OPINION: Wake-up call for EEZ rules

Gavin Evans - Tue, 2 Apr 2024 **Inside Resources**

Trans-Tasman Resources' decision to call an end to the hearing for its seabed mining project in the South Taranaki Bight should be a wake-up call for environmental planning in this country.

The company – doubtless – will now seek to have its application heard under the coalition's proposed fast-track process.

Because even if the now-cancelled hearings were to confirm the consents granted in 2017, they would again have been appealed in court. And again, and again.

That is just the consequence of our flawed EEZ legislation, the unworkable constructions the country's courts have imposed on it, and a well-funded campaign by the fishing industry and four environmental groups that has only had to raise the red-flag of "uncertainty" to stall the project for the past seven years.

As Cindy Baxter, chair of Kiwis Against Seabed Mining, demonstrated on Thursday, there is a completely false test at play.

The potential benefits of hundreds of jobs and $400 million in export receipts for 20 to 60 years never get tested against environmental impacts limited in any year to a few square kilometres of the 36,000 square kilometres of high-energy ocean environment.

Because, as Baxter stated, "there was absolutely no way TTR could prove that it wouldn't cause material harm to the South Taranaki Bight."

And that's the challenge of trying to prove negatives in science – they are always matters of probability.

What is a reasonable level of certainty? And how should non-specialist decision-makers choose between one group of technical experts who say their work is best-in-class and entirely sufficient, and opposing experts who can always ask for more studies, or greater detail, or for longer periods?

KASM went on claim that the "dangerous and destructive" mining industry would turn the bight – already home to the Kupe gas field and one of the country's most heavily fished and vessel-trafficked regions – into an "industrialised zone."

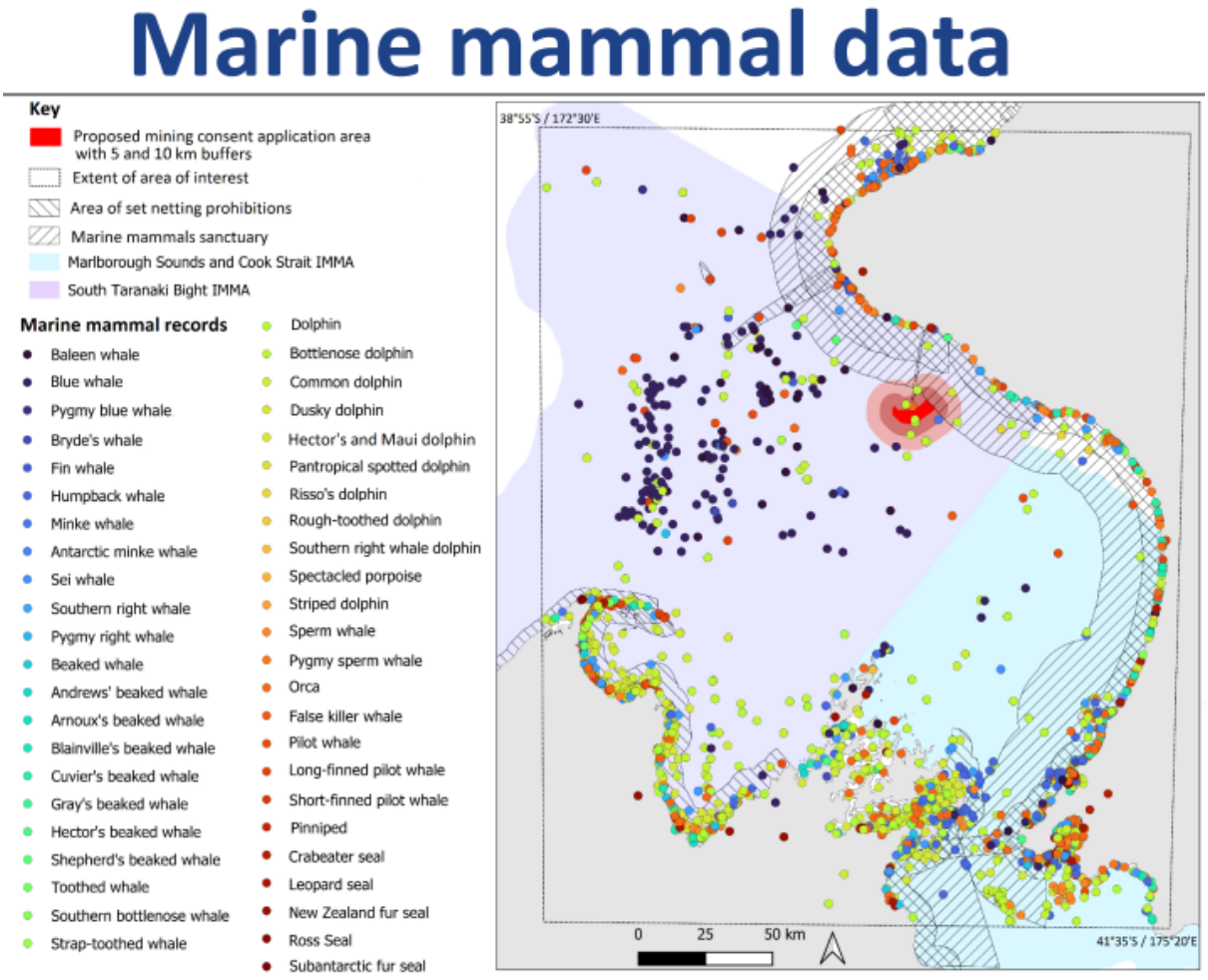
Te Pāti Māori co-leader Debbie Ngarewa-Packer, whose Ngāti Ruanui iwi are among the opponents, tried to suggest the country must now choose either mining or renewable energy development.

