Your Comment on the Taranaki VTM Project

Please include all the contact details listed below with your comments.

1. Contact Details	
Please ensure that you have authority to comment on the application on behalf of those named on this form.	
Organisation name (if relevant)	Climate Justice Taranaki Incorporated
First name	[redacted]
Last name	[redacted]
Postal address	[redacted]
Phone number	[redacted]
Email ***(a valid email address enables us to communicate efficiently with you)***	[redacted]

2. We will email you draft conditions of consent for your comment			
☒	I can receive emails and my email address is correct	☐	I cannot receive emails and my postal address is correct

3. Please select the effects (positive or negative) that your comments address:			
☒	Economic Effects	☒	Sedimentation and Optical Water Quality Effects
☒	Effects on Coastal Processes	☒	Benthic Ecology and Primary Productivity Effects
☒	Fished Species	☒	Seabirds
☒	Marine Mammals	☒	Noise Effects
☒	Human Health Effects of the Marine Discharge Activities	☐	Visual, Seascape and Natural Character Effects
☒	Air Quality Effects	☒	Effects on Existing Interests
☒	Other Considerations (please specify): Please see our full submission including Annex 1.		

Attached please find our full submission with the file name:

CJT submission on Taranaki VTM Project under FTAA 5Oct25 FINAL.pdf

Climate Justice Taranaki Submission

5th October2025

In Response to Material Filed by Trans-Tasman Resources' Limited Application to the EPA under the Fast Track Approvals Act (FTAA) – The Taranaki VTM Project

Introduction

1. Founded in 2010 and incorporated in 2015, Climate Justice Taranaki (CJT) is dedicated to environmental sustainability, social justice and inter-generational equity - our collective ethical responsibility to current and future generations, human and non-human. Our vision is founded on, and underpinned by, Te Tiriti o Waitangi, the founding document of government in Aotearoa New Zealand.

2. Composed of a broad range of people with varied expertise and life experiences, CJT has submitted on numerous Bills, national policy papers and applications under the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 (EEZ Act) over the past decade[1]. CJT is very concerned about the government's push for an increasingly utilitarian approach to managing our oceans and marine environment around Aotearoa.

3. In October 2016, we submitted[2] on the Trans-Tasman Resources Ltd. application for marine consents to mine iron ore off the South Taranaki coast. In March 2017[3], we made substantive presentations at the TTRL hearing. In June 2023, we participated in the Select Committee Inquiry[4] into seabed mining in New Zealand. In October 2023, we submitted[5] on the EPA reconsideration of the TTRL mining application. In April 2024, we prepared another substantive presentation for the hearing but did not have the opportunity to deliver it, as the hearing abruptly discontinued, with TTRL pulling out and opting for the Fast Track process instead. We therefore consider ourselves as affected parties with existing interests that will be impacted by the Taranaki VTM project and welcome this opportunity to comment on the application.

Key points

4. ***Decision sought:*** CJT is strongly opposed to the TTRL application for the Taranaki VTM project. We provide our considered reasoning here below as to why the Panel should decline the application.

5. ***Costs and Benefits***. If thorough cost-benefit and risk analyses had been undertaken, we are confident that the claimed significant regional and national benefits required under the purpose of the FTAA (s3) would be far outweighed by the known and potential economic, environmental, cultural and social losses and risks associated with it.

6. ***Sustainable management:*** The seabed mining project, if approved, would in our view, contradict the sustainable management purpose of the EEZ Act (section 10) by compromising the life-supporting capacity of the marine environment.

7. ***Unquantified risks to threatened species:*** The project would risk the survival of globally and nationally threatened marine mammals and seabirds. It will contribute to the increasing cumulative impacts from a wide range of human activities, including escalating climate change. These have not been properly assessed. NZ has national and international obligations to threatened species, including under the Convention on Biological Diversity 1992 listed in the EEZ Act s11, one of the key criteria for assessment of application for marine consent under the FTAA Schedule 10 s6(1)(b).

8. ***Unquantified risks to habitats and species of ecological, fishery and cultural significance:*** Effects on turbidity and potentially release of noxious or toxic compounds from disturbed benthic sediments directly, and from the released sediment plume of waste material, also pose unquantified risks to adjacent biodiverse habitat of rocky reefs hosting species of significant cultural, fisheries and ecological importance. Reductions in light penetration and other effects of the sediment plume may have been underestimated, based on the modelled wave period. There will also be additional effects from noise and from the reverse osmosis desalination and ore washing.

9. ***Best Available Information:*** The applicant has not provided the best available information required under the EEZ Act s61(1), one of the criteria for assessment under the FTAA Schedule 10 s6(1)(d). Some of the materials provided are out-of-date, contradictory, confusing or inaccurate, causing uncertainty. In stark contrast, local iwi, hapū, environmental organisations, their experts and other submitters have devoted considerable human and financial 'capital' in providing clear, detailed, updated information in opposition to this proposal during the last decade and more. Under such uncertainties, disagreements among expert witnesses and other conflicts of information, CJT submits that the Panel should favour caution and environmental protection, according to the EEZ Act s61(2).

10. ***Legal consistency:*** If granted under the FTAA, this decision would create a point of significant disagreement with the Supreme Court, High Court and Appeals Court judgements.

11. ***Te Tiriti o Waitangi:*** Granting the TTRL application could also represent a significant breach of Te Tiriti o Waitangi, given the united opposition from tangata whenua. The Waitangi Tribunal has granted iwi a hearing into the way the FTAA has been used to seek approval for the Taranaki VTM project (Wai 3482)[6],[7]. The claimants include Te Rūnanga o Ngāti Ruanui, all hapū of Ngāruahine iwi, Te Kura o Ngā Ruahine Rangi, Ruanui hapū including Ngāti Tupaea and Parihaka Papakainga Trust[8].

12. **Annex I** of our submission, in slides format, serves to highlight and present some of our key points in a visual way.

Economics

Cost-Benefit Analysis

13. The applicant's claimed economic benefits have been over exaggerated, as demonstrated by Kiwis Against Seabed Mining (KASM) [9]. The economic experts for KASM and Forest & Bird clearly laid out the flaws of the applicant's economic analysis, notably its complete neglect of regional and national cost-benefit analyses. The applicant's figures on gross economic benefits and number of jobs should be placed in context of the potential economic and opportunity losses from impacted fisheries, marine tourism, ecosystem damage and human health. These have not been considered.

14. There are, of course, other potential costs, less easily assessed or calculated monetarily. These include degradation or loss of habitat or species *per se*, exclusive of any direct or indirect economic losses. Where such damage has happened, reparations have been calculated in various jurisdictions (See Bioval method[10] and case law[11]). But obviously this approach is applied after the fact, not in the initial decision-making process as to whether the activity should proceed. CJT submits that these are significant considerations, as for example espoused by all iwi and hapū opposed to this application, as kaitiakitanga.

Oil spill risks and other incidents

15. The risks of an uncontrolled incident on or between the Taranaki VTM's Integrated Mining Vessel, the Floating and Storage Offloading Vessel (FSOV), the Capesize export vessel and/or other vessels should not be understated. Based in Taranaki, we are well aware of the episodic storm events (extra-tropical 'cyclones' and other deep low-pressure systems in the Tasman Sea) that generate extreme wind and swell. These are predicted to continue to increase in intensity in coming decades. Considering the complexity of the operation, other maritime traffic in the area and increasingly extreme weather events the associated costs of an incident could be enormous, in terms of clean-up and remediation costs, ecological damage and losses in commercial and customary fisheries.

16. Although the Taranaki coastline has escaped major long-term damage from ship grounding, collisions or spills to date (likely more by good luck than management), prior oil spills associated with the offshore oil and gas industry have occurred. In 2010, OMV had two oil spills[12] from its Raroa vessel at the Maari field in just over a month (Oct-Nov), affecting areas as far as the Kapiti coast – the cause reported[13] to be "*a faulty joint on a pipe*". And in February 2015, another spill occurred while transferring oil from the Raroa to a tanker, due to a leak in the transfer hose[14, 15]. In November 2016, the Maari oil field had to be closed down, and staff evacuated as a crack was found on the wellhead platform. OMV reported that the crack was caused by "*fatigue*" and "*combined action of wind and wave*", although it was also unable to reject the possibility of damage from the 7.8 earthquake that hit the country the week before[16]. No investigation was conducted by WorkSafe or Maritime NZ[17]. In the year that followed, at least four other dangerous occurrences and incidents were notified during OMV operations (WorkSafe OIA response, Nov 2017).

17. In addition to extreme weather and seismic events, human errors can also lead to major incidents. On 5 October 2024, Royal NZ Navy ship HMNZS Manawanui ran aground with 75 people on board in Samoa whilst conducting a hydrographic survey of a reef and sank the next day. An interim Court of Inquiry[18] found the direct causes and some contributing factors of the incident related to a series of human errors, "*…deficiencies in the training and qualifications of key ship's personnel involved in the incident, risks related to the survey task were not sufficiently identified, discussed and mitigated, and instructions or procedures were lacking*." The Court also found inadequate leadership, supervision and time pressure as contributors to the incident. The sunken navy ship is a $77 million write-off while $32 million was booked in for 2024-25 for the clean-up, salvage and "other remedial activities" at the shipwreck[19]. Although it appears a financial settlement has not yet been agreed[20], with subsequent pollution, the incident provides a timely example of risks from unforeseen circumstances that should be carefully weighed in the present application.

18. Recent changes to key legislation such as the EEZ Act may have the effect of 'indemnifying' operating companies in the event of a major incident and/or the companies declaring bankruptcy[21]. One analogous comparison is the benefit–costs to Taranaki and the taxpayer from the Tui oil-field decommissioning debacle. Over its operational life, the field generated an estimated $539 million dollars in royalties. Cost of decommissioning was $293 million[22]. Fortunately, it did not require major remedial works from a spill or other incident.

19. More examples to follow, the 2011 Rena grounding and oil spill cost NZD $47 million in clean-up[23]. Over $27 million of that, plus the salvage cost of $700 million, was paid for by the ship owners[24]. Maritime NZ[25] modelled the potential direct costs of a response to a significant oil spill from the World War II RMS Niagara wreck at around $200 million along with "*significant scientific, cultural, economic and reputational value*". Notably, the Chuuk Lagoon in Micronesia declared a state of emergency after the

discovery in September 2025 of oil leaking from a similarly vintaged shipwreck[26]. The coral reefs there are highly vulnerable to oil pollution, as are the local communities who rely heavily on the reefs for food and livelihoods.

Blue economy

20. While CJT regards the intrinsic and cultural values of the ocean as over and above any monetary value, many international organisations have put figures on the so-called blue economy. The WWF commissioned report *Navigating Ocean Risk – Shaping the Transition to a Sustainable Blue Economy* (2021)[27] found that globally, the cumulative value at risk to companies and businesses dependent on the ocean, including for example coastal real estate and infrastructure, fisheries, aquaculture, ports and shipping, tourism, and marine wind energy, would amount to US$8.4 trillion over the next 15 years under the business-as-usual trajectory "*where we continue with current climate, environment and business practice*". However, if immediate action is taken to support ocean regeneration, the damage could be reduced to US$3.3 trillion.

Blue carbon

21. In 2023 a NIWA report[28] commissioned by the Parliamentary Commissioner for the Environment (PCE), based on the methods used in an earlier UK study (2022)[29] to assess the organic carbon content in the top 10cm of the seabed, was published. The NIWA report revealed that more than two billion tons of carbon is stored in the seabed around NZ from shallow harbours to the EEZ. When disturbed, such as by trawling[30], the CO2 is released, compromising the ocean's capacity as a carbon sink which helps to moderate climate extremes.

22. It is unknown, as far as CJT is aware, how much carbon is stored in the top eight metres of sediments that are proposed to be disturbed in the mining area. We do note, however, that if this application is permitted, then other such projects may well proceed, with presently unquantified impacts on our commitments to emissions reduction under the Paris Agreement and national legislation. Release of substantial amounts of CO_2 to the water column potentially also affects local ocean pH, in turn affecting carbonate chemistry and marine ecosystems.

23. The NIWA report explained, "*While the efficacy of marine sediments to regulate climate on shorter timescales is less certain, historically persistent and ongoing physical seafloor disturbance by anthropogenic activities, such as bottom trawling, seabed mining, dredging and anchoring, have the potential to release sedimentary OC [organic carbon] back into the overlying seawater. With this process, there is the opportunity for this carbon to be remineralised into CO_2, thereby offsetting the absorption efficiency of the oceans for taking up atmospheric CO_2.*"

24. The report revealed moderate sediment organic carbon vulnerability to bottom trawling across greater Cook Strait from western Te Tauihu to South Taranaki and along the west and northeast coast of Te Ika-a-Māui North Island. Although the study did not specifically assess the vulnerability to seabed mining and bearing in mind that the data were about organic carbon in the surface (0-10cm) marine sediments, it seems likely that twenty years of seabed mining in the proposed area (potentially extendable and expandable) could release substantial amounts of climate damaging emissions.

