

Applicant Responses to Relevant Comments from Environmental Groups on the Taranaki VTM Project

This document contains the key comments from the following parties:

- > Climate Justice Taranaki;
- > Environmental Defence Society Incorporated;
- > Parliamentary Commissioner for the Environment;
- > Royal Forest and Bird Protection Society of New Zealand;
- > Kiwis Against Seabed Mining and Greenpeace; and
- > Ngā Motu Marine Society.

Comments from Climate Justice Taranaki

Comment Number	Comment	Applicant Technical Input	Where Addressed in the Application Documents	Response
1	Claims to hold existing interests due to involvement in previous applications.	Legal	N/A	Previous proceedings were publicly notified. The present application was not required to be publicly notified under the FTAA, but invitations to comment were made (including to CJT). TTR has seen no evidence that CJT has an “existing interest” within the meaning of the EEZ Act.
2	The economic analysis submitted in the application is flawed with the economic benefits over-stated.	Economic	N/A	We note this comment relates to events in 2024 regarding information available to investors on the Australian Stock Exchange (https://www.kasm.org.nz/post/ttr-retracts-claim-of-1bn-benefit-from-seabed-mining). Therefore, this statement has no relation to the NZIER’s EIA in TTRL’s current application.
3	No cost-benefit analysis has been undertaken.	Legal	Response Evidence: Leung, C. and Huang, T. (2025). Joint Statement of Evidence of Christina Leung and Ting Huang (Economics) on behalf of Trans Tasman Resources Limited in Response to Comments Received, 13 October 2025, 14-22 p.	Cost Benefit Analysis is not a requirement for this application. It is not mandated by the FTAA or the EEZ Act, and the updated economic assessment provides an appropriate evidential basis to assess the Project’s benefits. Refer to Appendix J - NZIER’s Statement of Evidence on the scope and approach of NZIER’s EIA. Also refer to paras 35 to 53 of the evidence statement on how NZIER has addressed issues raised around the net economic benefits of the project, including additional analysis.
4	The risks of an uncontrolled incident on or between the Taranaki VTM’s Integrated Mining Vessel (IMV), the Floating and Storage Offloading Vessel (FSO), the Capesize export vessel and/or other vessels	Operations/Processes	Response Evidence: Thompson, S. (2025). Expert Evidence of Shawn Thompson on Behalf of Trans Tasman Resources Limited in Response to Comments Received, 13 October 2025, 36, 39-42 p.	With the IMV, FSO, a Capesize export vessel, and support craft operating in proximity, TTR will be required to comply with the IMO, Maritime NZ and ABS (Class) regulations: i) IMO COLREGs govern close-quarters conduct, safe speed, risk of collision, lights/shapes, sound signals, and traffic-separation conduct. Any multi-ship operation must be organised to always maintain COLREG compliance. https://www.imo.org/en/ourwork/safety/pages/preventing-collisions.aspx ii) SOLAS Ch V – Safety of Navigation: obliges voyage planning, bridge organization, and use of services like VTS/routeing, critical when coordinating tandem/offloading or parallel operations. https://www.imo.org/en/about/conventions/pages/international-convention-for-the-safety-of-life-at-sea-(solas),-1974.aspx

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				iii) ISM Code (SOLAS Ch IX): requires documented emergency preparedness (drills, scenarios, ship-specific procedures) for collisions, groundings, loss of control, and oil spills, across all participating vessels, not just the storage/offloading unit. iv) MARPOL Annex I (STS operations): if any ship-to-ship (STS) transfer of oil occurs, a Flag-approved STS Operations Plan and procedures are mandatory. v) Maritime Rules Part 22 (Collision Prevention) gives COLREGs legal force in NZ waters for NZ and foreign ships, so all the close-quarters and restricted-maneuvrability situations around the IMV/FSO/Capesize are enforceable locally. vi) Marine Protection Rules Part 130A (shipboard oil-spill plans) and Part 131 (offshore installations OSCP) require MNZ-approved contingency plans, with notification, salvage/technical support arrangements, and practicable response capability for worst-case scenarios. https://www.maritimenz.govt.nz/rules/all-rules/marine-protection-rules-part-130a/ vii) ABS advisories for shuttle/offloading operations (tandem hawser, hose handling, telemetry/interlocks, comms) and Position Mooring Systems address the practical failure modes that lead to loss of station, contact, or hose parting. Class attendance on bollard-pull tests and system FMEAs is routine. https://ww2.eagle.org/content/dam/eagle/advisories-and-debriefs/marine-shuttle-tanker-advisory.pdf
5	Release of substantial amounts of CO2 into the water column will potentially affect local ocean pH.	Ecology, Sedimentation and Coastal Matters	Footnote documents referenced: FN27	This risk of seabed disturbance releasing carbon trapped in sediments back into seawater and into the atmosphere is low in sediments with low organic content. The investigation by Vopel et al. (2013) [Vopel, K., Robertson J., & Wilson P.S. (2013). Iron sand extraction in South Taranaki Bight: effects on seawater trace metal concentrations. AUT Client report: TTRL 20138, 62 p] found low levels of organic matter (<1% dry weight) in sands from the mining area and found no evidence for increases in this measure with sediment depth.
6	Approval of the application would set precedent for future applications.	Legal	N/A	TTR's application is a specific and unique application. Any future applications must be assessed on their merits, and the present application will not set a precedent.
7	The extent of 'hard grounds' within and near the application site is unclear, and may be adversely affected by the proposal.	Ecology, Sedimentation and Coastal Matters	Response Evidence: Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'	Refer to 'Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'
8	Thorough risk assessment of the leaky KS-2 well in the Kupe field is necessary.	Operations/Processes/ Ecology, Sedimentation and Coastal Matters	Appendix 1: Proposed Marine Consent Conditions: 52 & 87.	Any scheduled mining or extraction operation will be governed by a detailed Operational Assessment Report (OAR) (proposed Condition 87) that would be developed annually using a robust dataset has been established through preceding investigations. This will include a close spaced grade control drilling program, which will define the mineralisation characteristics, distribution, and extraction boundaries, ensuring operational accuracy and safety. In addition, the OAR will be informed by an Operation Sediment Plume Model (proposed Condition 52) that will help assess releases to the surrounding environment under specific operating conditions. This modelling will ensure that potential effects from the mining operation are fully understood and comply with consent conditions.