"New Zealand's confronting an opportunity of a new blue economy, which includes offshore wind turbines, and they are in the exact same area that these guys are trying to dig up," she told Newsroom.

Interestingly, about 40 per cent of the 3.2 billion tonnes of vanadium-rich titanomagnetite TTR has identified lies within the coastal marine area Ngāti Ruanui is claiming under customary title.

TTR's decision to seek a fast-track consent is a shame, because it will inevitably 'politicise' the final decisions on whether and how the country should develop the significant mineral resource that lies off the southern Taranaki coast.

But what choice did it have?



Issues

The company has spent more than $85 million during the past 15 years assessing the mineral sands potential along the west coast of the North Island.

Two broad issues have dogged the proposal from the beginning: an inability of people to understand its small footprint in the context of the massive, high-energy bight environment; and a focus on potential technical uncertainties – created by the requirements of the EEZ legislation – instead of on the lack of harm expected beyond the immediate mining area.

The almost 880 square kilometres of mining and exploration acreage TTR holds, or has sought, near the Kupe gas production platform holds a potential 60-year supply of VTM.

About 40 per cent of that lies within the coastal marine area – the old 12-mile limit.

TTR has previously said it would not look to mine there until its operation in the EEZ had demonstrated it could do so without harming the environment.

And the 64 square-kilometre mining permit granted in 2014, and a subsequent 177 sq km expansion it has sought, lie at least 22 kilometres from shore.

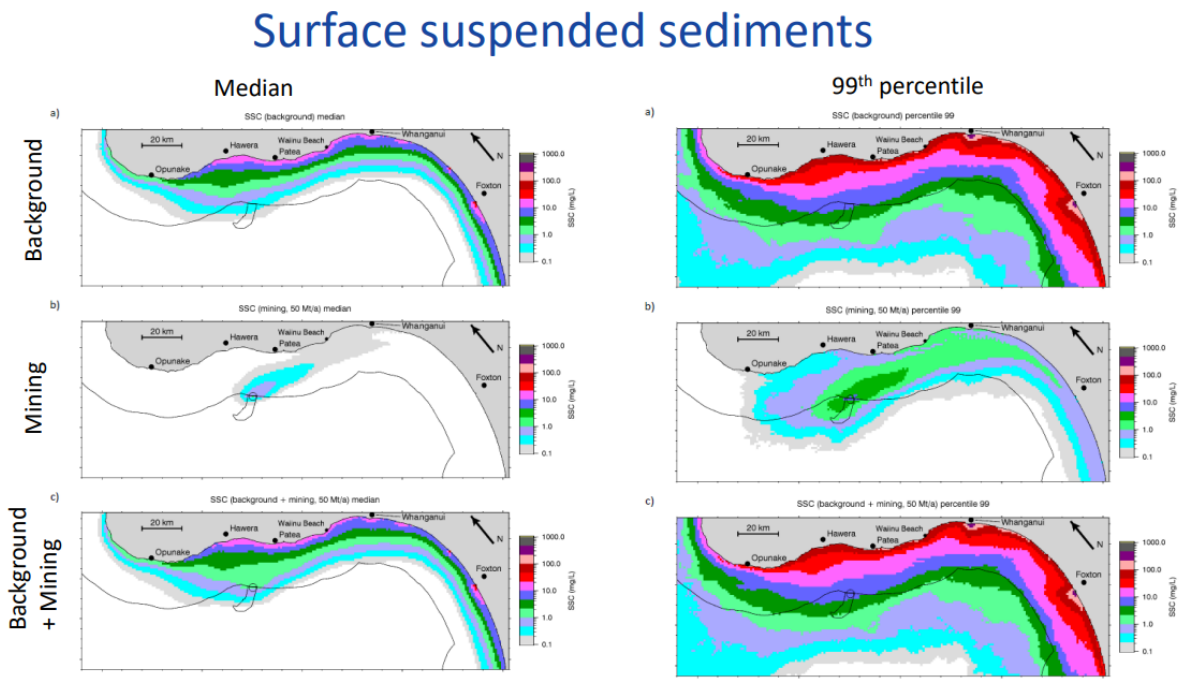
The mining, using a tethered, uncrewed crawler tractor moving on the seafloor at about 35 metres an hour, would cover only about a third to two-thirds of a square kilometre a month depending on downtime.