25. Even if legislation ignores or rules out the consideration of emissions from activities on climate change, the economic impacts of allowing such loss of carbon from the seabed and marine ecosystems because of seabed mining should be considered, in the context of blue carbon economic loss.

26. Small nations like the Bahamas are actively engaged in protecting its blue carbon ecosystems to reduce emissions, support biodiversity, build climate resilience and create sustainable economic opportunities[31].

27. There is a presently unquantified cumulative economic cost associated with such carbon loss, as well as emissions from the vessels and other operations of the Taranaki VTM seabed mining. The current application may represent 'the thin edge of the wedge', considering the 242sq.km. of mineral mining permit area (MMP55581) and adjacent 635sq.km of exploration permit area (MEP54068)[32]. It could set a precedent with significant adverse ramifications.

Lack of clear, consistent and up-to-date information and assessment

28. The EPA EEZ Act team [redacted] report (Sep 2025)[33] listed in detail the inconsistency, inaccuracy, draft and out-of-date nature of a lot of the information, references and documents used or provided by the applicant for assessment. These issues contribute to uncertainty and "*it would be useful for the Panel to consider whether the information provided is the best available information in line with s61 of the EEZ Act*" (Nazar, 2025). Having engaged in this long-running application through its various iterations, CJT fully agrees with the above analyses and advice.

29. One pertinent example was the discovery of many hard grounds in the immediate 'down-stream' vicinity of the application, initially by local fishers and divers (e.g. 'Project Reef'), subsequently documented more formally for the Taranaki Regional Council (TRC) by Morrison et al. (2022)[34] for the then National Institute of Water and Atmospheric Research (NIWA, now Earth Sciences New Zealand). These hard grounds were deemed by NIWA and TRC to be very important from ecological and commercial (fishery nursery grounds) perspectives. The full extent of the hard grounds remains to be determined, but it seems that some at least are under the modelled dispersion of the sediment plume. If that is indeed the case, reductions in illumination are likely to have a significant effect on primary production, with cascading consequences to productivity more generally.

Kupe oil and gas development and leaky well

30. The Nazar report (Sep 2025) also noted that "*since the time the original environmental data was collected, additional activities have occurred in the area, such as the Kupe oil and gas development. These activities may have resulted in changes to the receiving environment that could affect the relevance or reliability of the older data relied on in the application*."

31. CJT has repeatedly raised concerns with EPA and others about the state of the well KS-2 in the Kupe field, leaking since 2018, in respect of the environmental effects and safety risks it poses. We are also concerned about the lack of transparency and adequate regulatory response on the matter[35], [36]. Under this circumstance, any major additional activities nearby such as seabed mining should require thorough risk assessment associated with the leaky well, related infrastructure and activities of the current Kupe operator, Beach Energy. Up-to-date information on the receiving environment is also essential, as pointed out by Nazar (2025).

32. Beach Energy's 2023 drilling of a new well KS-9 was reported to have failed[37] and predicted[38] to result in "*non-cash pre-tax impairment of between $115 million and $125 million at the Taranaki site*". With the recent weakening of liability and decommissioning requirements on companies in the EEZ Act regulations, the risks on the Crown, taxpayers and the Taranaki region in potential economic losses and environmental damage are significant.

Desalination and iron ore washing

33. Nazar (2025) highlighted the lack of assessment of the environmental and ecological effects relating to iron ore washing and the production of 30,000 m^3 of desalinated seawater daily (approx. 5 million tonnes annually), notably the discharge of the brine at sea. Brine plumes can lead to hypersaline layers affecting benthic and pelagic communities. The chemicals used in the reverse osmosis may also pose risks on human-health and should be disclosed and assessed.

Vanadium extraction

34. Extracting vanadium from VTM using 'Salt Roasting and Water Leaching' process would result in the production of high-saline wastewater, gas emissions and solid waste, and face issues associated with inconsistency in feedstock composition, as acknowledged in the Siecap metallurgical review (Feb 2025)[39]. Other conventional methods used to extract vanadium from vanadium slag are also accompanied by serious pollution, such as acid gases and toxic wastewater discharge and high energy consumption[40].

35. Nazar (2025) is clearly concerned about the lack of clarity and impact assessment on the roasting process to be used by Taranaki VTM. Siecap (2025) recommended "*further bench scale testing... to refine process parameters, validate initial findings, and ensure optimal performance before scaling up to pilot or full-scale operations*". This is yet another demonstration of how unproven and risky the proposed project is environmentally and economically.

36. If vanadium, the prize catch of the operation, cannot be extracted safely, how would the claimed economic benefits to NZ regionally and nationally be affected?

Marine protection and threatened species

37. In respect of the EEZ, the TTRL Overview Conference presentation to the Expert Panel (Transcript of 2 Sept 2025, para.161-164)[41] said NZ has "*already 42% of it – or 1.7 million square kilometres... well protected*". This is highly misleading. The figures refer largely to Benthic Protection Areas (BPAs)[42] and Seamount Area Closures where the seabed has been protected against bottom trawling and dredging. There are no BPAs in the EEZ offshore from Taranaki. Importantly, these areas are not 'well protected' because unlike Type 1 and 2 Marine Protected Areas (MPAs), they "*don't protect sufficient biodiversity"* to meet the MPA Protection Standard (DOC website, viewed 4/10/2025)[43]. Neither do marine mammal sanctuaries (MMS) including the West Coast North Island MMS adjacent to the Taranaki VTM project site which has a ban on seabed mining with an exemption for existing permit holders[44].

38. Sadly, the Kermadec Ocean Sanctuary Bill was scrapped in March 2024[45], thereby foregoing the laudable opportunity to effectively protect 620,000 sq.km. of a critical marine biodiversity hotspot, equivalent to 15% of NZ's EEZ area[46]. That Bill's failure significantly reduces NZ's ability to contribute to the UN Conference of the Parties to the Convention on Biological Diversity (UN COP15 CBD) Kunming-Montreal Global Biodiversity Framework target - 30% protection by 2030[47].

39. The recent Environmental Defence Society Oceans Reform Final Report pointed out that a mere 12.3% of the territorial sea is protected and there are no Type 1 Marine Protected Areas (MPAs) in the EEZ. "*The country is a long way from meeting the global protected target in-country*" (Raewyn Peart / EDS, Sept 2025)[48]. The EDS recommends a new Oceans Act requiring the promulgation of a National Oceans Strategy which would support a National Marine Spatial Planning Framework, "*to better manage a particular 'seascape' for the benefit of the marine environment and the communities reliant on it*".

40. Crucially in this respect, the FTAA 2024 Schedule 10 section 6 requires the Panel to take into account the EEZ Act s10 and 11, any relevant policy statement issued under the EEZ Act, and sections of the EEZ Act including s59, 60, 61(1)(b) and (c) and (2) to (5), 62(1A) and (2), etc.

41. Section 10 of the EEZ Act lays out the purpose of the Act which is "*to promote the sustainable management of the natural resources*" of the EEZ-CS and "*to protect the environment from pollution…*" Section 11 lists the international obligations relating to the marine environment:

    a) the United Nations Convention on the Law of the Sea, 1982
    b) the Convention on Biological Diversity, 1992
    c) the International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL)
    d) the Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter, 1972 (the London Convention).

42. Section 59(2)(e) of the EEZ Act requires decision-makers to take into account "*the importance of protecting rare and vulnerable ecosystems and the habitats of threatened species*".

Marine mammals and seabirds

43. Aotearoa hosts incredibly diverse and globally significant species of marine mammals and seabirds, many of which are Threatened with extinction or are Data Deficient – their level of vulnerability unknown (Annex 1). These include little penguin kororā and Maui dolphin, both endemic. Others include a genetically distinct population of pygmy blue whale[49]. Breeding success of this truly majestic *taonga* species is heavily reliant on predictable upwelling and abundant prey - krill and small fish - which are all affected by marine heatwaves (Barlow, et al. 2023[50]; Barlow & Torres, 2025[51]; Cockrem, 2021[52]). Any additional stress on these species and their prey, notably noise and plume, could severely impact their breeding success, reduce the chance of population recovery and push them to extinction.

44. CJT endorses the expert statements provided by KASM and Forest & Bird on marine mammals and the submission from Ngā Motu Marine Reserve Society on kororā and the other impacts from the Taranaki VTM project.

Cumulative effects

45. Aotearoa's globally important marine fauna and flora are already under significant, and rapidly expanding, cumulative impact. CJT does not support adding further impacts to our territorial sea or EEZ (CJT, 2023), as detailed in a submission to the Select Committee Inquiry into seabed mining in NZ (2023)[53] and in Annex 1.

46. It is prudent to consider the 'shifting baseline' syndrome. "*In the absence of past information or experience with historical conditions, members of each new generation accept the situation in which they were raised as being normal. This psychological and sociological phenomenon is termed shifting baseline syndrome (SBS), which is increasingly recognized as one of the fundamental obstacles to addressing a wide range of today's global environmental issues*" (Soga and Gaston, 2018)[54].

47. A local example, around 2021, anecdotal evidence from a founding fisherman at Egmont Boat Club (est.1961) described how thousands of fish were killed off during the first offshore seismic survey tests for oil and gas in the late 1960s. He described how his house (5km inland) shook when the seismic blasts went off. He and his fishing friends would take to the sea and follow the survey ships to fill their boats with dead fish that could be scooped off the surface of the water. He said it took about an hour to fill the boat but after the surveys the fish stocks never recovered and still today fishing is nothing

like it was. Local elderly Māori fishers have also said fish stocks are much less than they remember as children. This demonstrates that current baseline data is insufficient to demonstrate what a healthy Taranaki fishery looks like as it is already so damaged from decades of cumulative harm from industry, pollution and now climate change.

48. The requirement to properly assess cumulative effects is clearly stated in the relevant legislation, in Sections 6, 28, 33 and 59 of the EEZ Act, which provide broad discretion. It is also consistent with the Precautionary Principle. CJT has made this clear at various EPA Hearings[55]. Assessments for notified (and non-notified) applications under the EEZ Act should focus on the overall impact, including synergisms, of adding that application to those already occurring, and predicted to occur in coming decades.

49. In respect to the TTRL application, the Nazar (2025) report described the cumulative effects assessment as "*limited in scope*" while "*many assumptions regarding effects, consequences, and recovery have been considered in isolation, rather than evaluating the combined and cumulative impacts across ecological receptors.*" The latter "*including multiple stressors, against long-term timelines and the uncertainty around recovery… needed to provide a realistic understanding of the potential regional and ecosystem-wide impacts*" has not been assessed.

50. The Taranaki Regional Council (TRC) recently commented that the "*information in the Application is insufficient to reach conclusions regarding the extent of adverse effects on seabirds, marine mammals, and generally from the sediment plume on sensitive reef ecosystems… How the Panel decides to take into account the requirement to favour caution and environmental protection will be crucial… In taking caution and environmental protection into account, the Expert Panel should take a conservative approach to uncertain environmental effects and assume a plausible worst case to base its assessment on*" (TRC, 16 Sep 2025)[56]. We agree with this view and recommend that the Panel apply the Precautionary Principle in making a decision, irrespective of any unwarranted influence or attempted interference from political actors, including Ministers [57], [58].

Concluding remarks

51. CJT is strongly opposed to the TTRL application and ask that the Panel declines it in full.

52. It is our considered view that the claimed regional and national benefits from Taranaki VTM are far outweighed by the known and potential economic and environmental losses associated with it, should it be allowed to proceed.

53. This 'zombie' project has caused significant angst and a large amount of work by opponents. We, and the many others of like-mind, have nothing to gain financially from this project. Our submission is written purely in defence of our life-supporting whenua and moana, for present and future generations.

