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Port of Tauranga Limited
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Addendum to Cawthron Report 4019B – response to biosecurity considerations in cultural value assessments / reports

This addendum provides technical responses to marine biosecurity comments raised in cultural value assessments / reports relating to the application by Port of Tauranga Limited (POTL) to renew resource consents for capital and maintenance dredging in Tauranga Harbour.

Ngāi Tamarāwaho

In section 12.7 of Winiata (2026), the findings of Cawthron Report 4019B are summarised, including the risks from dredge vessels and dredge spoil disposal, and specific risks from Mediterranean fanworm and Asian paddle crab. It is highlighted that, for Ngāi Tamarāwaho, biosecurity risk is a cultural risk. The Ngāi Tamarāwaho effect finding is that *'biosecurity conditions must be precautionary, adaptive and transparent, with pre-arrival vessel information, surveillance, reporting to the hapū and response protocols for taonga species and mahinga kai areas'*. This is further highlighted in section 19.4, where Ngāi Tamarāwaho recommend that the Fast-track approval panel must require *'strong biosecurity controls'*.

In general, the Ngāi Tamarāwaho interpretation of Cawthron Report 4019B is sound and consistent with a Western science perspective. Their recommendation for strong biosecurity controls can be met via mitigation options discussed in the report, including biofouling management requirements for incoming vessels, monitoring for pests within the dredge areas, and adaptive management if the background biosecurity risk changes appreciably.

Waitaha

In section 6.5 of Te Kapu Ō Waitaha (2026), the findings of Cawthron Report 4019B are summarised. Te Kapu Ō Waitaha highlight 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'*. They require the following outcomes:

a. *Waitaha notification of all marine pest detections relevant to dredging or disposal*
b. *Waitaha access to biofouling management plans where relevant*
c. *adaptive biosecurity review if new pests are detected*
d. *inclusion of Waitaha in marine pest response discussions*

e. *cultural trigger where marine pests threaten mahinga kai or taonga species*

f. *annual reporting on biosecurity monitoring and vessel compliance.*

Requirements (a), (b), and (f) could be met by including Te Kapu Ō Waitaha as a party to be notified of the dredge management plans, biofouling management plans and any surveys within the area. Requirement (c) is consistent with the proposed consent condition enabling case-by-case consideration of risks based on surveys by Bay of Plenty Regional Council and commissioning of new risk assessments by a suitably qualified expert when a material change in risk is likely to have occurred. Requirements (d) and (e) relate to stakeholder engagement, and could be accommodated in consent conditions.

Ngāti Ranginui Fisheries Trust

The report by Mārearea Consulting (2026), states in item 100(b) that:

> *The Port is considered a high-risk area for marine pests due to shipping activity. Several introduced species have established in the harbour, most likely arriving from international ships. This includes the Mediterranean fanworm and Asian paddle crab which are both continuing to spread within the harbour including near the dredging areas. These species are difficult to control once established. Marine pests may also be transferred from Te Awanui to deposition areas. POTL relies on national and regional rules and regulations to ensure marine pests do not enter the harbour. POTL also proposes to manage risks through the development of a Dredge Management Plan which will include specific biosecurity measures for vessels. Consent conditions are also proposed to enable adaptive management of future changes in biosecurity risk, and it is recommended pre-dredging surveys are undertaken to check for pest species.*

This interpretation is consistent with Cawthron Report 4019B.

Item 102 outlines are range of proposed mitigations for the activity. One of these specifically relates to biosecurity: *'Tangata whenua are resourced to participate in the management of marine pests, including being involved in monitoring research of marine pests and their effects, and responses to detection of new marine pests.'* This proposal is consistent with the growing engagement of tangata whenua in biosecurity decision-making and operations at multiple levels in Aotearoa New Zealand. This should be possible if properly resourced. However, these types of operations also need to conform to Western scientific principles (e.g. statistical basis for surveillance and monitoring designs) and have input from suitably qualified scientists.

It is also noted that broader recommendations in Mārearea Consulting (2026) to enable tangata whenua to review and provide input to consent conditions and the dredge management plan, or have access to technical experts, would, in principle, include biosecurity considerations.