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				Where existing infrastructure such as the Kupe field and associated wells (e.g. KS-2) is present, its location, status, and any known issues (including legacy or active leaks) are factored into both risk assessment and mine plan criteria. This ensures that all operational activities maintain appropriate stand-off distances, integrity controls, and contingency measures. In short, no seabed mining activity will proceed in isolation, it will be governed by a structured and data-driven planning process integrating geology, environmental conditions, and existing infrastructure to ensure both environmental protection and operational safety.
9	Insufficient assessment of the effects of iron ore washing and discharge of desalinated water.	Ecology, Sedimentation and Coastal Matters	Additional Information: Yolanda Fernández-Torquemada, Adoración Carratalá, José Luis Sánchez Lizaso (2019). Impact of brine on the marine environment and how it can be reduced. Desalination and Water Treatment 167, 27-37.	Fernández-Torquemada et al. (2019) recently reviewed the impact of brine from desalination plants on the marine environment and how it can be reduced. They noted that negative environmental impacts of brine discharge from a desalination plant can be minimized by appropriate planning and that frequent environmental monitoring programs of desalination plants normally show that the impacts are small, localized, and unimportant. However, significant effects have been detected in some cases. In these cases, effects can be mitigated by introducing devices that increase the mixing of effluent and surrounding seawater (e.g. high pressure/velocity diffusers) or/and by diluting the saline with seawater before discharge. Ecological impacts of the saline plume from the IMV will be minimised by: > Pre-mixing the reverse osmosis (RO) permeate concentrate into the slurry thereby reducing brine strength down to ~1.1–1.3 times× that of seawater before discharge. > The momentum and buoyancy differential of the discharge driving the rapid near-field entrainment needed to return to near-ambient salinity very quickly. > The IMV saline discharge point slowly traversing the 44 km2 mining area over 20 years of operations so that no one point will be continuously exposed to the saline discharge.; > The receiving environment being very exposed and subject to frequent moderate to strong winds, rough seas and strong currents thereby maximising mixing of the brine and minimising the size of the mixing zone. > Receiving environments in the immediate vicinity of the saline discharge dominated by short-lived, fast growing planktonic and benthic invertebrate species. Fish, as osmoregulators can adjust their internal osmotic concentration, are much less sensitive to changes in salinity, and can move away from brine plume.
10	Lack of clarity on the vanadium extraction process and potential adverse effects.	Operations/Processes	Response Evidence: Thompson, S. (2025). Expert Evidence of Shawn Thompson on Behalf of Trans Tasman Resources Limited in Response to Comments Received, 13 October 2025	Please refer to ‘Evidence of Shawn Thompson (Technical and Operational) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025’
11	The FTA framework requires the Expert Panel to take into account sections 10 & 11 of the EEZ Act.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Legal Submission.
12	There is a requirement to assess cumulative effects under sections 6, 28, 33 and 59 of the EEZ Act.	Legal	N/A	This is a misunderstanding of the meaning of cumulative effects. Cumulative effects do not include effects “predicted to occur in coming decades”.

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13	Cumulative effects assessment of the application is limited in scope.	Ecology, Sedimentation and Coastal Matters	Response Evidence: Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'	Refer to 'Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025' - Cumulative effects
14	The Expert Panel should take a conservative approach to uncertain environmental effects.	Legal	N/A	The requirement to favour caution and environmental protection cannot be used to amplify the assessed adverse environmental effects in the proportionality test. TTR's evidence is that a worst-case scenario (for sediment modelling) has been used.
15	The Expert Panel should assume a worst-case scenario when assessing the effects of the application.	Ecology, Sedimentation and Coastal Matters	Response Evidence: Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'	Refer to 'Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025' - Reliance on modelled information to assess environmental impact

Comments from Environmental Defence Society Incorporated

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1	The Expert Panel should take into account prior decisions on previous applications.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 – Legal Submission.
2	Previous Supreme Court decision identified deficits in the application information.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 – Legal Submission.
3	The projects adverse impacts are out of proportion with the projects benefits, and a cost benefit analysis is required for the application.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 – Legal Submission.
4	The economic analysis submitted in the application is flawed with the economic benefits not correctly identified.	Economic	Response Evidence: Leung, C. and Huang, T. (2025). Joint Statement of Evidence of Christina Leung	Refer to NZIER's evidence statement paras 14 to 22 on the scope and approach of NZIER's EIA. Also refer to paras 35 to 53 of the evidence statement on how NZIER has addressed issues raised around the net economic benefits of the project, including additional analysis.