54. Annex I forms an integral part of our submission to highlight and present some key points in slides format.

[1] https://climatejusticetaranaki.info/submissions/
[2] https://climatejusticetaranaki.info/wp-content/uploads/2013/03/cjt-submission-to-epa-on-ttr-seabed-mining-oct2016-full.pdf
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[33] https://www.fasttrack.govt.nz/__data/assets/pdf_file/0007/12310/FTAA-2504-1048-EEZ-Apps-response-to-s51-request-for-advice.pdf
[34] https://www.trc.govt.nz/assets/2238-TRC002-FINAL-Offshore-subtidal-rocky-reef-habitats-on-Patea-Bank-South-Taranaki-2.pdf
[35] https://www.rnz.co.nz/news/national/501353/lack-of-action-over-leaking-oil-and-gas-well-sparks-fury
[36] https://www.rnz.co.nz/news/national/504216/regulators-seek-independent-advice-on-leaking-oil-and-gas-well
[37] https://www.rnz.co.nz/news/business/517508/attempts-to-get-more-gas-from-kupe-field-fail
[38] https://www.capitalbrief.com/briefing/beach-energy-flags-potential-400m-impairment-charge-025386fd-5130-4fbf-9682-e6bee97d5e24/
[39] https://www.fasttrack.govt.nz/__data/assets/pdf_file/0017/4265/Attachment-4-Siecap-Metallurgical-Review-Taranaki-VTM-Project-Concentrate-4-February-2025-FINAL.pdf
[40] https://www.sciencedirect.com/science/article/abs/pii/S0921344925000576
[41] https://www.fasttrack.govt.nz/__data/assets/pdf_file/0008/11600/Transcription_with_Paragraph_Numbers.pdf
[42] https://www.mpi.govt.nz/fishing-aquaculture/sustainable-fisheries/protected-areas/benthic-protection-areas/
[43] https://www.doc.govt.nz/nature/habitats/marine/other-marine-protection/
[44] https://www.doc.govt.nz/nature/habitats/marine/other-marine-protection/west-coast-north-island/
[45] https://environment.govt.nz/acts-and-regulations/acts/kermadec-ocean-sanctuary-bill/
[46] https://wwf.org.nz/news/oceans/scrapping-kermadec-ocean-sanctuary-huge-blow-marine-protection
[47] https://www.doc.govt.nz/about-us/international-agreements/ecosystems/convention-on-biological-diversity/the-global-biodiversity-framework/
[48] https://eds.org.nz/resources/documents/reports/pathway-to-oceans-reform-eds-oceans-reform-final-report/
[49] https://www.youtube.com/watch?v=9hpfVmP0hJ4
[50] https://onlinelibrary.wiley.com/doi/full/10.1002/ece3.9770
[51] https://blogs.oregonstate.edu/gemmlab/2025/02/24/the-blues-are-back-in-town-recap-of-the-sapphire-2025-field-season/
[52] https://www.nzgeo.com/audio/john-cockrem-little-penguins-with-big-problems/
[53] https://climatejusticetaranaki.info/wp-content/uploads/2023/06/cjt-submission-inquiry-into-seabed-mining-final-23june23.pdf
[54] https://esajournals.onlinelibrary.wiley.com/doi/10.1002/fee.1794
[55] https://climatejusticetaranaki.info/wp-content/uploads/2018/04/devantier-marine-talk-wellington-march-2018-v4.pdf
[56] https://www.trc.govt.nz/assets/Documents/Meetings/PolicyPlanning/2025/Policy-and-Planning-Committee-Agenda-Sept-2025-web.pdf and https://www.youtube.com/watch?v=_UlckLdfHaI
[57] https://www.thepost.co.nz/politics/360795752/shane-jones-says-fast-track-isnt-fast-enough-chris-bishop-says-its-going-well
[58] https://www.newstalkzb.co.nz/on-air/mike-hosking-breakfast/audio/shane-jones-resource-minister-discusses-the-continued-disruptions-to-the-taranaki-seabed-mining-project/

Climate Justice Taranaki Submission
Annex 1

5th October 2025

In Response to Material Filed by Trans-Tasman Resources' Limited Application to the EPA under the Fast Track Approvals Act (FTAA) – The Taranaki VTM Project

www.climatejusticetaranaki.info

Conservation & sustainable use of our marine environment

How are we doing? *Status quo*:

- 90 % of indigenous seabirds
- 82 % of shore birds
- 81 % of assessed marine invertebrates
- 22 % of marine mammals

Threatened or at risk of extinction

Statistics New Zealand and MfE 'Our Marine Environment 2022'.
https://environment.govt.nz/publications/our-marine-environment-2022/

6th Mass Extinction gaining pace

Ecological and biodiversity values: Patea Shoals

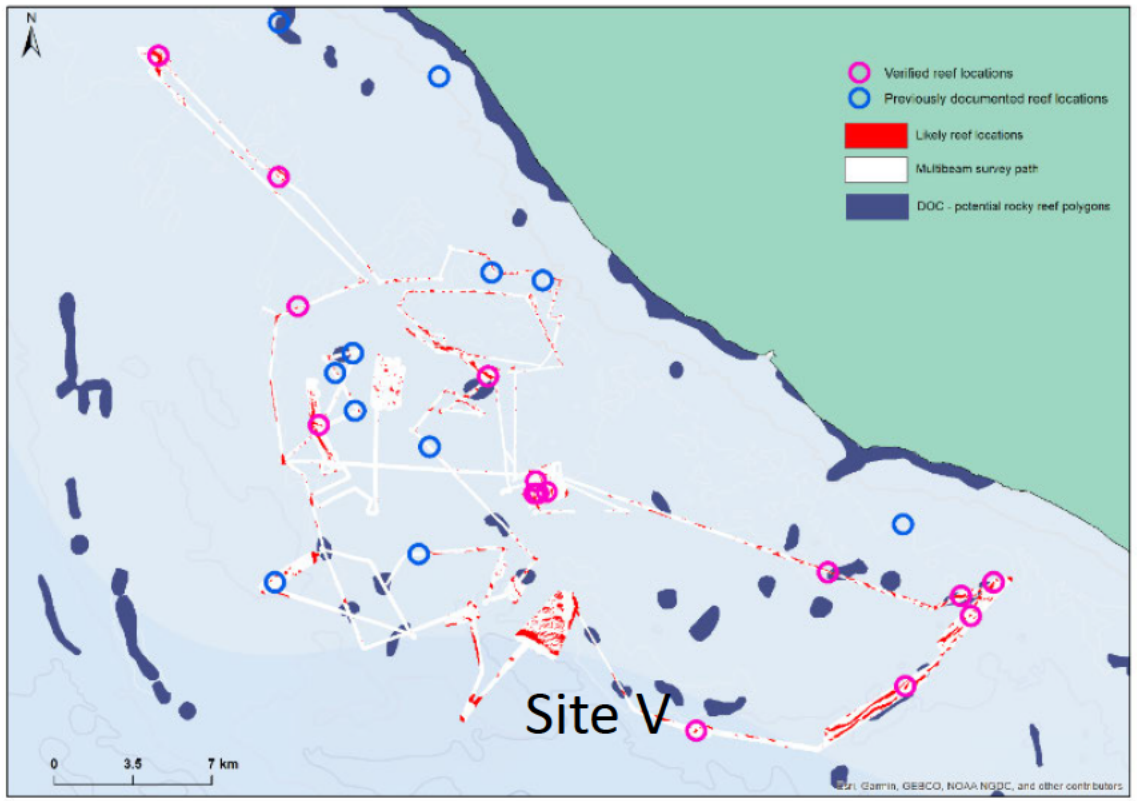


Figure 4-1: Known and likely reefs (by science survey) of Pātea Bank circles denote reefs verified with cameras, red polygons are other likely reefs encountered during multibeam sonar mapping, and the blue polygons putative reefs from DOC assessment of abrupt bathymetric changes on old fairing sheets.

Surveys by NIWA in South Taranaki Bight reported new species of bryozoans, sponges, annelids, and algae, and new records for many groups for the region. NIWA surveys in 2021 focused on Patea Bank, near the TTRL proposal found subtidal reefs are common, with many more awaiting discovery ...”

https://dc.niwa.co.nz/niwa_dc/srv/api/records/efa4d0c1-ffe5-3540-36ca-e8085a768fdf;

https://www.trc.govt.nz/assets/2238-TRC002-FINAL-Offshore-subtidal-rocky-reef-habitats-on-Patea-Bank-South-Taranaki-2.pdf

Ecological and biodiversity values: Benthos & fishes

"… Associated with these reefs are extensive areas of biogenic habitat, dominated by macroalgae (notably *Ecklonia* forests, *Caulerpa* meadows, mixed macroalgal meadows, and soft bryozoan fields), … sponge garden …The associated fish assemblages are abundant, dominated by blue cod, scarlet wrasse, butterfly perch, leatherjackets and tarakihi, with other fisheries species likely to be common (e.g., snapper, trevally, kingfish, and kahawai). … providing important nursery habitat …They are worthy of careful management by the TRC, and other governance entities."

https://dc.niwa.co.nz/niwa_dc/srv/api/records/efa4d0c1-ffe5-3540-36ca-e8085a768fdf
https://www.trc.govt.nz/assets/2238-TRC002-FINAL-Offshore-subtidal-rocky-reef-habitats-on-Patea-Bank-South-Taranaki-2.pdf

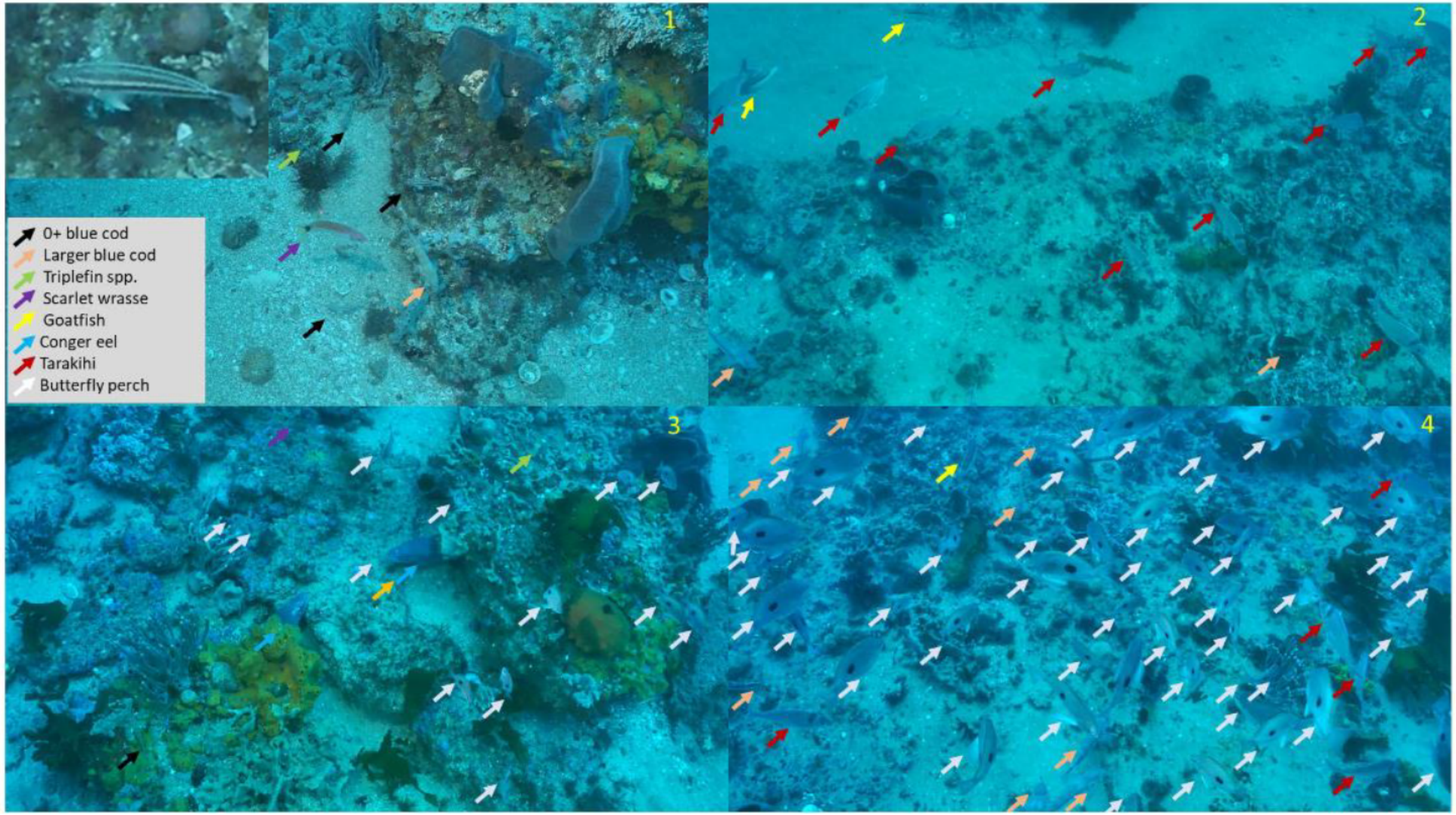


Figure 3-6: Fish examples from Site V, for reef #V1, 32 metres water depth Individual species are marked by coloured arrows: 1) soft sediment to reef boundary with sponge biogenic habitat, and 0+ juvenile blue cod (insert: close-up of 0+ black & white colouration), blue cod, triplefin, scarlet wrasse; 2) reef and soft sediment channel with sponge biogenic habitat, tarakihi school, goatfish, blue cod (an adult blue moki is out of shot); 3) reef/sand mosaic area with sponge and *E. radiata* biogenic habitat, 0+ blue cod, conger eels, scarlet wrasse, triplefin, and juvenile butterfly perch (school on moving video); 4) rock platform with sediment, sponge and *E. radiata* biogenic habitat, school of adult butterfly perch, tarakihi, goatfish, and tarakihi.

