the Act) that is not:

(a) In the coastal marine area
(b) A deliberately constructed wetland, other than a wetland constructed to offset impacts on, or restore, an existing or former natural inland wetland
(c) A wetland that has developed in or around a deliberately constructed water body, since the construction of the waterbody
(d) A geothermal wetland
(e) A wetland that:
    i. Is within an area of pasture used for grazing

activities affecting freshwater or natural inland wetlands are proposed. This NES does not apply to the Project.

The NES for **Greenhouse Gases from Industrial Process Heat** does not apply to this Project because no industrial process heat will be generated.

The NES for **Storing Tyres Outdoors** does not apply to this Project because no storage of tyres outdoors is proposed.

The NES for **Telecommunication Facilities** does not apply to this Project because no telecommunication infrastructure is affected.

The NES for **Assessing and Managing Contaminants in Soil to Protect Human Health** applies to disturbance of terrestrial soils where specified activities that are likely to result in contamination have occurred. No terrestrial activities are proposed. This NES does not apply to the Project.

The NES for **Sources of Human Drinking Water** manages contaminants in water that is used for human consumption. No sources of human drinking water will be affected by the Project. This NES does not apply.

This Project does not include any marine aquaculture activities, therefore the NES for **Marine Aquaculture** does not apply.

The remaining standard that may have some applicability to the Project is discussed below:

9.5.1. National Environmental Standards for Air Quality

The NES for **Air Quality** sets ambient air quality standards for the discharge of certain contaminants into air. The only potential contaminant managed by the NES for Air Quality that may be relevant to the Project is PM_{10}, which could result from dust emissions as a result of dredging activities. The nature of dredging activities means that the sediment that is removed from the seafloor will be wet and therefore unlikely to disperse into the air. Further, the Air chapter of the RNRP sets rules to manage discharges into air, including in the coastal marine environment. The activity is permitted under rule AIR-R1[50]. The Project is consistent with the NES for Air Quality.

9.6. BAY OF PLENTY REGIONAL POLICY STATEMENT

The purpose of the RPS is to promote the sustainable management of natural and physical resources in the Bay of Plenty Region by providing an overview of the resource management issues of the region and policies and methods to achieve integrated management of the natural and physical resources of the whole region.

Under section 30 of the RMA, the BOPRC is responsible for the control of water, air, land (for the purposes of soil conservation, water management, natural hazards avoidance and

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ii. Has vegetation cover comprising more than 50% exotic pasture species (as identified in the *National List of Exotic Pasture Species* using the *Pasture Exclusion Assessment Methodology* unless
iii. The wetland is a location of habitat of a threatened species identified under clause 3.8 of this National Policy Statement, in which case the exclusion in (e) does not apply

[50] See section 4.5 for an assessment of the activity against this rule.

mitigation and hazardous substances management), control of the discharge of contaminants into the environment, the control of river and lake beds, indigenous biodiversity, and the strategic integration of infrastructure with land use through objectives, policies and methods.

Objectives and policies in the RPS that are relevant to the Project are outlined below.

RPS Section	Provision(s)	Commentary
Air Quality	Objective 1: The adverse effects of odours, chemical emissions and particulates are avoided, remedied or mitigated so as to protect people and the environment Policy AQ 3A: Managing the adverse effects of fine particulate contamination	While the Project involves the handling of fine particulate matter, it is done in a wet environment and therefore the likelihood of fine sediments being released into the air is minimal. The Project is consistent with these provisions
Coastal Environment	Objective 2: Preservation, restoration and, where appropriate, enhancement of the natural character and ecological functioning of the coastal environment • Policy CE 2B: Managing adverse effects on natural character within the coastal environment (a) Avoid adverse effects of activities on the attributes that comprise natural character in areas of the coastal environment with outstanding natural character; (b) Avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on the attributes comprising the natural character in all other areas of the coastal environment, recognising that areas identified in maps in Appendix F as having high or very high natural character can be especially sensitive to the adverse effects of inappropriate subdivision, use and development; and (c) Recognise that open coastal water in the region is of at least high natural character. • Policy CE 3A: Identifying the key constraints to use and development of the CMA • Policy CE 6B: Protecting indigenous biodiversity • Policy CE 8B: Ensuring subdivision, use and development is appropriate to the natural character of the coastal environment • Policy CE 9B: Safeguarding the life-supporting capacity of coastal ecosystems • Policy CE 14B: providing for ports	Adverse effects on outstanding natural character The Project is consistent with the existing natural character of the coastal environment. Assessments of the likely impacts of the Project on the coastal marine environment are provided in **section 7**. The Project is consistent with these provisions.