The tractor would siphon up 50 million tonnes of seafloor annually, returning about 45 million tonnes to within four metres of the seafloor, and ensuring the vast bulk of the material returns to within the mining pit.

The flat, sandy plain provides habitat for eagle rays, but has little other visible life, the DMC heard last month. One or two five-armed starfish may be present over a hectare.

Within the mining permit, everything living in the seabed will be killed, but the invertebrate community – used to recovering from regular, major storm events – will start repopulating each mined trench almost immediately and will likely have recovered within a year, the DMC heard.

Larger, slower growing species like starfish, may take several years to get back to their original sizes and density, but certainly within five years.



Interests

TTR's permit interests, and almost 500 square kilometres Ngarara Exploration has applied for further west and south, overlap areas of interest for three wind developers – the nearer-shore Wind Quarry Zealandia project, the BlueFloat Energy-Elemental partnership, and the Copenhagen Infrastructure Partners-NZ Superfund venture.

TTR's interest in the South Taranaki Bight has been opposed by six fishing groups – including Talley's Group, Cloudy Bay Clams and Te Ohu Kaimoana – which partnered with KASM, Greenpeace, the Taranaki-Whanganui Conservation Board, Forest & Bird and local iwi to challenge the mining proposal.

The Department of Conservation was consulted on the 109 conditions TTR proposed for the operation – including two-years of pre-commencement studies – and did not oppose the application.

While the environmental groups oppose any seabed mining philosophically, the positions of other Taranaki and Whanganui iwi are more nuanced.

Some recognise the potential of the resource; others are vehemently opposed. There is a general grievance at not having been meaningfully involved earlier in the proposal, concern at the risk to traditional fishing areas, and a determination not to lose control of any coastal sea that MACA title may grant them under the Marine and Coastal (Takutai Moana) Act 2011.

MACA title would give iwi control of any seabed minerals in their traditional coastal waters.

Commercial fishing is conducted throughout the bight but tends to be more concentrated west and south of the proposed mining area.

Hearings

Trans-Tasman was granted marine consents for its project, on its second bid, by a split decision-making committee, in 2017.

Aspects of those approvals were then overturned by the Supreme Court which, again with a split decision, in 2021 ordered them be reconsidered by a fresh decision-making committee.

The court believed there wasn't sufficient information on the project's effects on marine mammals and seabirds and the effect of the sediment 'plume' on the marine environment.

That meant the previous DMC had failed to protect the marine environment from 'material' harm, had failed to favour caution and environmental protection, and had improperly relied on conditions setting out how pre-mining monitoring would be undertaken.

The court also asked the new DMC to look again at the role of the NZ Coastal Policy Statement, the project's impact on iwi and how tikanga should be considered, and whether a bond should have been considered.

At the hearings Hawera last month – the first of four planned sessions – the new DMC focused only on the project's environmental impacts. It was firmly focused on understanding the facts of the proposal, the conflicting statements on the potential for material harms from the opposing experts, and how the proposed conditions would prevent those.

Morgan Slyfield, counsel for TTR, reminded the committee it was bound by the Supreme Court on points of law but was required to come to its own view on the facts before it, including the role of the pre-commencement monitoring.