Not expert opinion or model

Benthos & fishes

Photos from Morrison et al. (2022) Offshore subtidal rocky reef habitats on Patea Bank, South Taranaki

Prepared for Taranaki Regional Council

Ecological and biodiversity values: Seabirds

Aotearoa New Zealand - world's seabird 'capital'

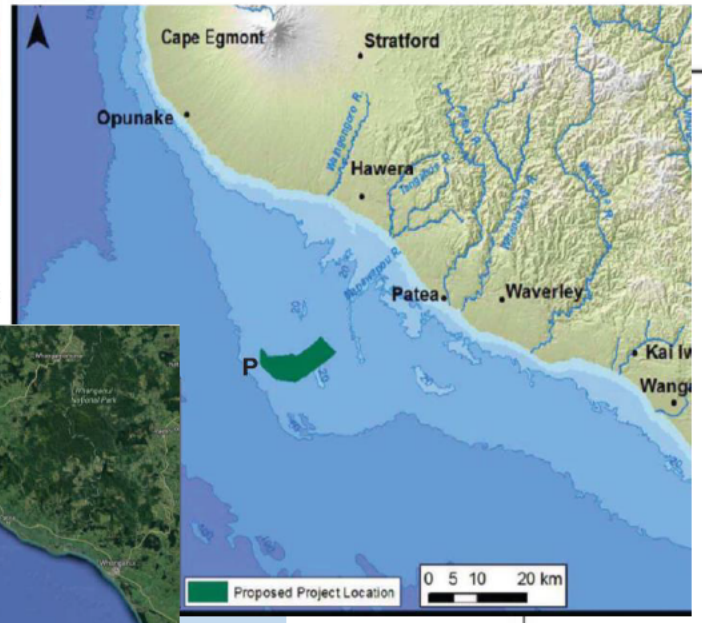
"The seabird assemblage utilising the proposed mining area and adjacent areas in the STB, and how this might vary seasonally, remains to be quantified."

EXPERT EVIDENCE OF DR DAVID THOMPSON ON BEHALF OF TRANS TASMAN RESOURCES LIMITED 19 MAY 2023

But Patea Shoals and adjacent waters are important feeding grounds for Kororā and Fairy prions, and …

Fairy prion

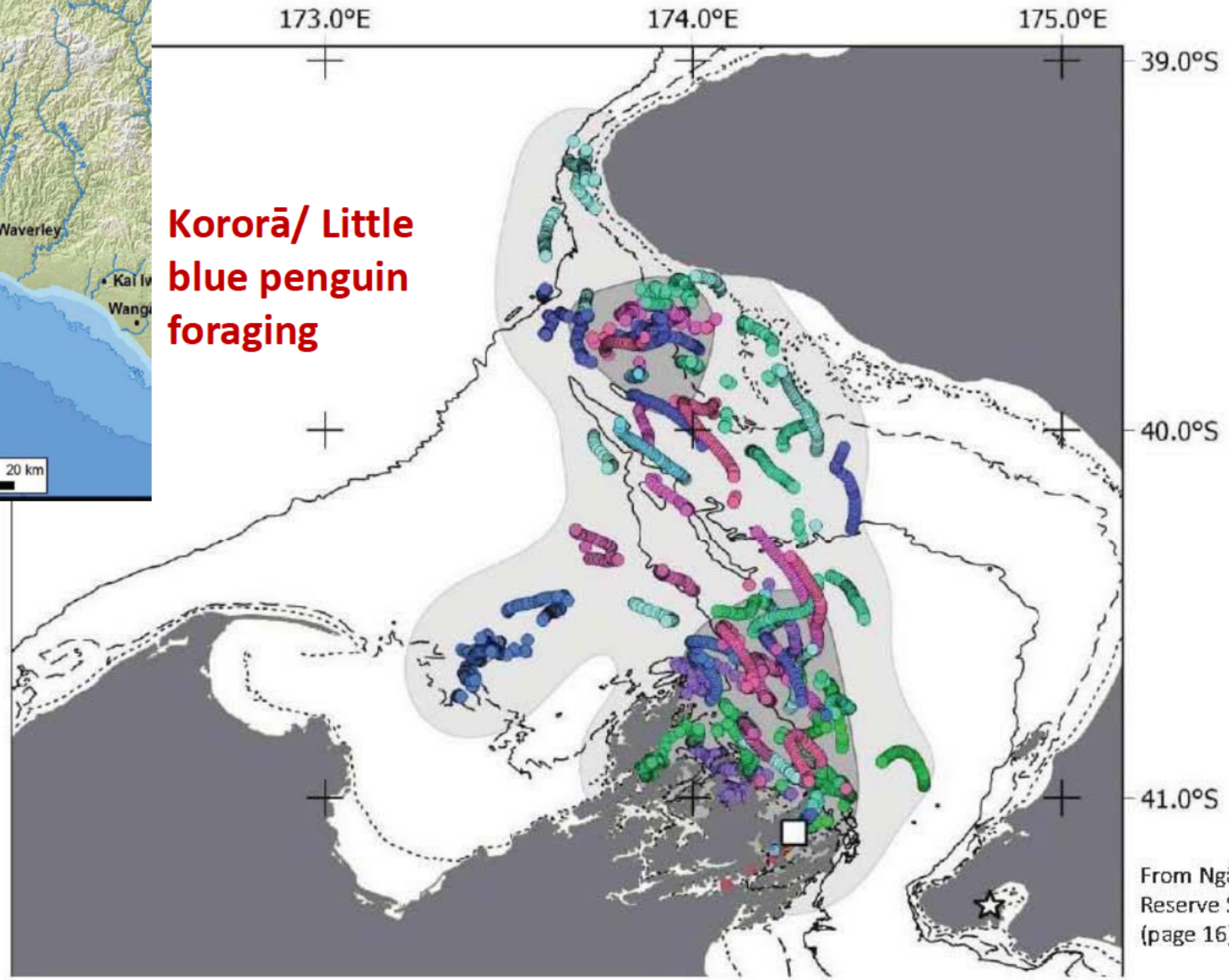
P =100 000 prions



Source: Presentation by expert witness J. Cockrem at EPA TTR seabed mining reconsideration hearing, 15 March 2024

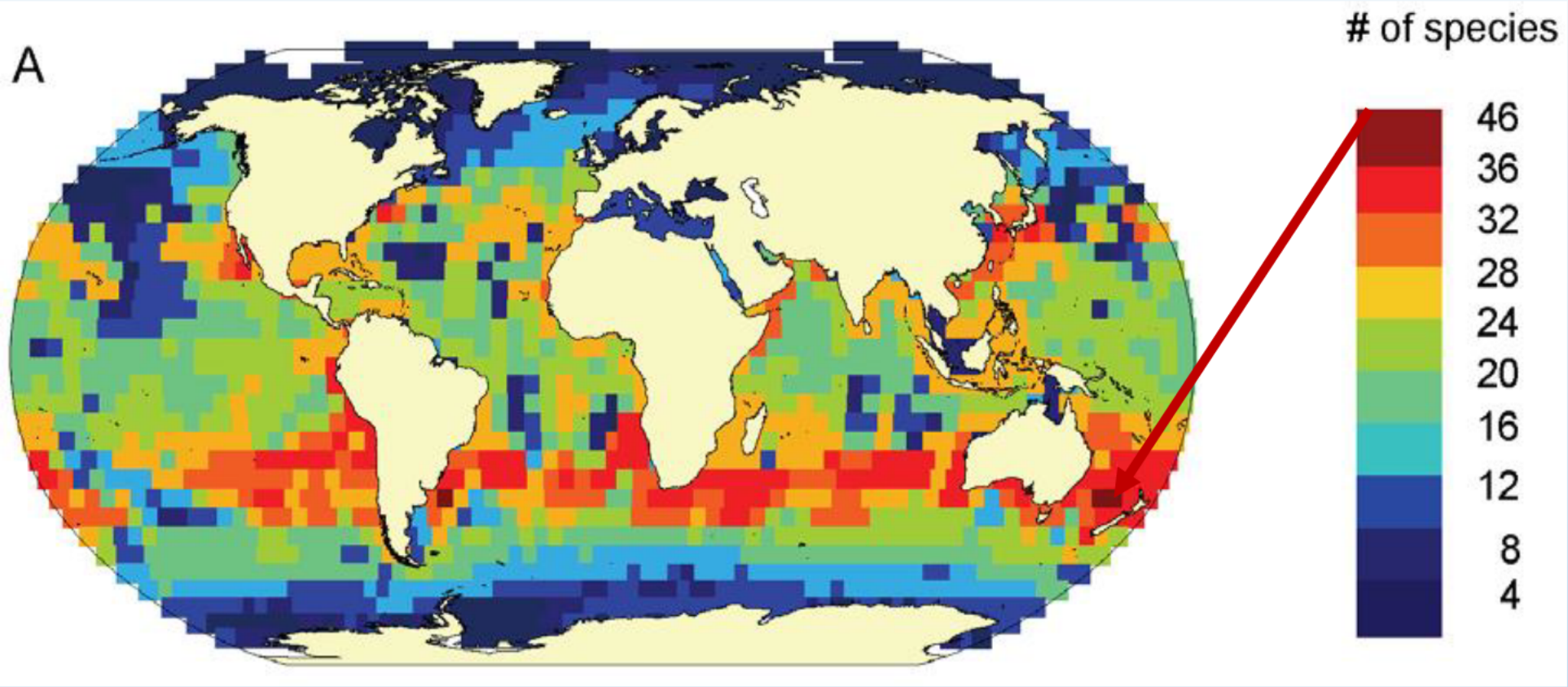
Foraging trips completed by fourteen little blue penguins tagged at Motuara Island, Marlborough, during the incubation period in Spring 2015. Eleven of the fourteen penguins foraged in waters off South Taranaki. These data are Te Papa copyright and summarised in Poupart et al. (accepted for publication in NZ Journal of Zoology).

Kororā/ Little blue penguin foraging



From Ngā Motu Marine Reserve Society Submission (page 16).

Ecological and biodiversity values: Marine mammals



STB & Tasman Sea world marine mammal diversity hotspot

Kaschner et al. (2011) Figure 4. Validation with empirically observed marine mammal occurrences (56x56 cells, 1990–1999). A. Predicted species richness of all cetaceans.

MacDiarmid (2023): "… limited range of some species, areas of overlapping species distribution, … inshore areas in the STB were … among the top 5% for cetacean conservation value in the New Zealand region inside the EEZ boundary and the STB as a whole in the top 15% of areas."