RPS Section	Provision(s)	Commentary
	Objective 4: Enable subdivision, use and development of the coastal environment in appropriate locations • Policy CE 5A: Provide for sustainable use and development of the CMA • Policy CE 14B: Providing for ports	The Project is directly related to providing for the ongoing use of the Port in the most efficient way given current trends in the international shipping industry. The Project is consistent with these provisions.
Energy and Infrastructure	Objective 6: Provide for the social, economic, cultural and environmental benefits of, and the use and development of nationally and regionally significant infrastructure • Policy EI 3B: Protecting nationally and regionally significant infrastructure • Policy EI 4B: Recognising the benefits from nationally and regionally significant infrastructure	The Project directly supports regionally/nationally significant infrastructure. The Port is a critical international trade link for both local and national goods as well as being a critical importation hub. The Project is consistent with these provisions.
	Objective 7: Provide for the appropriate management of: • Any adverse environmental effects (including effects on existing lawfully established land uses) created by the development and use of infrastructure and associated resources • Any reverse sensitivity effects on established, consented or designated infrastructure o Policy EI 7B: Managing the effects of infrastructure development and use	The Port has been in operation since at least 1955, with major expansions in 1970 and ongoing dredging to ensure design depths for cargo ships at least since then. This represents a substantial existing investment. Dredging is necessary to ensure that the existing channel depth is maintained and efficient use of the existing berth space is enabled. The Port has existed alongside important ecological habitats, traditional uses, and recreational environments for decades. Monitoring will be put in place to ensure that the proposed dredging has a minimal impact on the surrounding environment and the social and cultural uses that it supports. With the application of appropriate controls, the Project is consistent with these provisions.

RPS Section	Provision(s)	Commentary
Integrated Resource Management	Objective 10: Cumulative effects of existing and new activities are appropriately managed • Policy IR 1B: Applying a precautionary approach to managing natural and physical resources • Policy IR 3B: Adopting an integrated approach • Policy IR 5B: Assessing cumulative effects	The effects of the Stage 1 capital dredging in 2015/2016 have been intensively studied, and POTL has supported ongoing monitoring programmes. In this sense, the cumulative effects of this type of dredging are fairly well understood and are discussed in more detail in **Section 7**. Ongoing monitoring and mitigations are proposed as a part of this reconsent. The Project is consistent with these provisions.
	Objective 12: The timely exchange, consideration of and response to relevant information by all parties with an interest in the resolution of a resource management issue • Policy IR 4B: Using consultation in the identification and resolution of resource management issues • Policy IW 3B: Recognising the Treaty in the exercise of functions and powers under the Act • Policy IW 6B: Encouraging tangata whenua to identify measures to avoid, remedy or mitigate adverse cultural effects	
Iwi Resource Management	Objective 13: Kaitiakitanga is recognised and the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) are systematically taken into account in the practice of resource management • Policy IW 3B: Recognising the Treaty in exercise of functions and powers under the Act • Policy IW 4B: Using consultation in the identification and resolution of resource management issues	Draft conditions 4 and 5 provide a structure through which kaitiakitanga can exercised. The SPDAG, established under the Stella Passage Development consent, provides a structured mechanism for tangata whenua to set priorities over time, including mauri monitoring, cultural indicators, kaimoana restoration, independent investigations, restoration initiatives, and other cultural programmes as matters emerge. Funding through this consent is proposed to support these functions and enable the SPDAG to respond to evolving priorities over the life of the consent. This framework provides a practical and proportionate mechanism to incorporate intergenerational and cultural perspectives, while maintaining a clear, flexible, and implementable regulatory structure.
	Objective 15: Water, land, coastal and geothermal resource management decisions have regard to iwi and hapū resource management planning documents • Policy IW 4B: Taking into account iwi and hapū resource management plans • Policy IW 6B: Encouraging tangata whenua to identify measures to avoid, remedy or mitigate adverse cultural effects	Relevant iwi and hapū resource management plans that are published with BOPRC are assessed in **Section 9.9.1** as a part of this SAR.