In the same way, it was not bound by the Supreme Court's finding on the sufficiency of the information available on the expected impacts on marine mammals and seabirds, and the effects of the sediment plume, and had to come to its own view.

His colleague, Justin Smith KC, emphasised that any uncertainty as to the effects of parts of the proposal was also a factual matter that had to be assessed on a case-by-case basis.

For a consent to be declined, there would have to be "reasonable" uncertainty, even after the setting of conditions, as to whether some material harm might result.

Opposition

In a now familiar pattern, opponents of the plan highlighted the importance of the entire South Taranaki Bight – rather than the proposed mining area – as an important habitat, breeding ground and food source for marine and birdlife, many species of which are considered threatened or endangered.

They highlighted limitations of TTR's sediment and population modelling, and calls for longer, more detailed, and more costly pre-commencement and post-commencement monitoring were common.

Some submitters argued the combination of mining and the unquantifiable new risks expected from climate change will push some species to "the brink."

"I think that's unlikely in all honesty," seabird ecologist David Thompson told the hearing on 13 March.

"The effects of what's being proposed are not going to be significant for birds."

While Greenpeace talks of a "giant" sediment plume being created from the mining, TTR's expert witnesses last month were at pains to point out how little sediment remains in the water more than two kilometres from the mining, and how minor its effects would be in an area where fish and seabed populations already deal with far higher background sediment levels closer to the coast.

Most of the time, suspended sediment levels in the generally eastward stretching 'plume' they modelled would be less than 2 milligrams per litre – and would appear completely clear if held in a glass, Thompson told the DMC in a written statement of evidence.

Even in the worst combination of high mining sediments and stormy, turbid seas, the additional sediment flows from the mining only alter at the margins the background sea sediment levels during such 99 percentile events.

Valuable fish and rocky reef communities are not being destroyed now during such events where the background sediment levels are already 10 to 20 times higher on much of the coastal shelf and 100 times higher closer to shore.

Given the sensitivity of those reefs to iwi and the fishing community, and the discovery of more rocky reefs on the coastal shelf nearer the northern border of TTR's mining permit, the company volunteered new conditions.

It offered to delay mining within three kilometres of the coastal marine environment – the old 12-mile limit – until at least five years of operational data has been gathered.

It also offered to assist with more detailed mapping of reefs in the area.

The Supreme Court had highlighted the 'major' and 'significant' effects the 2017 DMC had believed the project could have on fish life in some of those rocky reefs within about 20 kilometres of the mining area.

Marine ecologist Alison MacDiarmid told the recent hearing she cannot understand how the earlier DMC came to the conclusion that elevated suspended sediment levels at The Crack and Project Reef could result in temporary or permanent displacement of fish species.

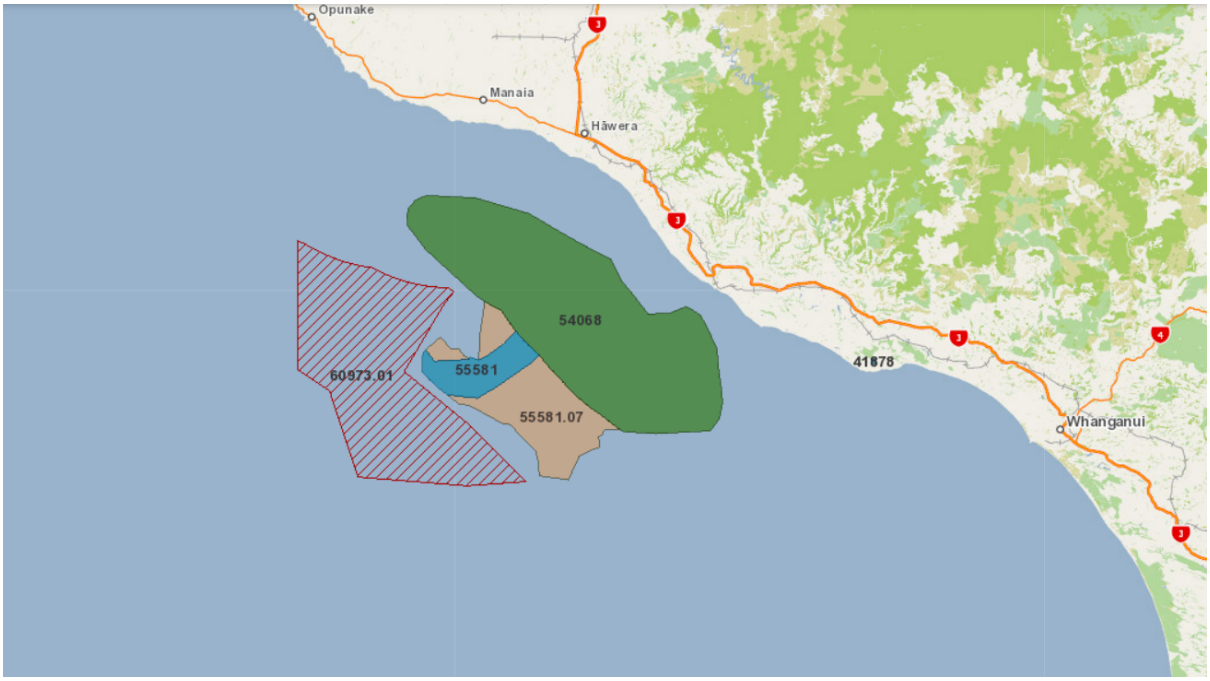
"It wouldn't be a conclusion consistent with my evidence or understanding," she said.