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			and Ting Huang (Economics) on behalf of Trans Tasman Resources Limited in Response to Comments Received	
5	Giving greatest weight to the purpose of the FTA does not override environmental and biophysical constraints, and the FTA does include environmental bottom lines which the project can be refused under.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 – Legal Submission.
6	A net benefits approach requires a cost benefit analysis. The Expert Panel should commission its own cost benefit analysis as well as have consideration of environmental bottom lines in making a decision on the application.	Economic	Response Evidence: Leung, C. and Huang, T. (2025). Joint Statement of Evidence of Christina Leung and Ting Huang (Economics) on behalf of Trans Tasman Resources Limited in Response to Comments Received	Refer to paras 35 to 53 of the evidence statement on how NZIER has addressed issues raised around the net economic benefits of the project, including additional analysis.

Comments from Parliamentary Commissioner for the Environment

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1	There is uncertainty over the recovery time of affected ecosystems – the time taken for recovery is key consideration of the environmental impact.	Ecology, Sedimentation and Coastal Matters	Response Evidence: Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025’	Refer to ‘Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025’
2	The environmental impacts of the discharge of treated water needs to be considered.	Ecology, Sedimentation and Coastal Matters	Supplementary Technical Package: 41	Sediment discharge will affect the currents by altering the water density and the bottom roughness and these changes, in turn, will affect the transport processes. These effects were accounted for in the sediment plume modelling. The impact of changes in temperature and salinity depends on a number of factors: • The magnitude of the change • The depth at which the change occurs • Whether the change occurs during a period of strong mixing or a more quiescent period. Hadfield (2013) modelled a freshwater discharge of 0.198m3/s released at ~2m below the surface. This modelling showed that a freshwater source of this magnitude will not have a significant effect on salinity.
3	The potential to release stored CO2 and impact on NZ emissions should be addressed.	Ecology, Sedimentation and Coastal Matters	Footnote documents referenced: FN27	This risk of seabed disturbance releasing carbon trapped in sediments back into seawater and into the atmosphere is low in sediments with low organic content. The investigation by Vopel et al. (2013) [Vopel, K., Robertson J., & Wilson P.S. (2013). Iron sand extraction in South Taranaki Bight: effects on seawater trace metal concentrations. AUT Client report: TTRL 20138, 62 p] found low levels of organic matter (<1%

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				dry weight) in sands from the mining area and found no evidence for increases in this measure with sediment depth.
4	The Expert Panel should consider if the information presented is the best available information, and should consider the three-step test set out in the Supreme Court judgement.	Legal	N/A	TTR's evidence discloses that a range of new information available since 2016 has been considered. TTR updated its evidence in 2023 for the specific purposes of the reconsideration of its 2016 application; and reviewed and updated its application in 2025 taking account of those 2023 updates and any pertinent information to have become available since the reconsideration. As per the evidence filed, a range of new information has been considered, and TTR relies on the assessments of its expert advisors who confirm the adequacy of the information.
5	The economic analysis submitted in the application potentially overstates the economic benefits and no attempt to assess net benefits has been made.	Economic	Response Evidence: Leung, C. and Huang, T. (2025). Joint Statement of Evidence of Christina Leung and Ting Huang (Economics) on behalf of Trans Tasman Resources Limited in Response to Comments Received, 13 October 2025, 14-30 p.	Refer to NZIER's evidence statement for response to issues raised regarding: • using the regional input-output approach overestimates the project's impact on GDP and employment. • inputs and assumptions used by NZIER in estimating the project's economic benefits and contribution to export earnings, royalties and tax. • no discounting applied to the estimated impacts to account for project risk. • economic benefits estimated in NZIER's EIA do not present the project's net benefits given it does not consider potential negative economic effects. • additional analysis to address potential negative effects
6	The Expert Panel must made a balancing judgement on the application based on the cost of environmental effects and net economic benefit of the application.	Legal	N/A	TTR relies on the evidence of its experts that there will be no material harm from the sediment discharge when all the temporal, spatial, qualitative and quantitative dimension of that test are accounted for. Relying again on the evidence of its experts, and in particular the comprehensive suite of conditions to monitor and manage the activity, TTR considers granting approval will appropriately favour caution and environmental protection, so no reconciliation is required. An updated economic impact assessment is provided that estimates the net economic benefit.

Comments from Royal Forest and Bird Protection Society of New Zealand

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1	Pygmy blue whales use the STB as an important nursing and feeding area.	Marine Mammals	Response Evidence: 'Evidence of Dr Simon John Childerhouse (Marine Mammals) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'	Refer to 'Evidence of Dr Simon John Childerhouse (Marine Mammals) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'
2	STB is the only known feeding and nursing habitat for pygmy blue whales in New Zealand.	Marine Mammals	Response Evidence: 'Evidence of Dr Simon John Childerhouse (Marine Mammals) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'	Refer to 'Evidence of Dr Simon John Childerhouse (Marine Mammals) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'

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3	The applicant relies on findings of fact from 2017 decision.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
4	Claims the Supreme Court decision identified the sediment plume would not avoid material harm.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
5	The previous approval relied on uncertain and unenforceable conditions.	Legal / Planning	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
6	“Material harm” must be determined in relation to the values and areas in question.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
7	“Material harm” should not be equated or conflated with significant adverse effects when making assessment.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
8	Significant weight must still be applied to criteria listed in (b)-(d) of the clause 6 of Schedule 10 of the FTA.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
9	Supreme Court decision held the correct approach under previous application was to identify and consider bottom lines.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in	Refer to Part 1 - Legal Submission.