RPS Section	Provision(s)	Commentary
	Objective 17: The mauri of water, land, air and geothermal resources is safeguarded and where it is degraded, where appropriate, it is enhanced over time • Policy IW 5B: Adverse effects on matters of significance to Māori • Policy IW 6B: Encouraging tangata whenua to identify measures to avoid, remedy or mitigate adverse cultural effects • Policy IW 2B: Recognising matters of significance to Māori	Enhancement of the mauri of the marine environment over time is provided for by financial support committed to in the draft conditions.
Matters of National Importance	Objective 19: The preservation of the natural character of the region's coastal environment (including CMAs) wetlands, lakes and rivers and their margins • Policy MN 1B: Recognise and provide for matters of national importance	The Port is significant to the functioning of many critical industries across New Zealand. It is both regionally and nationally significant infrastructure. Further, the Project will not meaningfully alter the existing natural character of the Harbour and its surrounding areas (see **Section 7.17** of this report). The Project is consistent with these provisions.
	Objective 20: The protection of significant indigenous habitats and ecosystems, having particular regard to their maintenance, restoration and intrinsic values • Policy MN 1B: Recognise and provide for matters of national importance • Policy MN 2B: Giving particular consideration to protecting significant indigenous habitats and ecosystems • Policy MN 4B: Encouraging ecological restoration • Policy IR 9B: Taking an integrated approach towards biosecurity	Proposed biosecurity risks and mitigation measures are discussed in **Section 7.14**. Existing biosecurity legislation will be followed and regular monitoring and reporting will take place. Overall, with the appropriate mitigation measures in place, the risks to biosecurity are likely to be negligible.
	Objective 21: Recognition and provision for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga • Policy IW 2B: Recognising matters of significance to Māori • Policy IW 5B: Adverse effects on matters of significance to Māori • Policy MN 1B: Recognise and provide for matters of national importance • Policy MN 3B: Using criteria to assess values and relationships in regard to section 6 of the Act	Engagement with tangata whenua is detailed in Appendix C1.

9.7. REGIONAL COASTAL ENVIRONMENT PLAN

9.7.1. Natural Heritage

Provision	Theme
OBJ 2 Policy NH 5, Policy NH 6, Policy NH 7, Policy NH 10, Policy NH 12, Policy NH 14, Policy NH 15, Policy NH 23.	Protect the attributes and values of: (a) Outstanding natural features and landscapes of the coastal environment; and (b) Areas of high, very high and outstanding natural character in the coastal environment; from inappropriate subdivision, use, and development, and restore or rehabilitate the natural character of the coastal environment where appropriate. Adverse effects must be avoided on the values and attributes of the following areas: (a) Outstanding Natural Character areas (as identified in Appendix I to the RPS); (b) Outstanding Natural Features and Landscapes (as identified in Schedule 3); (c) Any Indigenous Biological Diversity Area A (as identified in Schedule 2, Table 1); and Adverse effects must be avoided on taxa that meet the criteria listed in Policy 11(a)(i) or (ii) of the NZCPS. A summary of values and attributes for areas of Outstanding Natural Character is provided in Appendix J to the RPS. Values and attributes for Indigenous Biological Diversity Area A and Outstanding Natural Features and Landscapes are set out in Schedules 2 and 3 to this Plan respectively. When assessing the extent and consequence of any adverse effects on the values and attributes of the areas listed in Policy NH 5 and identified in Schedules 2 and 3 to this Plan and Appendix I to the RPS: (a) Recognise the existing activities that were occurring at the time that an area was assessed as having Outstanding Natural Character, being an Outstanding Natural Feature and Landscape or an Indigenous Biological Diversity Area A; (b) Recognise that a minor or transitory effect may not be an unacceptable adverse effect; (c) Recognise the potential for cumulative effects that are more than minor; (d) Have regard to any restoration and enhancement of the affected attributes and values, and (e) Have regard to the effects on the tangata whenua cultural and spiritual values of ONFLs, working, as far as practicable, in accordance with tikanga Māori.
OBJ 5	Enable the restoration and rehabilitation of the natural heritage of the coastal environment, including: (a) Kaimoana resources;

	(b) Natural heritage landforms or features that would increase resilience to natural hazards, and (c) Degraded cultural sites which tangata whenua wish to restore for natural heritage and cultural reasons

The RCEP does not include mapping or scheduling of those parts of the coastal environment that have high to outstanding levels of natural character. Mr Brown (**Appendix N**) suggests that this appears to rely on the overlap between ONFLs, ASCV, and other values.

As for the discussions on Section 6 of the RMA and the NZCPS, Mr Brown explains in **Appendix N** as summarised in **Section 7.17** that due to the existing environment of frequent ship movements, the proposed operations would have a '**negligible**' impact on the natural character of Te Awanui.

9.7.2. Water Quality and Coastal Hazards

Provision	Theme
OBJ 7 Policy WQ 5	To manage the accumulation of sediment in harbours and estuaries.
OBJ 21, OBJ 22	Development activities are managed to take into account the dynamic nature of coastal processes and to maintain or enhance coastal processes affected by climate change

The Project will positively contribute to the management of sedimentation in Te Awanui and help to manage the effects of climate-influenced storms. Maintenance dredging redistributes sediment washed out in storm events and redistributes it to areas where it can wash out and renourish areas scoured out by storms. This maintains existing coastal processes that are impacted by climate change and helps to buffer existing ecosystems from the potential negative impacts of increased storm frequency and intensity and the associated sedimentation effects.