Conservation initiatives

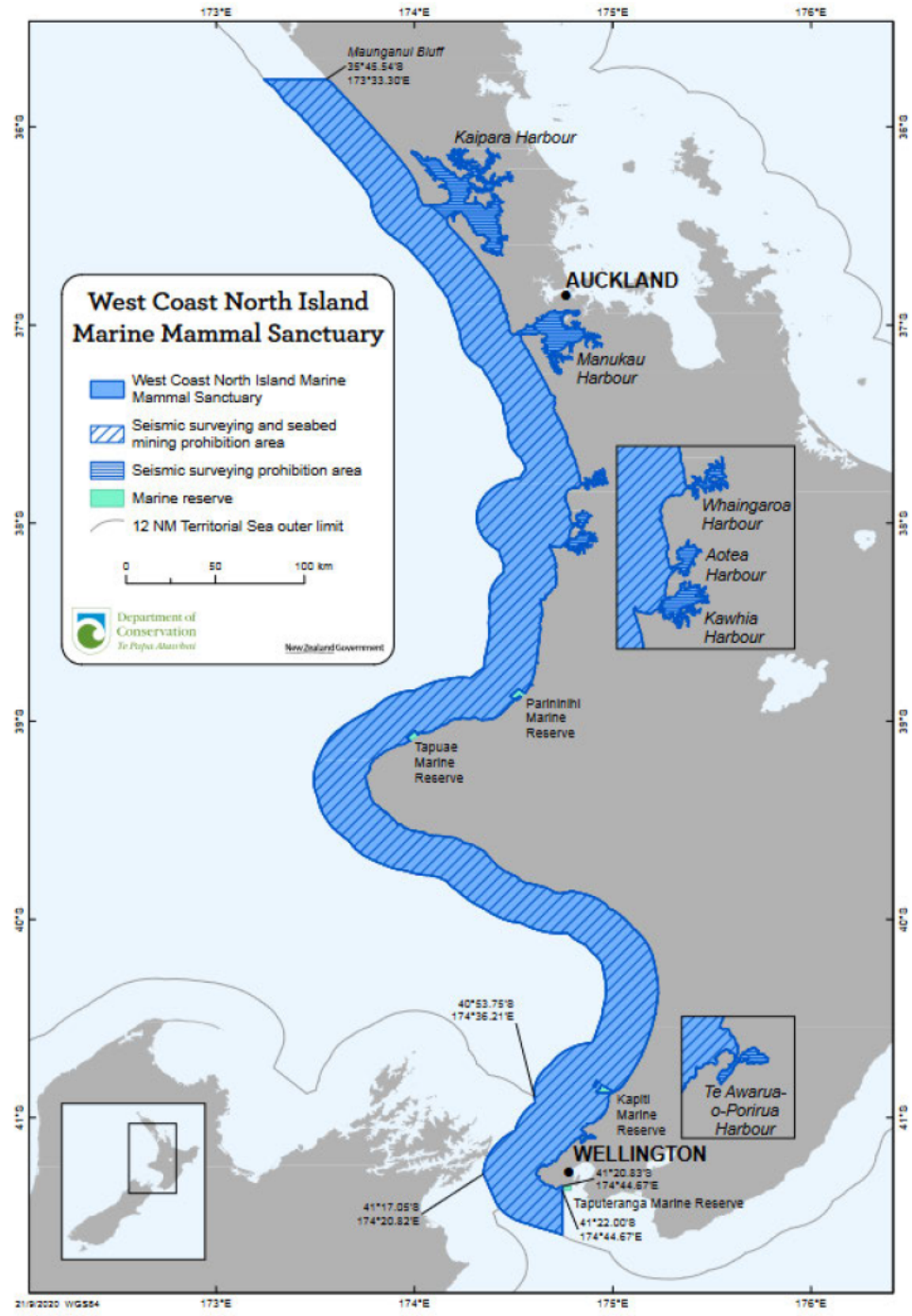
W coast N Isl. Marine Mammal Sanctuary - offshore to 12 nm territorial sea boundary

2020 Variations to the sanctuary

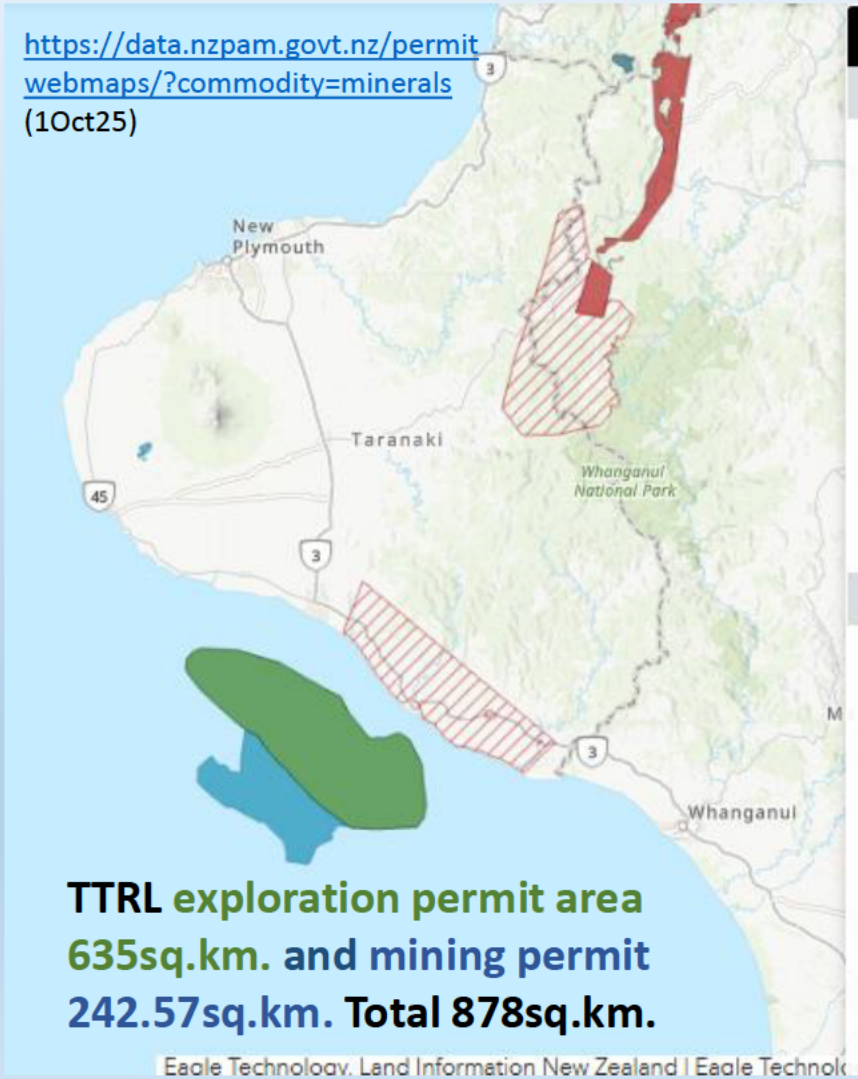
- extending the southern boundary
- ban on seabed mining **with an exemption for existing exploration and mining permits**
- ban on seismic surveying with exemptions…
- ‘nationally significant activities’ with approvals from Ministers of Conservation and Energy and Resources

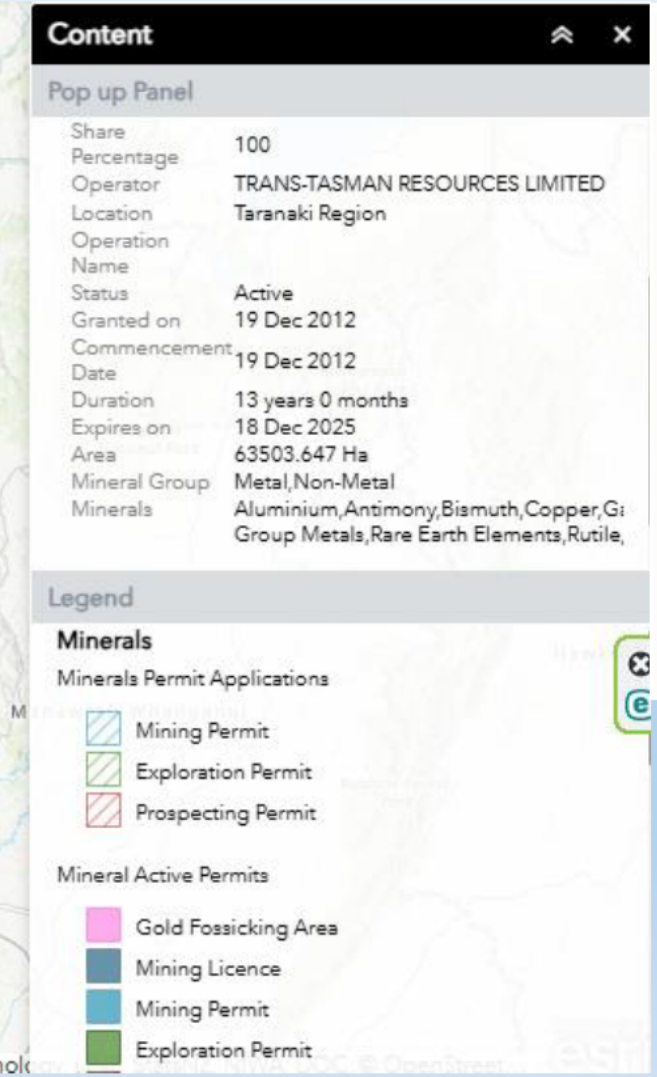
https://www.doc.govt.nz/nature/habitats/marine/other-marine-protection/west-coast-north-island/

TTRL proposal abuts Sanctuary, with demonstrable trans-boundary effects



Dr. Childerhouse's opinion that Māui dolphin moving inshore would place them in less harm (eg. inside the mammal sanctuary) may be confounded by Exploratory permit 54068 (expired in Dec21, extended to Dec25) under CMA



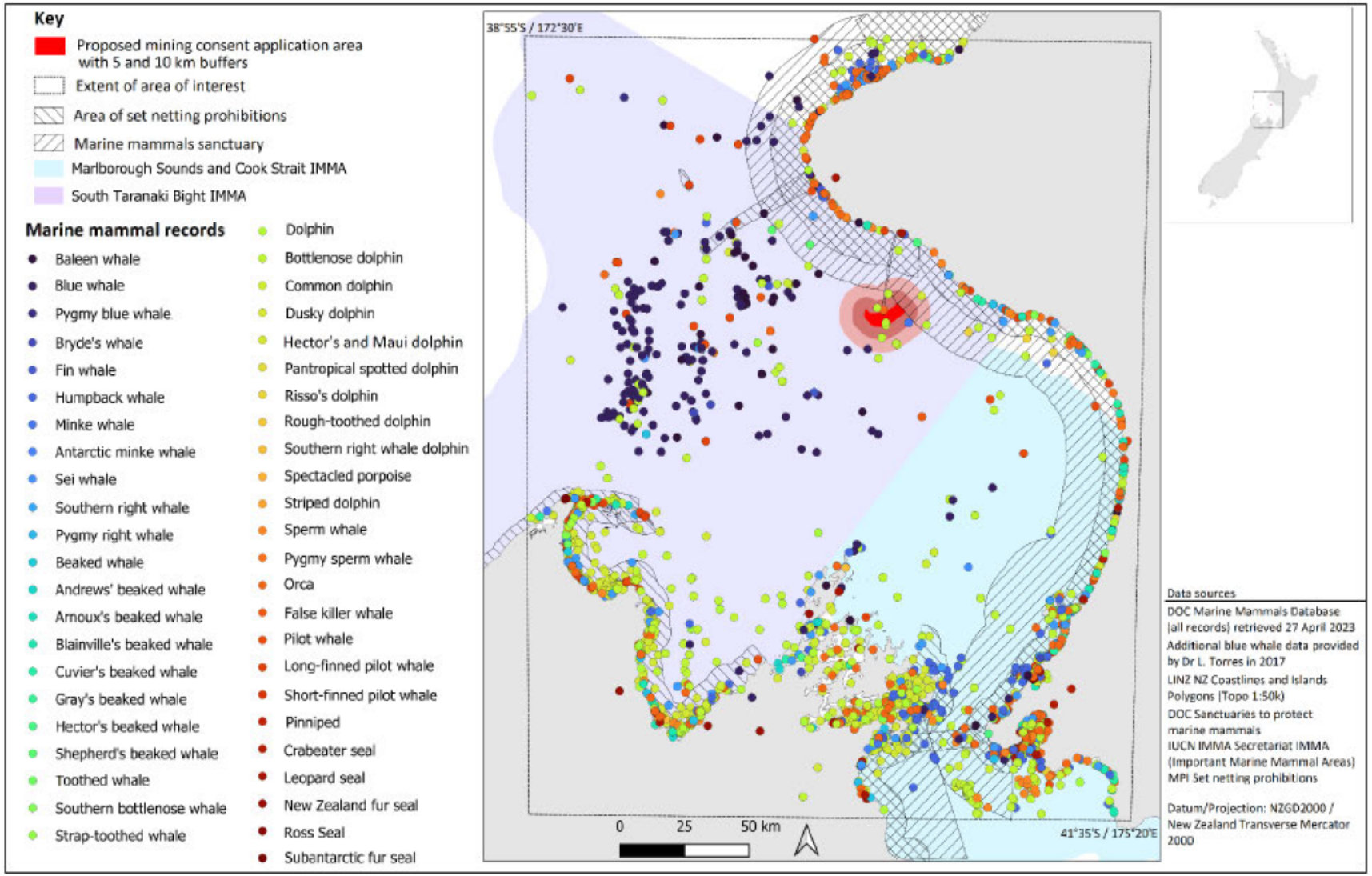


'Extension of land' 55581.07 submitted 1July2022, granted

Manuka Resources (https://www.manukaresources.com.au/site/pdf/494331d8-a335-49d0-8f3d-43565d072a1c/Investor-Presentation.pdf)

Figure A2-1. Locations of marine mammal sightings and incidents in the Taranaki region of interest up to November 2016 (all records until 14 November 2016) and since November 2016 (from 15 November 2016 to 27 April 2023). When the species was unknown but the record confirmed what group the animal(s) were, this was counted under the species groupings in italics. Data source: DOC marine mammal sighting and incident database (downloaded on 30 April 2023); Additional blue whale sightings provided by Dr. L. Torres in 2017).