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			Response to Comments Received. 13 October 2025	
10	Section 61(2) of the EEZ Act requires caution and environmental protection to be “favoured” by the Expert Panel in their decision rather than weighed.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
11	Inconsistency with a provision of the EEZ Act can be considered a reason for refusal when coupled with one or more adverse impacts.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
12	If the proportion of fine sediment exceeds the modelling, suspended sediment concentrations could increase significantly resulting in increased environmental effects.	Planning	Attachment 1: Proposed Marine Consent Conditions: Condition 4	The proposed consent conditions ensure this cannot happen, by setting limits below this proportion in Condition 4(c) ((i) 2.25% for 48 hours, (ii) 1.6% over 7 days, (iii) 0.9% over 3 months) and 4(d) (no more than 1.8% ultra fines over 1 week). In the event consent is granted, TTR is required to comply with the conditions.
13	The application continues to raise same issues of material harm that previously failed to meet the statutory threshold of the EEZ Act.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
14	The plume breaches the bottom line of the EEZ Act.	Planning	Attachment 1: Proposed Marine Consent Conditions: Condition 4	The FTA framework makes clear that none of the decision-making criteria from the EEZ Act may operate as a bottom line in the context of a substantive application under the FTA—which limits both s 10(1)(b) and any provisions of another marine management regime. Extensive studies and research have been undertaken at the site identifying the potential adverse effects as described in the substantive application. In no instances are the effects predicted to be significant or to a level that cannot be addressed through adequate monitoring and management, as is included in the proposed marine consent conditions. The application will therefore not be inconsistent with s 10(1)(b) of the EEZ Act, regardless of whether it's a bottom line (or not).
15	Absence of certain acoustic data means certain noise effects cannot be reliably assessed.	Marine Mammals	Response Evidence: ‘Evidence of Dr Simon John Childerhouse (Marine Mammals) on behalf of Trans-Tasman Resources Limited in	Refer to ‘Evidence of Dr Simon John Childerhouse (Marine Mammals) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025’



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			response to comments received 13 October 2025'	
16	The economic benefits are overstated, unreliable and disproportionately low to the scale of extraction.	Economics	N/A	Refer to NZIER's evidence statement for response to issues raised regarding: • using the regional input-output approach overestimates the project's impact on GDP and employment. • inputs and assumptions used by NZIER in estimating the project's economic benefits and contribution to export earnings, royalties and tax. • no discounting applied to the estimated impacts to account for project risk. • economic benefits estimated in NZIER's EIA do not present the project's net benefits given it does not consider potential negative economic effects. • additional analysis to address potential negative effects
17	Proposal is inconsistent with environmental bottom lines of the NCPS and proposed conditions are not sufficient to halt activity before adverse effects occur.	Planning	Substantive FTA Application: Section 8.2 Response Evidence: Evidence of Dr Philip Hunter Mitchell and Luke Christopher James Faithfull (Planning) on behalf of Trans-Tasman Resources Limited in response to comments Received 13 October 2025	As per section 8.2, the FTA framework makes clear that none of the decision-making criteria from the EEZ Act may operate as a bottom line in the context of a substantive application under the FTA. Instead, these decision making criteria may only be <i>taken into account</i> (Schedule 10(6) of the FTA)—which limits both section 10(1)(b) of the EEZ Act and any provisions of another marine management regime. Giving weight to the bottom lines of the NZCPS, or any other marine management regime, in the proportionality test under section 85(3)(b) of the FTA therefore amounts to a minutiae approach that is not required and would go directly against the FTA approach of eradicating bottom lines. As set out in the Evidence of Dr Mitchell and Mr Faithfull on planning, the proposed conditions are robust, and will ensure that the project operations will not result in any adverse effects that cannot be appropriately avoided, remedied or mitigated to the extent that there will be no material harm.
18	Without enforceable conditions and because the proposal does not give effect to environmental bottom lines, the nature of the MMRS weigh against granting consent.	Legal / Planning	Substantive FTA Application: Section 8.2	As per section 8.2, the FTA framework makes clear that none of the decision-making criteria from the EEZ Act may operate as a bottom line in the context of a substantive application under the FTA. Instead, these decision making criteria may only be <i>taken into account</i> (Schedule 10(6) of the FTA)—which limits both section 10(1)(b) of the EEZ Act and any provisions of another marine management regime. Giving weight to the bottom lines of the NZCPS, or any other marine management regime, in the proportionality test under section 85(3)(b) of the FTA therefore amounts to a minutiae approach that is not required and would go directly against the FTA approach of eradicating bottom lines.
19	If best available information remains uncertain or inadequate then the Expert Panel has a statutory obligation to favour caution and environmental protection.	Legal / Planning	N/A	The information requirements for the application are set out in section 43 of the FTA and section 39 of the EEZ Act. TTR considers that the information submitted in the application and accompanying materials constitutes the best available information, being the information that, in the particular circumstances, is available without unreasonable cost, effort, or time. Extensive studies and research have been undertaken within the STB and at the proposed mining site identifying the potential adverse effects as described in the substantive application, and the effects conclusions have guided TTR's approach to operations, monitoring and management.