9.7.3. Iwi Resource Management

Provision	Theme
OBJ 13, Policy IW 1, IW 2, Policy IW 8, Policy IW 9	Provide for partnerships and active involvement of tangata whenua in the management of the coastal environment
OBJ 14, OBJ15, OBJ 16, OBJ 18, Policy IW 1	Tangata whenua are enabled to undertake customary activities in the CMA. Taonga sites and areas are protected and restored or rehabilitated when deteriorated.
OBJ 17, Policy IW 1,	Māori values are integrated in monitoring the state of the coastal environment

Draft conditions 4 and 5 provide a structure through which kaitiakitanga can exercised. The SPDAG, established under the Stella Passage Development consent, provides a structured mechanism for tangata whenua to set priorities over time, including mauri monitoring, cultural indicators, kaimoana restoration, independent investigations, restoration initiatives, and other cultural programmes as matters emerge. Funding through this consent is proposed to support these functions and enable the SPDAG to respond to evolving priorities over the life of the consent.

This framework provides a practical and proportionate mechanism to incorporate intergenerational and cultural perspectives, while maintaining a clear, flexible, and implementable regulatory structure.

9.7.4. Activities in the coastal marine area

Provision	Theme
OBJ 25, OBJ 27	Activities that have a functional need to be located within the CMA are recognised and provided for, including exclusive occupation when such activities are incompatible with other activities.
OBJ 28, OBJ 29	The maintenance, operation and upgrade of regionally significant infrastructure is provided for
OBJ 26, OBJ30, Policy RA 1, Policy RA 2, Policy RA 3	Space in the CMA is allocated efficiently, and activities are undertaken in a manner that is appropriate to the values and existing uses of their location. Protect access to and use of regionally significant surf breaks. Protect the public open space qualities of the coastal environment. Retain public access to and along the coast, harbours and estuaries.
OBJ 36	Provide for the safe and efficient navigation of ships in the CMA
OBJ 42	The generation of unreasonable noise or light levels in the CMA is avoided
OBJ 44	Exotic or introduced plants and harmful aquatic organisms are prevented from establishing in the CMA and the adverse effects of existing infestations of exotic plants and harmful aquatic organisms in the coastal environment are remedied or mitigated.

The Project has a functional need to be located in the CMA and promotes the ongoing operations of existing regionally significant infrastructure. The Port's operation is an existing use, and maintenance dredging ensures the safe movement of ships into and out of the Harbour. The capital dredging ensures the efficient use of the existing berth space. Noise levels are expected to comply with existing noise control boundaries. The Project is consistent with these objectives and policies.

9.7.5. Port Zone

Provision	Theme
OBJ 52 Policy PZ 1, PZ2, PZ 4 and PZ 6	The current operational needs of the Port are provided for as a matter of priority while avoiding, remedying or mitigating the effects of those activities on cultural values and the environment.
OBJ 53 Policy PZ 5	The future expansions and operational needs of the Port and its shipping channels are provided for in appropriate locations, having regard to the potential adverse effects on the environment.
Policy PZ 8 Policy DD 11	Have regard to the role of beach replenishment sites for the continued operation of the Port of Tauranga and take into account the potential benefits of using sand from dredging for the purpose of beach replenishment. Recognise the potential benefits of using sand from dredging for the purpose of beach replenishment

The Project directly supports the operations of the Port. Maintenance dredging is crucial for ongoing Port operations, and capital dredging supports the efficient utilisation of the existing berth space to align with the changing needs of the shipping industry. The Project is consistent with these objectives and policies.

9.7.6. Disturbance, deposition and extraction

Provision	Theme
Policy DD 11	Recognise the potential benefits of using sand from dredging for the purpose of beach replenishment.