From: Childerhouse Expert evidence 19th May 2023



TTRL's 2022 'Extension of Land' covers more cetacean sightings, with blue whales in proximity, noting annual oceanographic variability re food availability …

Fast Track Approvals Act (FTAA) Schedule 10

Section 6 Criteria for assessment of application for marine consent

(1) For the purposes of section 81, when considering an application for a marine consent, including conditions in accordance with clause 7, the panel must take into account, giving the greatest weight to paragraph (a),—

(a) the purpose of this Act; and

(b) **sections 10 and 11 of the EEZ Act**; and

(c) any relevant policy statements issued under the EEZ Act; and

(d) sections 59, 60, 61(1)(b) and (c) and (2) to (5), 62(1A) and (2), 63, and 64 to 67 of the EEZ Act.

Exclusive Economic Zone & Continental Shelf Act, Section 10

(1) The purpose of this Act is—

(a) to promote the **sustainable management** of the natural resources of the exclusive economic zone and the continental shelf; and

(b) …to **protect the environment from pollution** by regulating or prohibiting the discharge of harmful substances and the dumping or incineration of waste or other matter.

(2) In this Act, sustainable management means managing the use, development, and protection of natural resources in a way, or at a rate, that enables people to provide for their economic well-being while—

(a) sustaining the potential of natural resources (excluding minerals)… and

(b) **safeguarding the life-supporting capacity of the environment**; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

EEZ Act, Section 11

11 International obligations

This Act continues or enables the implementation of New Zealand's obligations under various international conventions relating to the marine environment, including—

(a) the United Nations Convention on the Law of the Sea 1982:

(b) the Convention on Biological Diversity 1992:

(c) the International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL):

(d) the Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter, 1972 (the London Convention).

International obligations

Article 8 of the UN Convention on Biological Diversity requires the following of Parties, including New Zealand (which signed and ratified the Convention in 1992 and 1993):

Article 8(d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings;

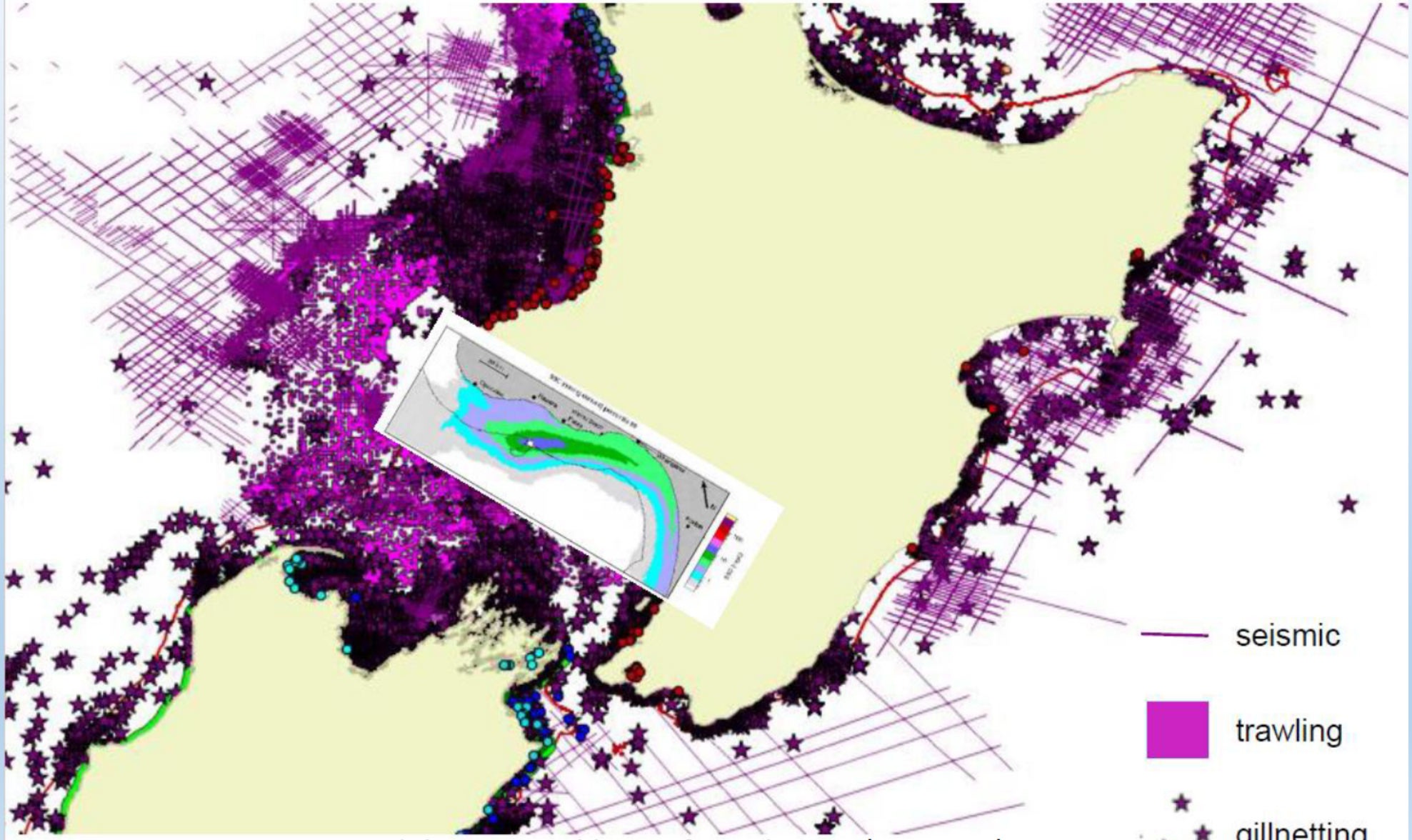
Article 8(f) Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species,…

Cumulative Effects EEZ-CS Act

Assessments for applications could focus on the overall effects, including synergisms, of adding an application to the effects already occurring, and predicted to occur, in coming decades. This is consistent with Sections 6, 28, 33 and 59 of the EEZ-CS Act, which provide broad discretion, and is also consistent with the **Precautionary Principle**.

Instead, reductionist, 'siloed' approaches have typically been adopted.

Existing uses offshore Taranaki



Slide prepared by Prof. Liz Slooten (U. Otago)

Cumulative Effects EEZ-CS Act

Section 6 Meaning of effect

(1) … unless the context otherwise requires, *effect* includes—
(a) any positive or adverse effect; and (b) any temporary or permanent effect; and (c) any past, present, or future effect; and (d) any cumulative effect that arises over time or in combination with other effects; and (e) any potential effect of high probability; and (f) any potential effect of low probability that has a high potential impact.

(2) Subsection (1)(a) to (d) apply regardless of the scale, intensity, duration, or frequency of the effect.

Cumulative effects: Oceanography

The ocean

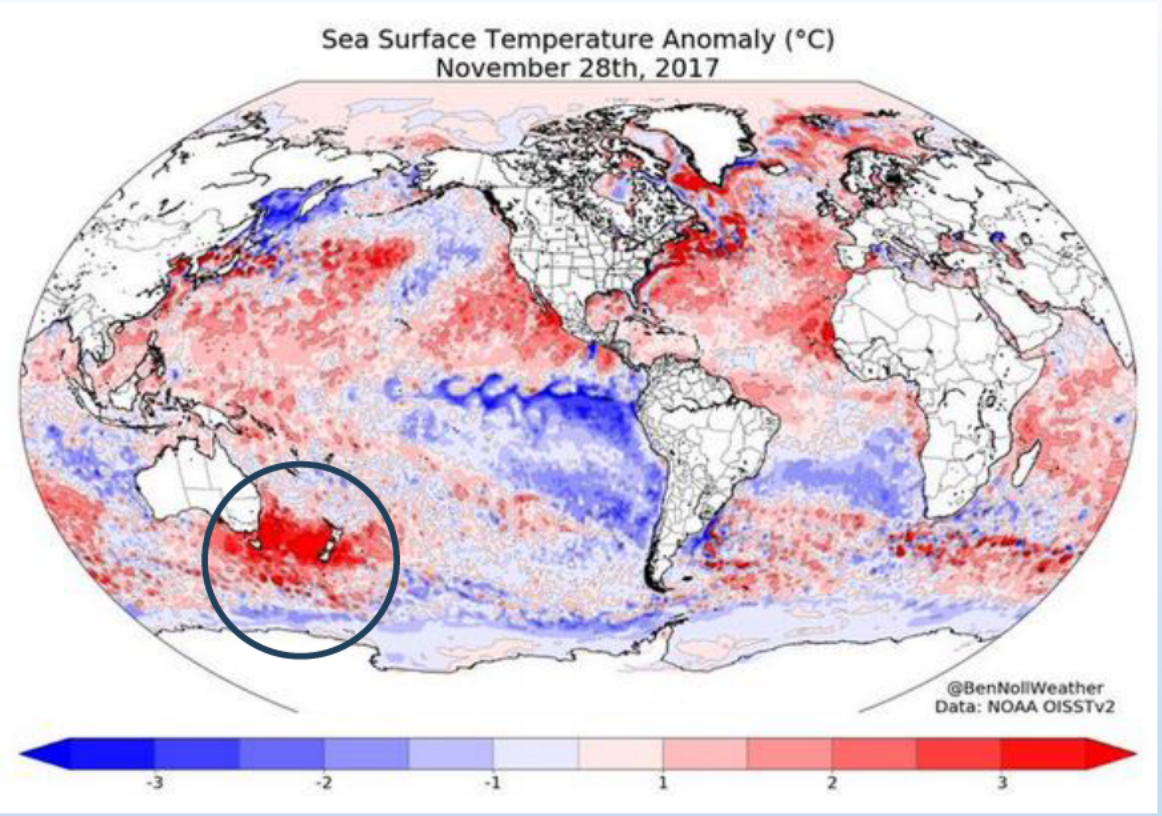
- has warmed unabated since 2005, continuing the clear multi-decadal ocean warming trends documented in IPCC AR5; & with increasing storm strength
- is continuing to acidify in response to ongoing ocean carbon uptake
- is losing oxygen overall with a very likely loss of 0.5–3.3% between 1970–2010 from the ocean surface to 1000 m (medium confidence)
- nutrient cycles are perturbed and there is high confidence that this is having a regionally variable impact on primary producers
- warming has contributed to observed changes in biogeography of organisms ranging from phytoplankton * to marine mammals (high confidence) …

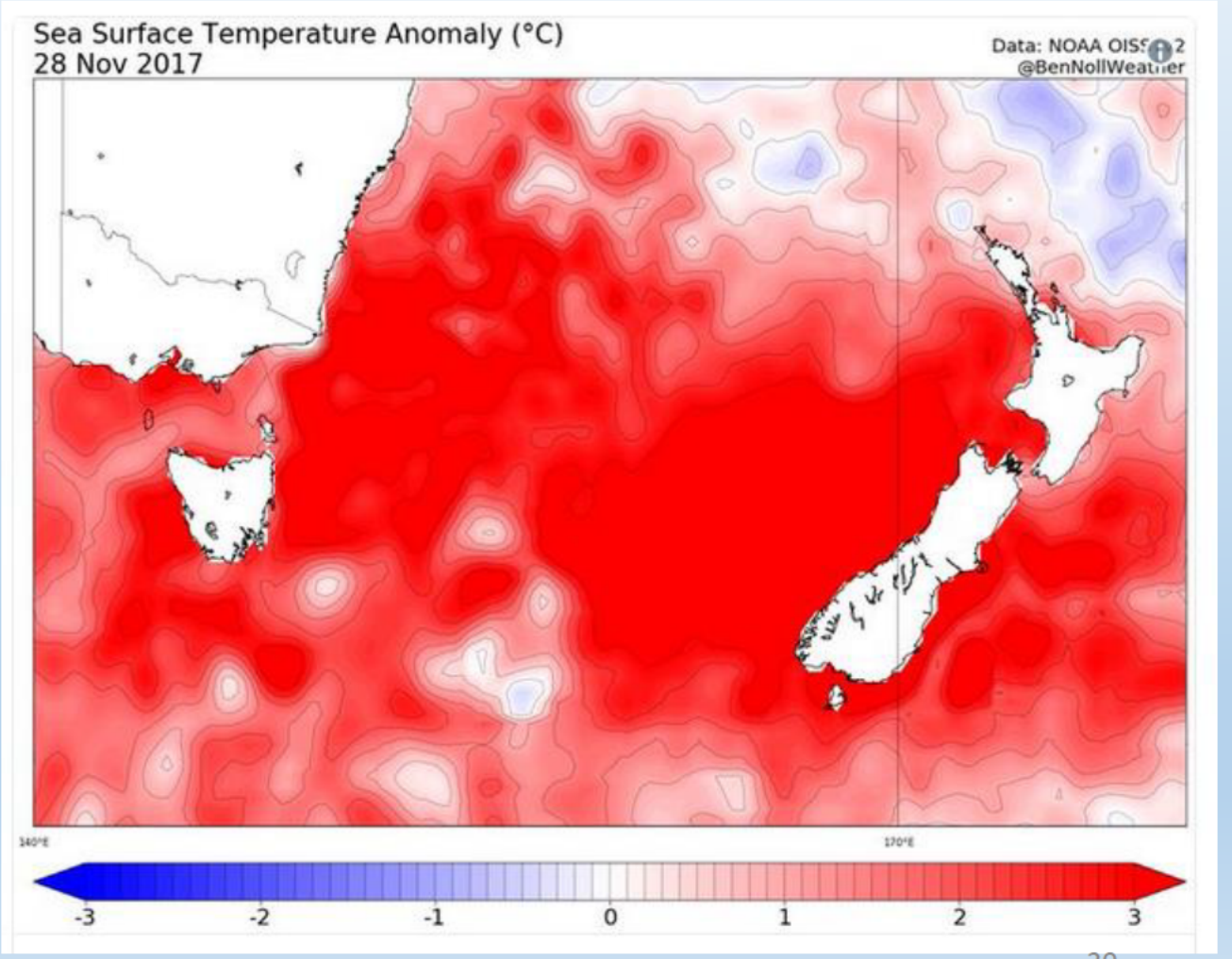
https://www.ipcc.ch/site/assets/uploads/sites/3/2022/03/07_SROCC_Ch05_FINAL.pdf

