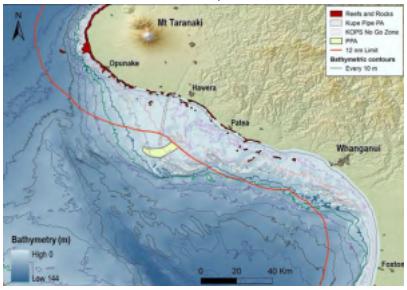
Wealth of data on Taranaki marine life – TTR

Gavin Evans - Tue, 30 Jan 2024 **Inside Resources**



A “wealth” of new information has been gathered on marine mammals in the South Taranaki Bight since Trans-Tasman Resources filed its 2016 seabed mining application, a marine biologist has told the Environmental Protection Authority.

That includes new population distribution models, almost 700 sightings, acoustic monitoring and more than 50 scientific papers on marine mammals within the region, Simon Childerhouse says in his latest evidence on TTR’s seabed mining proposal.

TTR has invested more than $85 million in studies and its consent bid during the past 15 years. It believes it can mine up to 50 million tonnes of vanadium-rich iron sands annually from the seafloor off the coast of Pātea, generating more than $400 million and creating about 200 jobs.

The company was granted consent in 2017, only for the Supreme Court, following earlier appeals, to quash some aspects of them and refer it back to another decision-making committee to reconsider.

Eight days of hearings are scheduled from mid-March to late May.

Childerhouse and other expert witnesses last week provided evidence to rebut claims made in pre-hearing submissions by opponents of the project.

Claimed uncertainty

He noted that several submitters had claimed a lack of new data since 2017, when in fact there was a “huge amount” of new material with which to better characterise and understand the whale, dolphin and seal populations in the bight.

Another common theme amongst submitters is that if something is not understood completely and fully, then its potential effects cannot be assessed due to uncertainty.

“This expectation of perfect knowledge of all aspects of the consent is simply not realistic nor practical,” he says.

While the best available scientific information may include gaps or uncertainty, sensible judgements can still be made, including a precautionary approach if required.

Childerhouse says there is some uncertainty related to some of the marine mammal data, but that does not preclude making robust and accurate assessments with respect to them.

“There is a strong tendency for submitters to simply state that an issue is uncertain or has some degree of uncertainty without actually providing any indication of what information would be required to address this uncertainty.

“Just saying something is uncertain doesn’t necessarily make it so.

“Both scientific process and risk assessments move forward by assessing the level and extent of uncertainty inherent in an issue and then making expert judgements about the potential impacts of that uncertainty.

“Decision makers are not required to have perfect knowledge of all issues under consideration before they can reach decisions. In my opinion, the best available information presently before the decision makers is sufficient to form some reasonable conclusion about the likely impact of this project.”

Fish life

TTR’s proposal would mine about a third of a square-kilometre a month – 22 kilometres off the coast – using unmanned diggers on the seafloor.

Much of the opposition remains focused on the potential impact of a sediment plume from that work on the Pātea shoals – a prolific shallow-water fishery nearer to the coast – and whether that could disrupt dolphins, whales and other marine mammals.

The Supreme Court had felt the way the previous DMC treated uncertain information on marine mammals, seabirds and sediment had been fundamentally flawed.

Childerhouse agreed with submitters that the bight is an important area for marine mammals, but he says it is “highly unlikely” that the area planned for mining has any special biological significance for them.

Nor was the absence of an accurate noise estimate from the operation – given there are no other similar operations worldwide – an issue.

That was simply because TTR had proffered a condition setting a maximum allowable noise level, set at a level comparable to the “very common” noise of shipping in the bight, he says.

Ecologist David Thompson agreed with submitters that the total number of seabirds in the bight was unknown, but he disputed the notion that the region – or even the specific mining area – was a key ‘hotspot’ for biodiversity.

“Seabird diversity is so high at a national scale that any region is likely to host a diverse assemblage of seabirds. In terms of diversity, it could be argued that all regional subdivisions of New Zealand waters are hotspots.”

Sediment

He says increased turbidity within a few kilometres of the mining activity may prevent seabirds feeding there. But he says that is a relatively small part of their foraging range, given some species travel hundreds of kilometres each season.

A key element of TTR’s argument is the high turbidity of the coastal environment along the South Taranaki coast. That is a function of the high-energy nature of the sea there but also the sediment flowing along the coast from the region’s rivers.

It argues any mining-derived sediment still in the water by the time it nears the coast will generally be lower than the prevailing conditions.

In his evidence, Thompson agrees with the submitters that there is no data on the efficiency of seabird foraging and how that might be affected by the turbidity of the water column.

But he says the selection of a suspended sediment concentration of 2 mg per litre, used as a basis for calculating an area that might not be suitable for seabird foraging, was not entirely arbitrary.

It was the lowest SSC found to be avoided by pelagic fish, and so was selected in the absence of any better data for seabirds.

“I appreciate that this SSC may not be applicable to seabirds. However, and perhaps more importantly, a SSC of 2 mg/L is an extremely conservative value – it would be fair to say a glass of water with a SSC of 2 mg/L would appear completely clear and would not appear ‘cloudy’, ‘muddy’ or ‘turbid’ to any extent.

“In using a median, mining-derived SSC of 2 mg/L as the basis for estimating an area with at least this SSC, it is likely that the resulting area is an over-estimate of what might be ‘too turbid’ for seabird foraging.”

Schedule

The DMC, chaired by Lyn Stevens, is aiming to finalise its hearing procedures by 29 February.

By then it expects the various expert witnesses to have agreed joint statements on sediment plume modelling, the effects of the proposal on fishing, seabirds and marine mammals, and the proposed conditions for the project.

In December, the DMC gave TTR until 5 February to file its opening submissions. Submitters were given until 15 February to file any further evidence on tikanga, and until 21 February to file their opening submissions.

Expert conferencing on tikanga and the effects of the proposal on tangata whenua was expected to take place during March.

The hearing of environmental evidence is set down for three days from 13 March. Tikanga evidence will be heard over two days from 16 April and closing submissions are set down for three days from 27 May.