Policy DD 12	Selection of deposition sites in the CMA for dredging material will be subject to the following criteria: (a) Avoidance of adverse effects on areas of existing significant fisheries, or shell fisheries or other areas containing nationally rare or outstanding examples of indigenous ecological community types; (b) Avoidance of areas of heavy commercial or recreational navigation; (c) The capacity to return seawater to ambient conditions before reaching any beach (except where beach replenishment is one of the purposes of dredging), or significant fishery, shell fishery or identified area or value of significance; (d) Minimum size to limit any adverse effects and to allow for effective monitoring to determine any adverse effects; and (e) Maintenance of beaches and related sediment transport processes.
Policy DD 14	Recognise that maintenance dredging of existing navigation and access channels, including river mouths, is necessary to provide for: (a) The efficient and safe operation of navigation and access channels; (b) The servicing of local shipping; and (c) Efficient connections with other transport modes.
Policy DD 15	Dredging and spoil disposal activities shall use methods of dredging, spoil transport and spoil disposal designed and operated to: (a) Minimise adverse effects on: (i) The benthic community adjacent to the area to be dredged or dumped on; (ii) Recreational and commercial activities; and (iii) Cultural and social values; and (b) Reduce adverse effects on water quality to comply with the relevant Water Quality Classification Standards and Criteria in Schedule 10.
Policy CD 1	Discharges to the CMA must: (a) Avoid significant adverse effects, including cumulative effects, on aquatic life, habitats, feeding grounds, kaimoana (including shellfish gathering), ecosystems, contact recreation and amenity values in the CMA after reasonable mixing; (b) Minimise adverse effects on the life-supporting capacity of water within the mixing zone; (c) Avoid the discharge of persistent toxic contaminants into the environment, and where avoidance cannot be practically achieved, the adverse effects of such discharges must be mitigated or remedied;

	(d) Avoid, remedy or mitigate adverse effects on the stability of the coastal environment, including localised erosion and scour resulting from the discharge; (e) Maintain or enhance the physical characteristics of receiving waters (including salinity) that contribute to their life supporting capacity, including their ability to support indigenous flora and fauna and kaimoana beds; and (f) Be of a quality that has particular regard to: (i) The sensitivity of the receiving environment; (iii) The capacity of the receiving environment to assimilate contaminants; and (iv) The nature of the contaminants to be discharged, the concentration of contaminants needed to achieve the required water quality in the receiving environment, and the risks if that concentration of contaminants is exceeded.
Policy CD 3	Water quality standards If a water quality standard higher or additional to that set by Schedule 10 is required to prevent degradation of existing water quality, the standard will be selected in accordance with the following hierarchy: 1 New Zealand derived risk-based thresholds. 2. Rest of the world derived risk-based thresholds, with preference given to those that are methodological consistent with those already used in New Zealand.
Policy CD 4	Definition of reasonable mixing zone. To define the radius of a reasonable mixing zone in the conditions of a resource consent for the point source discharge of contaminants to coastal waters having regard to the following matters: (a) Use of the smallest mixing zone necessary in order to minimise adverse effects on the life-supporting capacity of water within the mixing zone and achieve the required water quality standard of the receiving environment. (b) The water quality standard in Schedule 10 to this Plan. (c) The hydrological regime of the receiving water. (d) The ambient concentrations of contaminants in the receiving water. (e) Effluent discharge flow rate and contaminant concentrations. (f) Existing discharge and abstraction consents in the area affected by the proposed point source discharge. (g) The need to avoid significant adverse effects on ecosystems and habitats after reasonable mixing.

	(h) The values and existing uses of the area affected by the proposed point source discharge. (i) Māori cultural values (refer to Policy CD 6 and Iwi Resource Management policies). (j) Proximity to bathing sites. (k) Adverse environmental effects of the discharge, including cumulative effects in relation to (a) to (j). (l) The location of the discharge and position of the outfall. (m) Outfall diffuser design criteria. (n) Information provided by the applicant. (o) Any other information relevant to the nature of the discharge and the site characteristics.

9.8. TAURANGA CITY PLAN

Although the TCP does not include the CMA, it does include a number of objectives and policies that address the landscape and natural character values of the Harbour environs and effects on those values. Key provisions include:

6A.1.7 Objective – Harbour Environment Landscape Character

The landscape character values of the City's harbour environment is maintained and enhanced.

6A.1.7.1 Policy - Maintenance and Enhancement of Landscape Character of the Harbour Environment

By ensuring that subdivision, use and development along the margins of Tauranga Harbour does not adversely affect the landscape character values of that environment by:

a) Maintaining and enhancing the characteristics and elements that determine the amenity of the surrounding area;

b) Ensuring the bulk and scale of built form is compatible with the character of the harbour environment;

d) Maintaining and enhancing amenity between different land uses by screening, buffering or otherwise providing an appropriate interface treatment;

e) Achieving a high amenity interface between private and public space;

f) Maintaining and enhancing the natural character interface between urbanised and harbour margins environment;

g) Protecting areas of cultural value;

i) Siting buildings, structures, infrastructure and services to avoid or minimise visual impacts on the harbour margins environment;

k) Maintaining and enhancing indigenous vegetation, notable trees and heritage trees;

l) Managing the interface between urban activities and adjoining landscapes to maintain the integrity of identified outstanding natural features and landscapes and important amenity landscapes;

m) Ensuring activities maintain and enhance the factors, values and associations of outstanding natural features and landscapes and/or important amenity landscapes.