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				The necessity of reliance on modelling for certain aspects means the assessments include some uncertainty, but this is to be expected for a project of this scale and location, and does not reduce the reliability of the information. Under the FTA framework favouring caution and environmental protection i.e. section 61(2) of the EEZ Act can only be a matter to be taken into account (Schedule 10(6) of the FTA)—it cannot be a basis for declining consents. In no instances are the effects predicted to be significant or to a level that cannot be addressed through adequate monitoring and management, as is included in the proposed marine consent conditions which favour caution and environmental protection.
20	Section 85(3) of the FTA means that if consent should be declined under the EEZ Act, this is not determinative under the FTA.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
21	Reliance on a single numerical limit (condition 11) means frequent noise exceedances are likely, and that there is a lack of mitigation detail.	Noise	Supplementary Technical Package: 4a	See Humpheson evidence (paragraphs 64-65). Underwater acoustic emissions from the crawler and IMV will fluctuate due to factors such as sea state, equipment loading, and dynamic operations. International best practice, including ISO 17208-3, recognises that compliance should be assessed using representative averages and uncertainty analysis rather than instantaneous peaks. Occasional exceedances do not necessarily indicate non-compliance if the overall operational profile remains within the prescribed criteria.
22	The purpose of the pre-commencement conditions and Pre-commencement Environmental Monitoring Plan is to establish baseline environmental conditions.	Planning	Attachment 1: Proposed Marine Consent Conditions: Conditions 47 - 51	The baseline environmental conditions have already been established by the information and evidence provided with the application, and is considered sufficient to enable an informed consenting decision by the Expert Panel. The proposal to undertake further environmental monitoring before commencing the mining activity does not signify that there is a shortfall in the existing information to support TTR's application. Rather, the purpose of Conditions 47 – 51 reflects that the environment is dynamic, not static, and therefore the most accurate data on the characteristics of the existing environment will be data obtained in the period immediately prior to the commencement of mining. This information will then be used to validate the Operational Sediment Plume Model (OSPM) (Condition 52) and verify the numerical value associated with each of the SSC limits in Schedule 2 of the conditions.
23	Supreme Court decision rejected the use of adaptive management through conditions.	Planning	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025,	The Supreme Court did not conduct any evaluation of the evidence (as that was not its role), but relied on the DMC's record of decision, which was (in TTR's view) deficient. So, findings of "evidentiary gaps" by the Supreme Court are not reflective of the primary evidence available to the DMC, but to the DMC's record of decision. This Panel must make its own evaluation of the evidence before it, and even if large parts of the evidence remain the same as before the DMC in 2017, the Panel is not bound to share the Supreme Court's view, given that was not based on a direct evaluation of the evidence itself.

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				Further, as per legal submission – Adaptive management, the Supreme Court decision did not find the conditions imposed by the DMC in 2017 amounted to adaptive management.
24	Supreme Court decision identified evidentiary gaps in the previous application.	Legal / Planning	Attachment 1: Proposed Marine Consent Conditions: Condition 48	The PCEMP does not defer validation of sediment plume modelling, thresholds and ecological baselines from the consent process. The baseline environmental conditions have already been sufficiently established by the information and evidence provided with the application, and is considered sufficient to enable an informed consenting decision by the Expert Panel. Instead, the purpose of the PCEMP is to set up an environmental monitoring framework for the Project by establishing a set of environmental data based on previous modelling and investigations for the area, setting out roles and responsibilities of all parties and ensuring compliance with all regulatory requirements and guidelines. Under the FTA framework favouring caution and environmental protection i.e. section 61(2) of the EEZ Act can only be a matter to be taken into account (Schedule 10(6) of the FTA)—it cannot be a basis for declining consents. In any event, TTR maintains that granting approval subject to the conditions it has proposed will in fact favour caution and environmental protection.
25	The PCEMP framework defers validation of modelling and establishing of ecological baselines which undermines the requirement of the EEZ Act to favour caution.	Planning	Attachment 1: Proposed Marine Consent Conditions: Conditions 10 – 18, 35, 66 & 88	The proposed consent conditions are considered fit for purpose, and the required pre-commencement works will ensure noise generation will not exceed the noise thresholds once the activity commences. The ongoing monitoring requirements will ensure the noise generation remains in compliance with the consents and, in the unlikely event of a noise exceedance, the Marine Mammal Management plan, which must be certified by the EPA prior to the operation commencing, will set out suitable responses to avoid adverse effects on marine mammals to the greatest extent practicable.
26	The proposed consent conditions 10-18, 35, 66 and 88 lack of clear mitigation action if noise thresholds are exceeded.	Noise	Supplementary Technical Package: 4a Appendix 1: Proposed Marine Consent Conditions: 12 - 13	See Humpheson evidence (paragraphs 66-69). The primary mitigation measure is embedded in the design phase of the crawler and IMV, as required by Condition 12, and verified through certification under Condition 13 prior to deployment. Beyond this, physical retrofits are generally impractical. Therefore, operational measures represent the most feasible approach if monitoring indicates sustained exceedance. Over the life of the project there will be technology changes which may result in future noise reductions.
27	Evidence of Professor Banks finds the regional and national economic benefits.	Economic	Response Evidence: Leung, C. and Huang, T. (2025). Joint Statement of Evidence of Christina Leung and Ting Huang (Economics) on behalf of Trans Tasman Resources Limited in Response to Comments Received, 13 October 2025, 13-33 p.	Refer to NZIER's evidence statement for response to issues raised regarding: • using the regional input-output approach overestimates the project's impact on GDP and employment. • inputs and assumptions used by NZIER in estimating the project's economic benefits and contribution to export earnings, royalties and tax. • no discounting applied to the estimated impacts to account for project risk. • economic benefits estimated in NZIER's EIA do not present the project's net benefits given it does not consider potential negative economic effects. • additional analysis to address potential negative effects
28	Assessment under section 85(3) of the FTA requires a balancing exercise.	Legal		