"They're sufficiently distant for the effects on fish to be very minor. I don't think it's going to cause any particular harm to the fish in those places. I don't think they're going to move, if they can, or suffer any loss of feeding ability, foraging ability for lengths of time that will have an impact on their ability to grow or reproduce."

A key concern for the Supreme Court had been what they considered a lack of information on the project's potential impact on birdlife and marine mammals, and its belief that the DMC should have taken a more precautionary approach in the absence of firmer evidence.

Three of the country's top five judges had also believed the conditions on pre-commencement monitoring proposed by TTR were really an attempt to fill information gaps in its application.

Slyfield told the new DMC that the previous committee had created issues for the courts by not spelling out in its decision why and how the conditions it agreed would prevent “material” harms to the environment.



Impacts

The proposed mining area lies within one of the best studied shallow exposed marine shelves in the country, he noted, and there is no indication that the permit area is particularly important for seabirds or whales and dolphins.

If there is “uncertainty” about marine mammals in the area, it is because they are largely absent, he told the DMC.

Evidence from marine mammal specialist Simon Childerhouse showed relatively few sightings in the mining area, with most sightings of bigger whale species in the deeper waters to the west and southwest.

Numbers of Māui and Hector’s dolphins are believed to be “very low” in the bight and it is very unlikely that Māui dolphins are present in the mining area, he says.

“There is nothing to suggest that the mining area is of any significance to any marine mammal species.”

Given their very large feeding ranges, he thought the impact from noise from the operation would be “extremely limited” for individual animals, let alone for species.

“The impacts from this operation are going to be negligible. They're going to be very low.”

Acoustics specialist Darran Humpheson saw no difficulty in the company meeting a proposed condition that the combined noise from its mining tractor – similar to that pictured above – and the project’s processing vessel should not exceed 130 decibels at 500 metres.

That would be quieter than many commercial vessels.

Design engineering processes already do that on a mathematical basis before production of things like aircraft, cars and heat pumps, he said in reply to questions from the committee.

Thompson told the new DMC that the loss of a small area of potential feeding is not going to result in bird deaths given their far greater foraging areas within the bight.

Other potential impacts, such as habitat destruction on land, predators, and climate change are going to be far greater.

Given the challenge of measuring such small impacts and “disentangling” them from wider environmental impacts, TTR and its expert advisors had proposed dropping a condition that it test for any adverse effects from the mining on marine and seabird life “at a population level.”

Pre- and post-commencement monitoring would still be carried out with the goal of limiting harms on fish, bird and mammal communities.

MacDiarmid told the committee that the impacts on marine and birdlife from the proposal will be so small and subtle that they will be “perhaps impossible to measure, and distinguish from a host of other pressures.”

“Some of the submitters have picked up on this and turned it on its head and argued that if it's so difficult to measure then this introduces an intolerable level of uncertainty. I think this is a wrong approach. This is the wrong way to think about what we've been trying to provide you,” she says.

“We're all saying that the effects of the proposed mining operations are so small, that on the population scale this reference to the conditions is meaningless. A more useful and practical approach is to focus on the operational aspects and the conditions that will minimise harm.”