6A.1.8 Objective – Interface with the Coastal Marine Area (being MHWS), Outstanding Natural Features and Landscapes and Important Amenity Landscapes

The open space character of the coastal marine area and the factors, values and associations of outstanding natural features and landscapes and important amenity landscapes and their margins is maintained and enhanced.

6A.1.8.1 Policy – Interface with the Coastal Marine Area (being MHWS), Outstanding Natural Features and Landscapes and Important Amenity Landscapes

By ensuring that buildings, structures and activities along the margins of the coastal marine area, outstanding natural features and landscapes and important amenity landscapes do not compromise the natural character, factors, values and associations of those areas, through:

a) The impact of the bulk and scale of buildings, structures and activities on the amenity of the environment;

b) Significant modification of the existing landform or topography and the extent of earthworks;

d) Buildings, structures and activities detracting from the existing open space character and the factors, values and associations of outstanding natural features and landscapes and important amenity landscapes and their margins;

e) The effects on indigenous and exotic flora and fauna, with an overall goal to retain existing vegetation patterns and enhance those patterns around the outstanding natural features and landscapes and important amenity landscapes and their margins through mitigation planting.

The Project does not compromise that natural character factors, values and associations of the margins of the CMA and can therefore achieve the relevant TCP policies.

9.9. OTHER MATTERS (S104(1)(C))

Section 104(1)(c) requires that the Council must have regard to any other relevant matters, when making a consideration on a resource consent Application.

9.9.1. Assessment against Hapū/Iwi Management Plans

The relevant provisions from the following hapū/iwi resource management plans from BOPRC's list of lodged hapū/iwi resource management plans are:

- 'Matakana & Rangiwaea Islands Hapū Management Plan' (2017)
- 'Ngā Pōtiki Environmental Plan' (2019 - 2029)
- 'Ngāi Tamawhariua Hapū Management Plan' (2015)
- 'Ngāi Tamarawaho Hapū Management Plan' (2021)
- 'Ngāi Te Ahi Hapū Management Plan' (2013)
- 'Ngāi Tukairangi - Ngāti Tapu Hapū Management Plan' (2014)
- 'Ngāti Hangarau Hapū Management Plan' (2021)
- 'Ngāti Kahu Hapū Environmental Management Plan' (2011)
- 'Ngāti Pūkenga Iwi ki Tauranga Trust Iwi Management Plan' (2013)
- 'Pirirākau Hapū Management Plan' (2017)
- 'Tauranga Moana Iwi Management Plan 2016 - 2026: A Joint Environmental Plan for Ngāti Ranginui Ngāi te Rangi and Ngāti Pūkenga'
- 'Waitaha Iwi Management Plan'(2014)

The relevant objectives and policies of these plans are discussed in **Appendix W**.

The principal areas of alignment are engagement, recognition of cultural values, and incorporation of monitoring and adaptive management mechanisms.

Engagement and participation

The Application strongly responds to provisions across the plans requiring early, meaningful and well resourced engagement. A structured engagement strategy was implemented, including hui, technical forums, and resourcing for Cultural Values Reports (CVRs). This aligns with the consistent expectation in iwi and hapū management plans for early engagement, provision of sufficient information, and enabling participation in decision-making processes. The opportunity for iwi and hapū to prepare CVRs and influence the Application reflects a clear response to the consultation protocols identified in multiple plans.

Recognition of cultural values

The Application recognises core cultural values identified across the iwi and hapū management plans, including mauri, kaitiakitanga, whakapapa, and the significance of Te Awanui. These values are acknowledged in the Application and reflected in the CVR analysis. This is consistent with plan provisions requiring protection of cultural relationships with the environment, recognition of mātauranga Māori, and safeguarding of taonga species and culturally significant areas.

Monitoring and collaboration

The Application responds to provisions seeking ongoing involvement of tangata whenua in environmental management. Measures included in the consent conditions such as cultural monitoring, involvement of iwi and hapū in monitoring programmes, adaptive management responses, and proposed funding for restoration initiatives are consistent with provisions in iwi and hapū plans requiring collaborative management and participation in research and monitoring activities.

Avoidance of adverse effects

The Application includes mitigation measures and concludes that effects are generally low, however several iwi and hapū management plans expressly oppose or strongly constrain dredging activities and emphasise protection of mahinga kai, water quality, and sites of cultural significance. The CVRs consistently raise concerns regarding degradation of mauri and impacts on customary resources, indicating that iwi and hapū do not consider that these outcomes are fully achieved.