Comment Number	Comment	Applicant Technical Input	Where Addressed in the Application Documents	Response
29	The legal threshold for declining consent under section 85(3) of the FTA is met as the adverse effects are significant and there is an absence of demonstrable regional or national benefit.	Legal	Response Submission: Slyfield, M. (2025) Legal Submission of Morgan Syfield on behalf of Trans-Tasman Resources Limited in Response to Comments Received. 13 October 2025	Refer to Part 1 - Legal Submission.
JASCO Applied Sciences (Scientific Peer Review in Relation to Underwater Noise and Marine Mammals) on behalf of Royal Forest and Bird Protection Society of New Zealand Inc				
30	The use of only one MMO is unlikely to result in effective marine mammal observations as it is not feasible for one MMO to observe 360° around the vessel. Two MMOs is considered best practice, particularly in areas where threatened species are likely to occur.	Marine Mammals	Response Evidence: Evidence of Simon Childerhouse on behalf of Trans-Tasman Resources Limited in Response to Comments Received, 13 October 2025. Attachment 1: Proposed Marine Consent Conditions 10	Dr Childerhouse agrees (at paragraph 114) of his evidence with JASCO in that it would be useful to have two marine mammals observers (MMOs) present on the IMV rather than one, as the vessel is large (i.e., 300 m in length) and represents the single largest noise source for the operation. Dr Childerhouse confirms his view that he does not believe that two MMOs would be necessary on any of the other vessels as they have significantly lower risk profiles with lower noise sources and are generally slow moving when in the operational area. Condition 10(c) of the proposed conditions is amended accordingly.

Comments from Kiwis Against Seabed Mining and Greenpeace Aotearoa Inc

Comment Number	Comment	Applicant Technical Input	Where Addressed in the Application Documents	Response
n/a	Application should be declined for reasons laid out in submitters legal submission and accompanying evidence.	Legal, Planning, Economic, Marine Mammals, Seabirds, Ecology, Sedimentation and Coastal Matters, Operations/Processes	Substantive FTA Application Response Evidence	TTR believes the application should be approved for the reasons laid out in the substantive application and laid out in the evidence responses filed in response to the submissions received.
1	I have reviewed conditions 10, 11 and 12 and make the following comments: A. Section 10a states that “no adverse effects as a result of the activities authorised” on blue whales or other threatened marine mammal species, yet no clarity is provided about how these effects will be monitored and evaluated. Given that this permit would be for 20 years, clear guidance on metrics and regularity of evaluation of effects should be clearly identified. Otherwise, the uncertainty in guidance will create opportunities for inadequate assessment of impacts that could cause populations to decline before detection is possible. B. Observation effort from vessels will not avoid adverse effects caused by noise and sediment plume disturbance to animals that travel beyond line of sight. Monitoring of impacts on marine mammals should cover a larger region than just where vessel traffic is near the mining site.	Monitoring and Management	Substantive FTA Application: Sections 6.5-6.6 Attachment 1: Proposed Marine Consent Conditions 10-16, 18, 42-48, 54-55, 60 and 66 Appendix 5.9: Draft Marine Mammal Management Plan Response Evidence: Evidence of Simon Childerhouse on behalf of Trans-Tasman Resources Limited in Response to Comments Received, 13 October 2025.	These recommendations are not agreed. In relation to point ‘A’, monitoring requirements are set out in conditions, including but not limited to the following: - condition 66 which requires a Marine Mammal Management Plan to set out <i>inter alia</i>, “how compliance with Condition 10 will be achieved”; - conditions 11, 15 and 16 relating to noise monitoring; - condition 18 relating to the reporting on noise monitoring; - condition 36 in relation to marine mammal monitoring, including the recording and production of reporting on pre-start observation procedures; - biosecurity procedures to be followed in accordance with conditions 42 to 46 (including marine mammal monitoring under condition 46); - two years of pre-commencement environmental monitoring, specifically including monitoring of marine mammals as per condition 47(k), the plan to be developed under condition 48, the