* E.g. see Brown et al. (2024) https://doi.org/10.1038/s42003-023-05702-4

Aotearoa's seas are no exception, indeed world 'leaders'

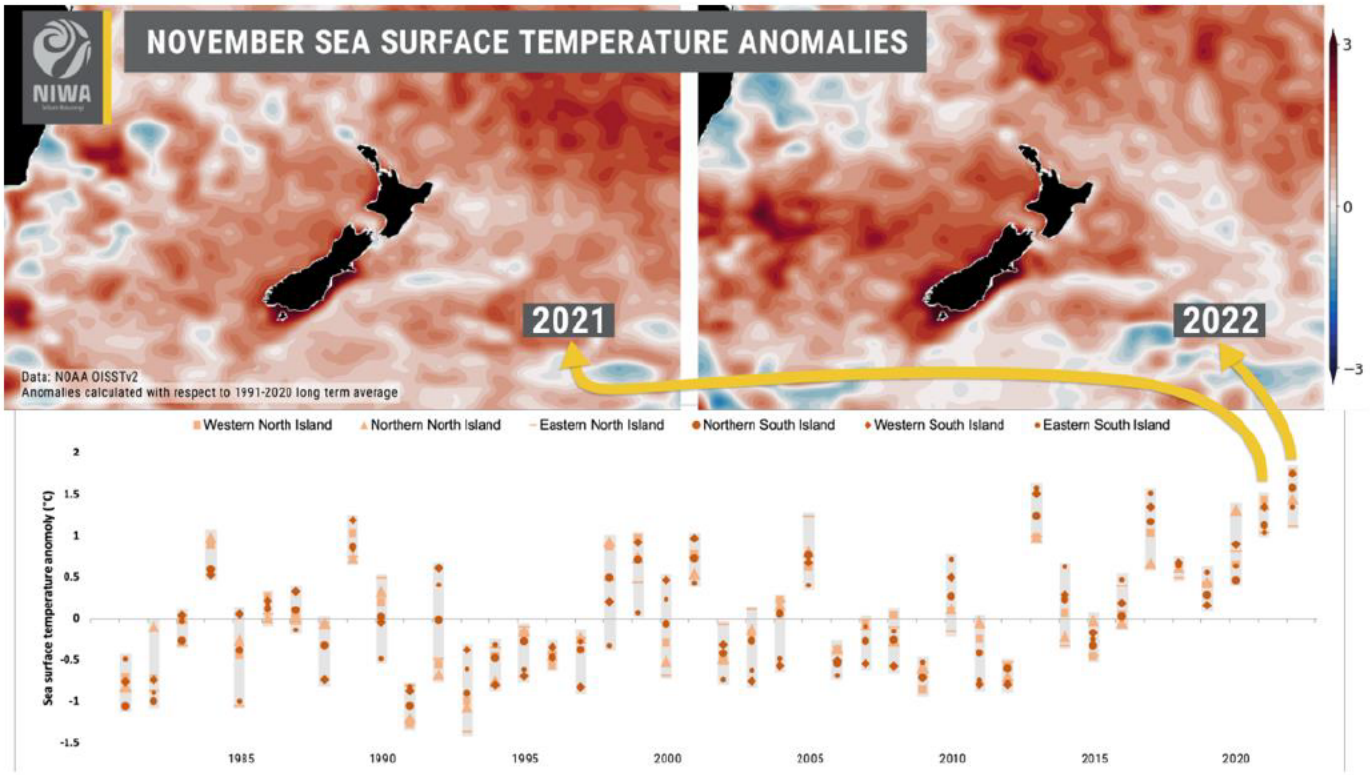
NZ EEZ temperature ‘snapshot’ 28th Nov. 2017



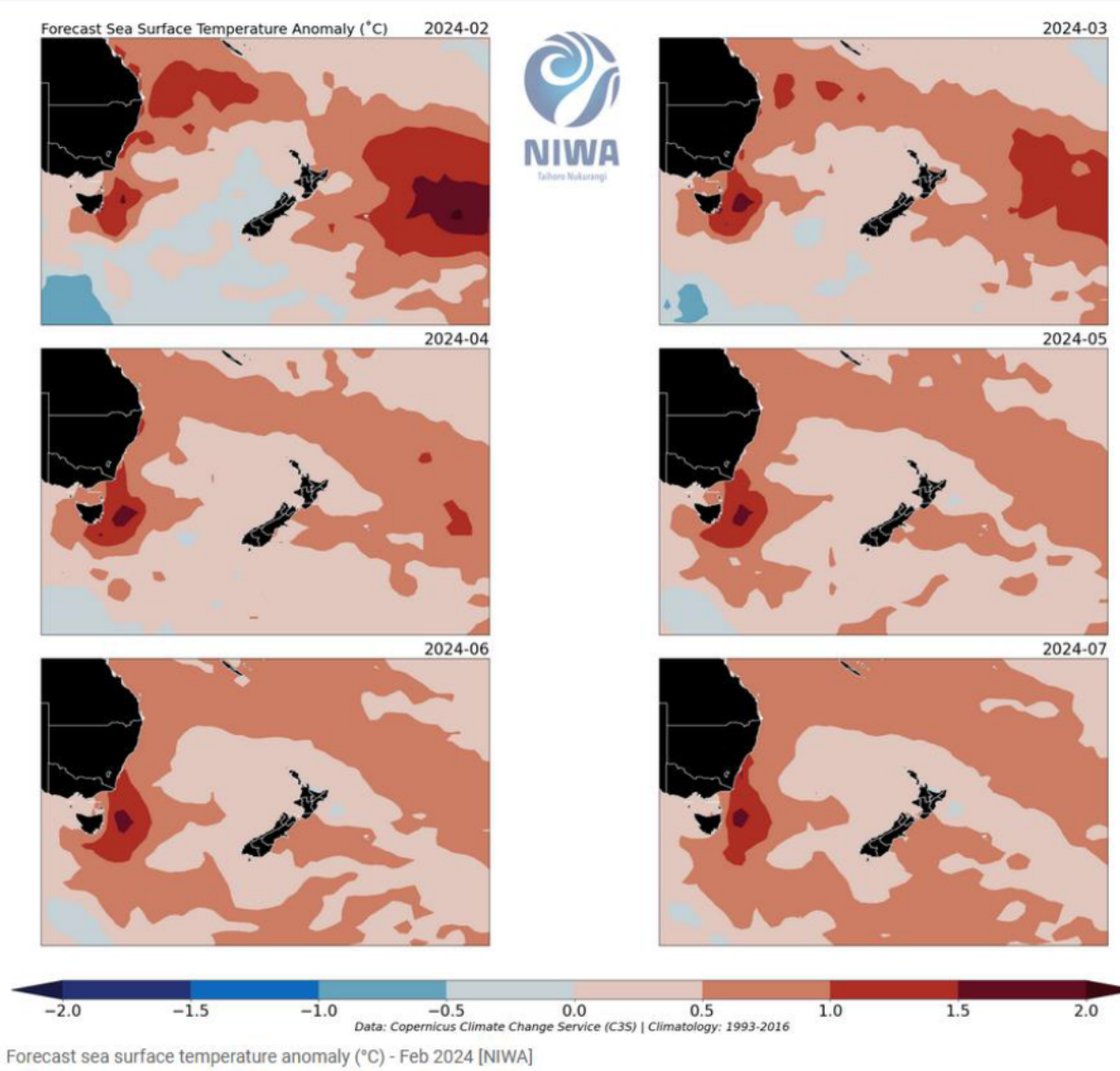


Record-breaking sea temps have cascading effects on food webs (eg. ‘drastic reduction in krill biomass’). Johnson et al. (2011) Climate change cascades: Shifts in oceanography, species' ranges and subtidal marine community dynamics in eastern Tasmania. JEMBE doi:10.1016/j.jembe.2011.02.032

Continued heating of Tasman Sea with extended 'unprecedented' marine heatwaves since 2015



The average temperature of the ocean is now 1.5°C higher than it was 100 years ago, and in the past 30 years, the frequency of marine heatwave events has doubled.



Forecast sea surface temperature anomaly (°C) - Feb 2024 [NIWA]

Right panel: Month-average temperature anomaly predictions cf. historical observations (1993-2016). Positive differences imply the month average temperatures exceed the corresponding historical average. Note that the historical average is recent, not pre-industrial.

Acidification continues to 2050 (at least) under 4 IPCC scenarios, with other stressors

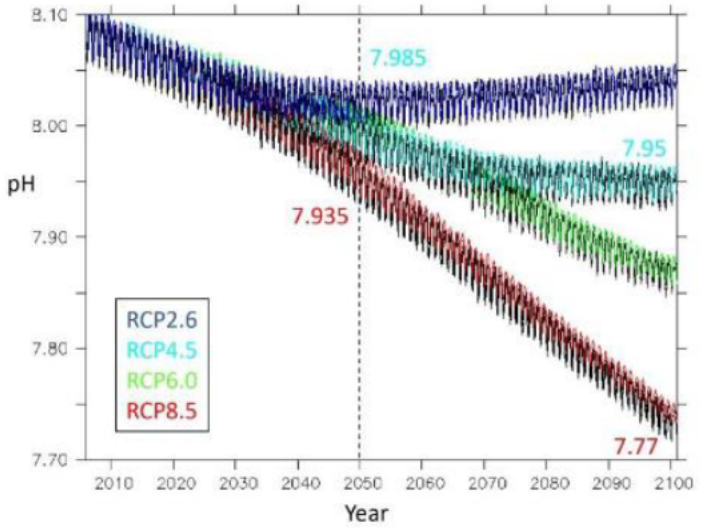


Figure 1-3 Projected surface pH for the NZ region under each Representative Concentration Pathway (RCP), with the Mid- and End-Century mean pH identified for RCP4.5 and 8.5. For each RCP, the black line indicates the mean of projections from six Earth System Models (ESMs) and the coloured line (Blue - RCP2.6, Cyan - RCP4.5, Green – RCP6.0, Red-RCP8.5) the projection generated using the GFDL-ESMG2 Earth System Model (reproduced from Law et al. 2018b).

Coastal and oceanic environments subject to many anthropogenic and natural stressors…. Ocean warming, coastal pollution, de-oxygenation, changing nutrient and light levels … affect marine plants and … animals at the individual, species and ecosystem levels. … overall combined stress is what is ecologically important. Currie (2022) Ocean Acidification Assessment. NIWA. *Prepared for Ministry for the Environment and Stats NZ.*

Sir Peter Gluckman (2013): "For New Zealand, the resulting impact of changes in wind patterns, precipitation, and the chemistry of our oceans can be expected to be at least as significant as the changes in temperature itself."

Synergisms among Sea temp., Acidification and Noise

"Ocean acidification will decrease sound absorption at low frequencies (<10 kHz), enhancing long-range sound propagation. At the same time, temperature changes can modify the sound speed profile, leading to the creation or disappearance of sound ducts in which sound can propagate over large distances."