Cumulative effects and cultural outcomes

While the Application acknowledges cumulative effects and incorporates mitigation and monitoring responses, tangata whenua feedback indicates that the Project is viewed as part of an ongoing pattern of cumulative degradation of Te Awanui. Many iwi and hapū plans seek not only mitigation, but restoration of environmental and cultural health, including reversal of past impacts. This is addressed by condition 11 which provides funding to be allocated by the SPDAG for projects that contribute to mātauranga monitoring and restoration of the health of Te Awanui/Tauranga Harbour.

Overall assessment

Overall, the Application process has responded to iwi and hapū management plans, particularly in relation to engagement, recognition of values, and collaborative management mechanisms. However, with respect to those provisions seeking avoidance of adverse effects, protection of mauri, and restoration of the harbour environment, POTL acknowledges that these remain the primary areas of contention between the Application and the outcomes sought in iwi and hapū planning frameworks.

10. CONCLUSION

10.1. EXTENT OF BENEFITS

Generating incomes for New Zealanders is an important component of enabling people and communities to provide for their wellbeing.

In its consideration of benefits the Economic Report demonstrates the significance and scale of Port of Tauranga for regional and national economic activity, drawing on the RMA's 'economic' provisions, such as section 5 references to "*enabling people and communities to provide for their economic, social and cultural wellbeing*" and section 7 (b)'s "*efficient use and development of resources*".

The Economic Effects Assessment (**Appendix M, Section 0** and **Section 6**) underscores the significance of the existing Port operation. Already an infrastructure asset of regional and national significance, the Port is an international freight gateway for imports and exports and one of only two ports able to accommodate the largest container vessels that visit New Zealand. The Port's significance goes far beyond POTL's direct economic contributions to the economy. It is a critical enabler of economic activity because the Port infrastructure supports other industries to create their own value.

Capital and maintenance dredging are required to ensure continued access of the various vessels that utilise the Port facilities. The Project's significance and key benefit is therefore in maintaining the Port's capacity, such that the existing and future planned activities can proceed. POTL reputation, a reduction in emissions, tourism and beach replenishment benefits also result from the Project.

10.2. SUMMARY OF ADVERSE EFFECTS

Tangata Whenua have assessed cultural effects to be adverse, to include historic activities, and to be cumulative.

Experts have determined that:

- Typical dredging activities may result in adverse impacts on **turbidity and morphodynamics** during the excavation of the seabed; during the disposal of the extracted sediment; and during the post-dredging or recovery period. Both excavation and disposal phase impacts are generally transient. The impacts during the post-dredging phase are predominantly determined by the changes made to the morphology (mostly the tidal channels), and the subsequent changing currents. Numerical modelling of the proposed capital dredging predicts little change in the tidal characteristics, and a reduction in tidal velocities for the dredged areas of the shipping channels proportional to the increased cross-sectional area. The modelling also shows no detectable changes to tidal characteristics and tidal velocities beyond the immediate area of the dredged channels.

- Computer modelling predicted **airborne noise** impacts from the Project both in the CMA and on nearby land that were assessed against the appropriate noise standards. Requiring dredging during nighttime hours in specific identified areas to implement a NMP has been recommended to ensure meeting noise standards. This provision is included in the draft conditions.

- **Underwater noise** will not be high enough to cause auditory injuries or hearing loss to marine mammals. The risk for disturbances is substantially higher, by way of covering a greater spatial area, outside the Harbour than inside. The change in soundscape generated by the dredging is expected to be negligible in habitats outside the Port Zone - especially when considering that the AIS data that it is based upon does not include all

vessel traffic. No underwater noise mitigation or monitoring has been identified as necessary to manage these effects.

- The risk of toxicants entrained in the dredged sediment and leaching into the water column in concentrations above water quality guidelines is extremely low, with the effects on **water quality** likely to be negligible. Water temperature, pH, salinity, and DO were measured by POTL upstream, downstream and alongside the vessel during the dredging and disposal process showing negligible effects for these parameters. Modelling indicates no effects on sensitive taxa, such as pipi (*Paphies australis*) are expected. POTL monitor and manage turbidity caused by the dredging activities using six continuous turbidity monitoring stations in the Harbour during dredging campaigns.

- The primary effects on **marine ecological** from the dredging are related to an increase in the concentration of suspended sediment (primarily from overflow discharge from the dredge), the deposition of sediment on soft sediment and rocky reef habitats, and the mortality of benthic invertebrates within the dredging area and disposal area. Dr De Luca's assessment concluded that the cumulative effects of dredging and disposal of dredge material is low with a less than minor effect and no mitigation required.