Ngāi Tukairangi Hapū

In Ngata and Ellis (2026), pages 49 and 50 state that the Mediterranean fanworm and Asian paddle crab have been introduced to the harbour through vessel movements, and that these pests threaten the ability of Ngāi Tukairangi Hapū to exercise mahinga kai and kaitiakitanga in their rohe moana. The

report authors highlight that dredging has the potential to exacerbate the impacts of these marine pests, and subsequently highlight areas for which some degree of uncertainty remains:

1. whether capital dredging would facilitate the spread of established marine pests from their current locations to new areas of the harbour
2. the effect of Mediterranean fanworm on pipi
3. whether the proposed maintenance dredging programme would perpetuate and escalate the biosecurity risk already resulting from POTL vessel activity
4. biosecurity treatment effectiveness in real-world scenarios.

Regarding point 1, and as described in Cawthron Report 4019B, there is a level of uncertainty regarding whether marine pests survive in dredge spoil. However, the report does note that dredging activity has been ongoing and there are several factors that intuitively work against survivability in dredge spoil (i.e. burying, mechanical damage).

Regarding point 2, impacts of Mediterranean fanworm on pipi beds have not yet been determined, which 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.

Regarding point (3), the assessment in Cawthron Report 4019B primarily considered the dredging activity itself rather than effects from enabling ongoing operation of the Port of Tauranga. Vessel movements constitute the largest overall risk for the spread of marine pests. If the Port of Tauranga 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 Tauranga Harbour, albeit with lower overall risk because additional steps would be required (i.e. sequential events with independent probabilities).

Regarding point (4), 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 Cawthron Report 4019B are consistent with best available practice residual levels of risk described in the report, and areas of uncertainty are highlighted in the report.

On page 54, it is recommended that:

- *Pre-dredging and post-dredging biosecurity surveys be undertaken at Te Paritaha and adjacent kaimoana habitat annually for the first five years of the consent and every three years thereafter, with specific assessment of Mediterranean fanworm and Asian paddle crab distribution.*
- *Where post-dredging surveys identify expansion of invasive species into previously unaffected habitat, dredging operations shall be suspended pending an independent*

assessment of causation and remediation options, with Ngāi Tukairangi consulted before operations resume.

Cawthron Report 4019B describes the use of pre-dredging surveys as a precautionary approach to minimise risk from dredge spoil disposal, and these recommendations are partly consistent with that. However, as Te Paritaha is not within a proposed dredge spoil disposal site, it is considered less likely from a Western science perspective that dredging would directly increase pest populations at this site.

On page 70, a summary of the biosecurity assessment by Ngāi Tukairangi Hapū is provided. Excluding minor inaccuracies (i.e. the first name of the author of Cawthron Report 4019B), this summary is consistent with the rest of the report and the above response applies.

The table on page 85 summarises technical reports and presentations, including the presentation relating to Cawthron Report 4019B. Two unresolved questions are flagged:

1. *Who manages established invasive pest response remains unresolved*
2. *Whether biosecurity risk scope is adequate for consent deferred to POTL/Clemleyer with no response received.*

Regarding the first item, in Aotearoa New Zealand the management of established pests is the responsibility of regional authorities, as described in Section 2.2 of Cawthron Report 4019B. Regarding point (2), this is discussed above.

Te Whānau ā Tauwhao (Ki Ōtāwhiwhi)

In Te Whānau ā Tauwhao (Ki Ōtāwhiwhi) (2026), pages 24–25 provide an overall critique of all technical reports. The findings and recommendations of Cawthron Report 4019B are consistent with best available scientific knowledge and practice. Any limitations in knowledge and / or uncertainty are openly outlined and described.

Table 5.1 highlights biosecurity risks associated with ballast water discharge from arriving vessels. This risk is described in Cawthron Report 4019B, and approaches to mitigate it via 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, 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.

Ngāti Hangarau

In table 1 of Ngāti Hangarau (2026), biosecurity considerations are highlighted and the following cultural response and expectation is stated: *'Invasive species directly threaten the mauri of the moana and our customary fisheries. Passive compliance is inadequate; we demand proactive mana whenua involvement in biosecurity surveillance. The risk to the taiao is too great to allow for self regulation.'* Consent conditions currently propose providing financial support for wider surveillance activities undertaken by Bay of Plenty Regional Council. Cawthron Report 4019B highlights that surveying dredge

locations immediately (e.g. within 2 weeks) prior to dredging would be a precautionary approach. That type of approach could engage mana whenua in biosecurity surveillance, noting that (as described in response to Ngāti Ranginui Fisheries Trust) these types of operations should conform to Western scientific principles and have input from suitably qualified experts.

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References

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Te Whānau ā Tauwhao (Ki Otawhiwhi). 2026. Assessment of actual and potential effects on the values of Te Whanau a Tauwhao (Ki Ōtāwhiwhi). Capital and maintenance dredging proposals by Port of Tauranga Limited.

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