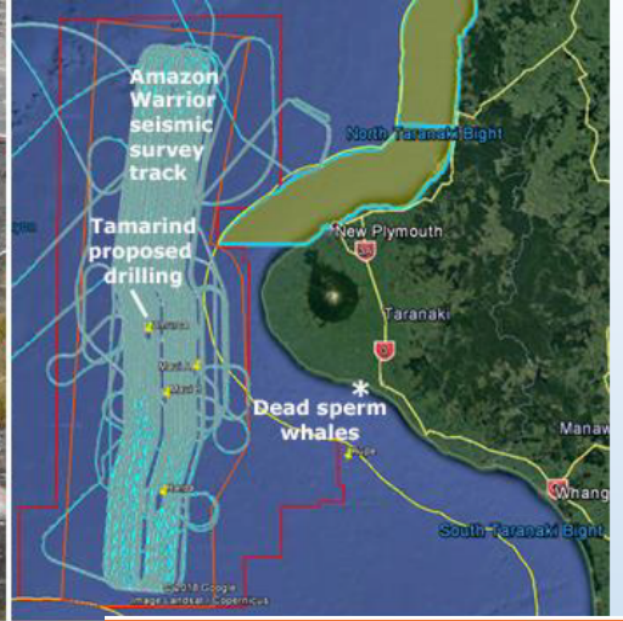
Possenti et al. (2023) Predicting the contribution of climate change on North Atlantic underwater sound propagation. PeerJ 11:e16208 https://doi.org/10.7717/peerj.16208

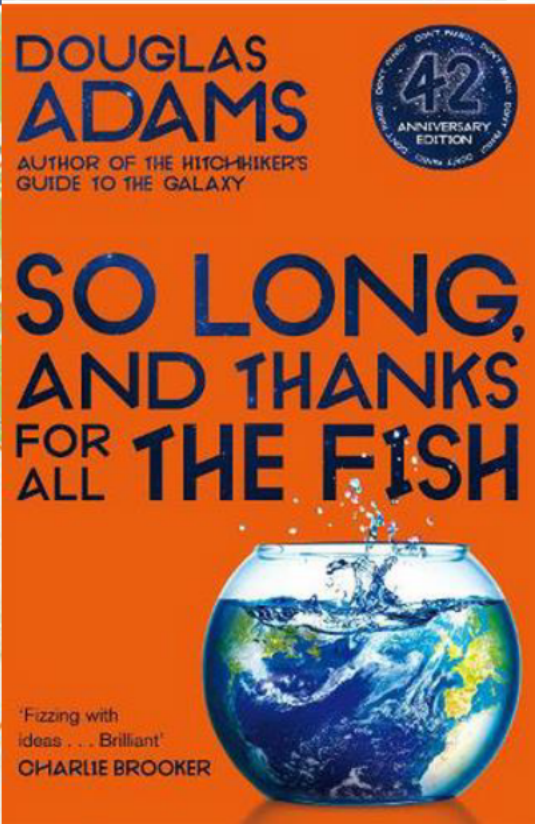
"… without information on the intensity and frequency range of the noise from … mining … it is not possible to determine the likely impacts on marine mammals, including physical and behavioral effects" & "… fish species both vocalize and are sensitive to underwater noise" (Excerpts from Expert caucusing Feb 2024).

Cetacean mortalities

12 dead Sperm whales washed ashore on South Taranaki beach, May 2018, after major seismic blasting survey.

- Not a stranding – all died offshore, likely all at once
- Cause of death unattributed
- MM Observer failure?





https://www.newshub.co.nz/home/new-zealand/2018/05/eight-dead-sperm-whales-found-on-taranaki-beach.html
https://www.stuff.co.nz/national/104249829/unprecedented-whale-strandings-reaches-11-in-total-on-taranaki-beach
https://climatejusticetaranaki.wordpress.com/2018/05/28/media-release-climate-justice-taranaki-questions-the-cause-of-sperm/
https://www.rnz.co.nz/national/programmes/morningreport/audio/2018646782/why-did-a-dozen-sperm-whales-wash-up-in-south-taranaki

Cumulative Effects: Fisheries

- Fisheries catches and composition in many regions are already impacted by the effects of warming and changing primary production on growth, reproduction and survival of fish stocks (high confidence)
- Warming-induced changes in spatial distribution and abundance have already challenged the management of some important fisheries and their economic benefits (high confidence)
- Coastal ecosystems under stress from ocean warming and SLR exacerbated by non-climatic pressures from human activities (high confidence)
- Since early 1980s, the occurrence of harmful algal blooms and pathogenic organisms has increased in coastal areas in response to warming, deoxygenation and eutrophication, with negative impacts on food provisioning, tourism, the economy and human health (high confidence).

https://www.ipcc.ch/site/assets/uploads/sites/3/2022/03/07_SROCC_Ch05_FINAL.pdf

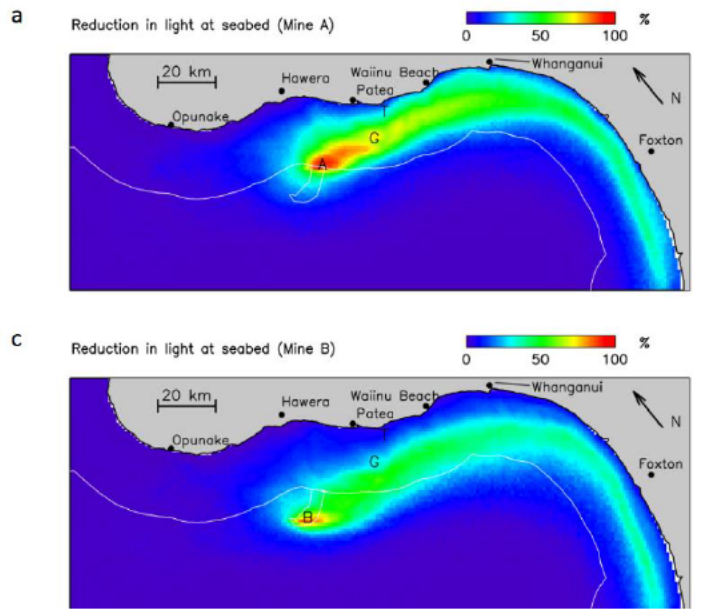
Cumulative Effects: Seabirds

Dr. David Thompson: “Risks include displacement from the mining site (physical exclusion), reduced foraging efficiency (via increased turbidity from the sediment plume), noise, fuel or oil pollution and through effects of artificial nocturnal lighting.”

Professor John Cockrem: “… seabird populations are going to be … more vulnerable to adverse effects created by dirty water from seabed mining. Their … existence is becoming gradually … harder. This is owing to changes in food availability that can come from changes in sea surface temperatures, leading to changes in the extent to which nutrient-carrying colder water is upwelling to the surface. Seabirds are facing a much more precarious existence in coming decades, than was the case before.” https://pacific.scoop.co.nz/2023/05/seabed-mining-around-aotearoa-expert-qa/

Cumulative effects: benthos

Many marine species have narrow physiological tolerance limits set to local environs. Most require specific metamorphosis cues and, for sessile and site-attached species, settlement cues.



Pinkerton (2017) Optical effects …

Changes in local conditions can alter or destroy such cues, create trophic cascades through food webs. In STB, some species may already be living close to those limits. Morrison et al. (2022): < 5% of STB seafloor estimated to receive sufficient light to support microalgae growth (citing Pinkerton 2014). Increasing turbidity from spoil dumping effects. NOTE: D. Greer's evidence 2017, 2024: plume model 7 sec wave period - underestimate affects plume size and dynamics. Also, natural resuspension is of surface sediments, not those from 5-8m deep with potentially different chemistry.

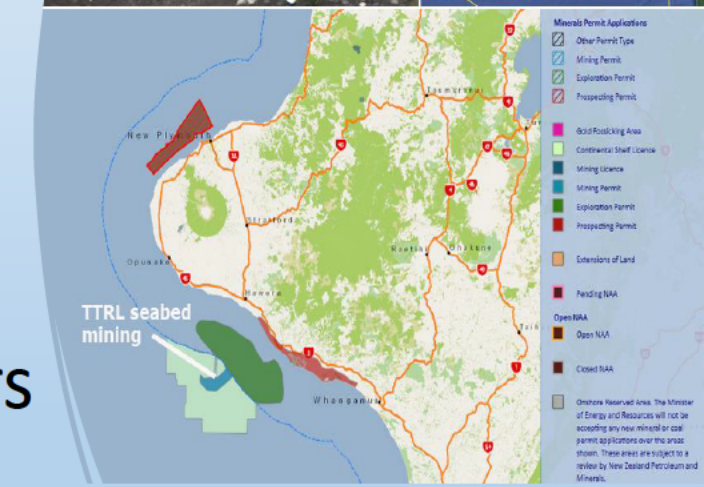
Confidence in Best Available Information (BAI), ‘Conditions’, monitoring and regulatory options

If BAI does not accurately represent the present or future (models or muddles?), can ‘conditions’ be fit for purpose or even met? Enforcement or self-regulation?

Monitoring: can ‘best practice’ provide sufficient statistical power to detect operational effects vs background ‘natural’ variability, other effects, future effects, synergisms?

Remediation: What happens when material harm occurs and/or ‘recovery’ does not? Is remediation possible?

Bond / insurance: What price for species loss?



Best laid plans of mice and men …

Biological-ecological Risks: Knowledge gaps and 'best available information'

"… patterns of species discovery … ask whether we will find species before they go extinct or only afterwards. The simple message is that we are constantly adding to the totals of recently extinct species. ... Less expected is that we are adding new species that, when discovered, are so threatened that they survive for only a few years. That we have these examples may be by good luck: we will surely have missed many others. This renders global estimates of extinction rates conservative. The survival of these global rarities is dependent on the protection of remaining [habitat]"

Lees AC, Pimm SL (2015) Species, extinct before we know them? Current Biology 25: R177-180. https://doi.org/10.1016/j.cub.2014.12.017

Planetary boundaries

Risks far outweigh potential benefits. Seabed mining is another form of frontier extractivism, the latest in a long history of environmental degradation, and much more challenging to manage / monitor effectively than land-based extraction. At this point in human history, with **multiple planetary boundaries breached and others nearing the brink**, we need rapidly to rethink our collective role as responsible stewards here on Earth. Industrial-scale mining of the seabed is not consistent with those aspirations.

Richardson K, Steffan W, Lucht W, et al. (2023) Earth beyond six of nine planetary boundaries. Sci Adv 9: eadh2458. https://doi.org/10.1126/sciadv.adh2458
Rockström J, Gupta J, Qin D, et al. (2023) Safe and just Earth system boundaries. Nature. https://doi.org/10.1038/s41586-023-06083-8

Corporate responsibilities

As of May 2021, companies including BMW Group, Samsung SDI, Google and Volvo Group, joined the call for a global moratorium on seabed mining, and for alternatives. The companies each pledged not to source seabed minerals, to ensure such minerals are excluded from supply chains and to not finance such mining. The companies, along with NGOs, civil society and the science community, are legitimately concerned about environmental impacts.

https://www.reuters.com/business/sustainable-business/google-bmw-volvo-samsung-sdi-sign-up-wwf-call-temporary-ban-deep-sea-mining-2021-03-31/

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Alternatives

The world's discarded electronics, in 2021 alone, weighed an estimated 57 million tonnes, growing by about two million tonnes annually. Less than 20 % is collected and recycled. The Royal Society of Chemistry endorsed a global effort to mine E-waste, rather than mining the Earth, above or below the sea. Survey of 10,000 people across 10 countries, 60 % said they would be more likely to switch to a rival of their preferred tech brand if they knew the product was made in a sustainable way.

CJT urges the government to explore and potentially incentivise urban mining of electronic waste, rather than virgin mining.

https://sustainablebrands.com/read/business-case/urban-mining-of-e-waste3x-cheaper-than-mining-virgin-metals

Māori perspectives

Tuhi-Ao Bailey: “The affected iwi, hapū and whanau of Taranaki, including members of CJT, have … consistently said that no, we don’t want it. Since 2011, Ngāti Ruanui and Taranaki iwi have led the fight against the practice. … As we sit in the midst of … mass extinction and face the collapse of our global climatic systems, we cannot possibly support an industry that would severely damage the seabed in our rohe and cause multiple as yet unknown effects on sealife and the communities’ ability to feed itself from our fisheries.”

Concluding remarks

1. CJT is strongly opposed to the TTRL application and ask that the Expert Panel **declines it in full**.
2. A thorough **cost-benefit analysis** has not been conducted by the applicant.
3. It is our considered view that **the claimed regional and national benefits from Taranaki VTM are far outweighed by the known and potential economic and environmental losses** associated with it, should it be allowed to proceed.