	C. There is no certainty provided or available that the crawler can be built to the noise conditions specifications.			Environmental Monitoring and Management Plan required by conditions 54 (with specific regard to marine mammals at condition 54(l)) and 55; condition 60, which requires that the Technical Review Group (which comprises a broad range of independent expertise) must evaluate and comment on the sufficiency of TTR's proposed management plans. In relation to point 'B', the evidence of Dr Childerhouse reiterates that evidence demonstrates that impacts from the sediment plume will be highly localised to an area that constitutes a very small proportion of blue whales' home range. In addition, Dr Childerhouse notes that in contrast to Dr Torres, the Royal Forest and Bird Society's marine mammal expert (Dr Clement) agrees that the sediment plume is of low risk to marine mammals, and the risk is adequately addressed by the consent conditions. Dr Childerhouse also refers to the evidence and reporting produced by Dr Humpheson for TTR, which demonstrates the potential effects of noise on marine mammals, as well as the noise limits set by proposed condition 12 which are sufficient to minimise or eliminate biologically meaningful impacts on marine mammals. In relation to point 'C', proposed conditions 13 and 14 provide the certainty sought. Condition 13 requires acoustic engineering certification of the crawler and IMV design "prior to deployment in New Zealand" and condition 14 requires that the certification required by condition 13 be provided to the EPA.
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Comments from Ngā Motu Marine Society

Comment Number	Comment	Applicant Technical Input	Where Addressed in the Application Documents	Response
1	Ecological effects have not been adequately assessed. Benthic species are an important part of the food chain and is a significant food source. Recolonisation will take several years causing knock on effects.	Ecology, Sedimentation and Coastal Matters	Response Evidence: Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'	Refer to 'Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'
2	Insufficient evidence is provided to confirm rapid recovery of benthic communities, and no assessment on impact on marine species that feed on benthic communities in the project area.	Ecology, Sedimentation and Coastal Matters	Response Evidence: Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'	Refer to 'Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025' - Impact on and recovery of seafloor communities in the mining area
3	Optical water quality will be adversely impacted preventing seaweed growth in a significantly large area.	Ecology, Sedimentation and Coastal Matters	Response Evidence: Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'	Refer to 'Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025' - Effects on primary productivity
4	Claims of low ecological significance of project area seabed are vague and unsubstantiated.	Ecology, Sedimentation and Coastal Matters	Response Evidence: Evidence of Dr Alison	Refer to 'Evidence of Dr Alison MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'

Comment Number	Comment	Applicant Technical Input	Where Addressed in the Application Documents	Response
			MacDiarmid (Marine Ecology) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025'	
5	Effects on penguins will be significant, opposite to application claims	Seabirds	Supplementary Technical Package: 8a, 8c	Penguins could potentially be displaced from areas of relatively high suspended sediment concentrations resulting from mining activity. However, for the reasons I set out in paragraphs 22-24 of my Statement of Evidence dated 19 May 2023 and in paragraphs 15-23 and 27 of my Statement of Rebuttal Evidence dated 23 January 2024 it is my opinion that penguins, and indeed other seabirds, will not be adversely affected.
6	Lack of sightings does not equate to lack of marine mammals in the areas, and robust scientific surveys and research have not been undertaken to affirm the species, ecology and behaviour of marine mammals in the area therefore it is not possible to assess the effects on marine mammals.	Marine Mammals	Footnote documents referenced: FN153 Supplementary Technical Package: 4c, 24 Attachment 1: Proposed Marine Consent Conditions: 11, 12, 35, 36, 47-51, 54, 55 and 66	The work of the Society's Project Hotspot Taranaki is to be commended for collecting and reporting such a large number of recent killer whale sightings. The new analysis of killer whale sighting data by TTR included a large number of those sightings which have been reported to DOC. While the large number of sightings is impressive and valuable, it is important to note that many of these sightings will be resightings of the same group either in the same location or across different locations. Without a thorough analysis of the individual records, it is difficult to determine how many killer whales those records represent. For example, Figures 15 and 16 of the submission show data collected over a 29-day period and appear to be of the same small group of killer whales moving through the region. That is not to say that these aren't important data but just that they don't necessarily mean that there are many killer whales regularly in the region. For example. Childerhouse (2023) plotted the 241 sightings of killer whales with the STB region and you can see from the figure on page 63 of that Evidence that almost all the records are from just south of Cape Taranaki north and very few appear along the southern coast of Taranaki. With respect to comments about Figure 15, TTR undertook dedicated aerial surveys for marine mammals inside and outside the mining area every 2-3 months for over two years covering over 8,400 km of transects. It only recorded one sighting of common dolphins and 4 sightings of New Zealand fur seals (Cawthorn 2015). This is useful data in establishing whether killer whales are likely to be in the area. These surveys combined with habitat suitability and occurrence modelling confirm that the mining area has a very low probability of occurrence for killer whales. Overall, the data is consistent with and supports the conclusion that there is a low likelihood of killer whales being present in the proposed TTR mining area and there is nothing to suggest that the mining area is of any significance to any marine mammal species. With respect to potential impacts from the sediment plume, modelling work by Dr Helen Macdonald and Dr Alison MacDiarmid concluded that: i) Based on the plume modelling, impacts will be highly localised (e.g. 1-2 km) around the activity; ii) it is highly unlikely that there will be any killer or blue whales within the proposed mining area; and iii) Given the extremely large home ranges of these whales, any impacts from the proposed operation will only affect a very small proportion of their total home range2. Finally, TTR have provided Consent Conditions to protect marine mammals, including killer whales, from any potential impacts of the activity. These include Condition 11 which sets a maximum allowable level of underwater noise from the operation and Condition 66 which is the development of a Marine Mammal Management Plan which will outline the mitigation requirements for the project.
7	Identifies issues with TTR approach including lack of surveys, lack of robust scientific research, lack of best available information.	Marine Mammals / Ecology, Sedimentation and Coastal Matters	Supplementary Technical Package: 4c, 4b, 24	These statements by the Ngāmotu Marine Reserve Society are incorrect. TTR undertook dedicated aerial surveys for marine mammals inside and outside the mining area every 2-3 months for over two years covering over 8,400 km of transects (Cawthorn 2015) and have undertaken highly detailed risk assessment based on the best available data. Evidence by Dr Childerhouse (2023, 2024) and the Application (2025) summarised the significant amount of data available on marine