- Seven potential effects on **marine mammals** were identified. Dr McConnell determined that the likelihood of adverse effects on mammals from noise is low. Mammals are tolerant of turbidity and typically don't rely heavily on vision for foraging and navigation. The likelihood of vessel strikes with mammals during dredging is low due to the relatively slow speeds that the vessels will be travelling. The likelihood of adverse effects on marine mammals from chemical contaminants during the proposed dredging activities to be very low and the magnitude of predicted effects to be negligible. The likelihood of marine debris effects from the proposed activity is very low and the magnitude of effects is negligible. The likelihood of artificial lighting effects on marine mammal species is very low and the predicted magnitude is negligible. No cumulative effects on mammals were identified.

- The effects of modification of foraging areas due to any suspended sedimentation from dredging activities, including offshore disposal of dredged material, on **avifauna** is anticipated to be minor. Because the character and intensity of noise will be similar to current Port activities, the impact of noise from dredging will be 'significantly less than that caused by commercial and recreational harbour traffic'. The risk to estuary birds from contaminants is less than minor. Overall, the proposed activities are expected to have less than minor effects on avian biodiversity in the Harbour and surrounding marine environments.

- Dredge vessels arriving from outside regions constitute a **biosecurity risk**, especially if the vessels' region of origin has marine NIS of concern not currently present within the Bay of Plenty. Dredge spoil disposal could also act as a pathway for the inadvertent transfer of marine NIS from the dredge location to the spoil disposal grounds but mechanisms are in place to mitigate the likelihood of any potential effects. The residual marine biosecurity risk after mitigation is expected to be minor or less than minor.

- The capital and maintenance dredging proposed do not represent a notable change to the status-quo in terms of **navigational safety**; either for large commercial vessels with a marine pilot embarked or for other maritime users of the Harbour. The overall effect of the changes in relation to navigational safety is assessed to be less than minor.

- The effects on **recreation** opportunities, despite potential conflicts caused by the high and growing levels of recreational and commercial boating activity in Te Awanui being reported, have been assessed as no more than minor in nature.

- **Landscape**, **natural character** and **amenity** effects associated with POTL's ongoing dredging and deposition operations, together with its proposed capital dredging, would be limited and appropriate from a statutory standpoint. Overall, the proposed activities are considered to be acceptable and appropriate, given their location, context, scale, and limited intensity. It is anticipated that the effects of the future operations proposed by POTL would be small-scale, quite isolated, and of a very low to negligible order, overall.

10.3. OBLIGATIONS TO ACT IN A MANNER THAT IS CONSISTENT WITH THE OBLIGATIONS ARISING UNDER EXISTING TREATY OBLIGATIONS

Section 7 of the FTAA

Treaty Settlements which overlap with the Site are listed in **Section 2.4.4** of this SAR. Obligations under existing treaty settlements are summarised in **Appendix X**.

10.4. PROPORTIONALITY TEST

Section 3 of the FTAA sets out the purpose of the FTAA, namely, to facilitate the delivery of infrastructure and development projects with significant regional or national benefits. The FTAA's Schedule 5 sections 17(1)(a) require that the panel gives greatest weight to the purpose of the FTAA and 17(1)(b) and 17(2)(a) requires that the panel considers RMA sections 5, 6 and 7.

The proposed capital and maintenance dredging would enable the continued efficient functioning of the Port. Given Port of Tauranga's market share of New Zealand cargo this ensure continued benefits for the wider region and the New Zealand economy as a whole. The Project will, therefore, make a notable positive contribution to the ability of New Zealanders to provide for their economic and social wellbeing and needs, now and in the future. That this is the case is signalled by long-standing recognition in the RCEP.

The Project is consistent with relevant applicable statutory documents.

The adverse environmental effects of the Project are assessed – from a Western science perspective - as low to very low, in many cases before any mitigation is applied. Many of the mitigation measures recommended are proven, by their successful use in previous Port dredging. As such, the Project will safeguard the life-supporting capacity of air, water, soil, and ecosystems.

Impacted Tangata Whenua parties are best placed to identify the cultural effects of the Project on their values. Their CVAs are accepted as credible and reliable and portray a considered and genuine view. Generally, Tangata Whenua are fundamentally opposed to the Project and identify adverse cultural effects associated with it. However, POTL has prepared a suite of conditions that are intended to respond to the cultural effects identified by Tangata Whenua parties.

The Project avoids any inappropriate adverse effects on matters of national importance subject to protection under Section 6 of the RMA. The Project also responds positively to the other matters that must be given regard to under Section 7 of the RMA.

The adverse impacts do not meet the threshold in s85(3) such that there is no discretion to decline the application.

On this basis, approval of the Project is consistent with, and would give effect to, the purpose of the FTAA.