Comment Number	Comment	Applicant Technical Input	Where Addressed in the Application Documents	Response
			Attachment 1: Proposed Marine Consent Conditions: 11,12, 35, 36, 47-51, 54, 55 and 66	mammals within the STB. Based on these data, Childerhouse (2024) concluded that the best available information presently before the decision makers is sufficient to form a reasonable conclusion about the likely impact of this project. Furthermore, TTRL have proposed two years of detailed research on marine mammals prior to the start of any operations within the region. This information would complement the existing, available data and provide additional data useful in confirming the lack of impacts from the project. With respect to uncertainty with the available data, Dr Childerhouse notes (2024, para 10) that there is sufficient data upon which to make robust and accurate assessments with respect to marine mammals. Where the best available information includes gaps or uncertainty, it is still possible to proceed in making sensible judgements while accounting for uncertainty and implementing a precautionary approach if required. With respect to the knowledge base on seabirds, the two-year, pre-commencement environmental monitoring plan (see conditions 47-48) will include a systematic and structured seabird survey covering the proposed project area (PPA) and beyond. The survey will be temporally resolved enabling seabird abundance within the PPA to be determined on a seasonal basis. This survey will address existing knowledge gaps around the utilisation of the PPA by seabirds. Finally, TTRL have provided Consent Conditions to protect marine mammals, including killer whales, from any potential impacts of the activity. These include Condition 11 which sets a maximum allowable level of underwater noise from the operation and Condition 66 which is the development of a Marine Mammal Management Plan which will outline the mitigation requirements for the project.
8	Application is not consistent with the information principles in the Exclusive Economic Zone Act (2012), New Zealand Coastal Policy Statement (2010) or the Coastal Plan for Taranaki (2023)	Planning	Substantive FTA Application: Sections 8.2.4 - 8.2.5 and 8.3.13 - 8.3.14 Appendix 8.5: Assessment of relevant statutory planning documents under the Resource Management Act 1991. Response Legal Submission: Legal submissions on behalf of Trans-Tasman Resources Limited in response to comments received. 13 October 2025	The application is considered consistent with the information principles in the EEZ Act as set out in sections 8.2.5 and 8.3.13 - 8.3.14 of the application. As set out in section 8.2.4 of the application and addressed in the legal submission on behalf of Trans-Tasman Resources (2025), the application is not required to be consistent with the marine management regimes of the New Zealand Coastal Policy Statement (2010) or the Coastal Plan for Taranaki (2023) however is required to consider the objectives and the outcomes sought to be achieved by these regimes. Inconsistency with the regimes cannot, in of itself, be a basis for declining an approval. Regardless, as set out in Appendix 8.5 of the application addressed in the legal submission on behalf of Trans-Tasman Resources (2025), the application is not considered inconsistent with the New Zealand Coastal Policy Statement or the Regional Coastal Plan for Taranaki.
9	Due to significant gaps in application information and uncertainty over ecological effects, application should not proceed further.	Planning	Substantive FTA Application: Sections 8.3.13-8.3.14 and 8.2.5 Evidence of Dr Alison MacDiarmid (Marine Ecology)	The information requirements for the application are set out in section 43 of the FTA and section 39 of the EEZ Act. TTR considers that the information submitted in the application and accompanying materials constitutes the best available information, being the information that, in the particular circumstances, is available without unreasonable cost, effort, or time. As noted at paragraphs 4 and 5 of Dr Childerhouse’s evidence and at paragraph 79 of Dr MacDiarmid’s evidence, there is sufficient data upon which to make robust and accurate assessments and it is possible to proceed in making sensible judgements while accounting for uncertainty and including a precautionary

Comment Number	Comment	Applicant Technical Input	Where Addressed in the Application Documents	Response
			on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025 Evidence of Dr Simon John Childerhouse (Marine Mammals) on behalf of Trans-Tasman Resources Limited in response to comments received 13 October 2025	approach if required. Where there is uncertainty, it is addressed through a comprehensive and appropriately precautionary set of proposed consent conditions. Despite the uncertainty, in no instances are the effects predicted to be significant or to a level that cannot be addressed through adequate monitoring and management negating the uncertainty, as is included in the proposed marine consent conditions. Under the FTA framework, favouring caution and environmental protection in light of uncertainty can only be a matter to be taken into account—it cannot be a basis for declining consents.