ENVIRONMENTAL PROTECTION AUTHORITY

Trans-Tasman Resources Limited
Marine Consent Application

HEARING at
THE DEVON HOTEL
390 DEBON STREET EAST,
STRANDON,
NEW PLYMOUTH,
on 8 March 2017

DECISION-MAKING COMMITTEE:
Mr Alick Shaw (Chairperson)
Mr Kevin Thompson (EPA Board Representative)
Ms Sharon McGarry (Committee Member)
Mr Gerry Te Kapa Coates (Committee Member)
Hearing Proceedings

Day 12 Wednesday 8 March 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Name</th>
<th>Representing</th>
<th>Topic</th>
<th>Exhibit Ref#</th>
<th>Documents Submitted / Presented</th>
<th>Transcript Ref. Page no's</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.00</td>
<td>Alick Shaw - DMC chair</td>
<td>TPA</td>
<td>Opening</td>
<td></td>
<td></td>
<td>1374</td>
</tr>
<tr>
<td>9.02</td>
<td>Anne Marie Broughton, Dr Christine Cheyne (by Skype), Vicky Domborski, Dr Robert Shaw</td>
<td>Taranaki/Whanganui Conservation Board</td>
<td>Representation</td>
<td></td>
<td></td>
<td>1374</td>
</tr>
<tr>
<td>9.17</td>
<td>DMC</td>
<td></td>
<td>Questions</td>
<td></td>
<td></td>
<td>1378</td>
</tr>
<tr>
<td>9.55</td>
<td>Jacq Dwyer</td>
<td>Patea Historical Society</td>
<td>Representation</td>
<td></td>
<td></td>
<td>1389</td>
</tr>
<tr>
<td>10.02</td>
<td>DMC</td>
<td></td>
<td>Questions</td>
<td></td>
<td></td>
<td>1392</td>
</tr>
<tr>
<td>10.05</td>
<td>Glenys Ellet, Graham Ellet</td>
<td>Waitotara Patea Surfcasters Club</td>
<td>Representation</td>
<td></td>
<td></td>
<td>1394</td>
</tr>
<tr>
<td>10.17</td>
<td>DMC</td>
<td></td>
<td>Questions</td>
<td></td>
<td></td>
<td>1399</td>
</tr>
<tr>
<td>10.20</td>
<td>Morning break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.43</td>
<td>Lyn Pearson</td>
<td>Sustainable Whanganui</td>
<td>Representation</td>
<td></td>
<td></td>
<td>1401</td>
</tr>
<tr>
<td>10.49</td>
<td>DMC</td>
<td></td>
<td>Questions</td>
<td></td>
<td></td>
<td>1404</td>
</tr>
<tr>
<td>Time</td>
<td>Name</td>
<td>Role</td>
<td>Presentation/Video Content</td>
<td>Duration</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>10.52</td>
<td>Dr Robert Shaw</td>
<td>Representation</td>
<td></td>
<td>1405</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.06</td>
<td>DMC</td>
<td>Questions</td>
<td></td>
<td>1409</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.18</td>
<td>James Croker</td>
<td>Representation</td>
<td></td>
<td>1413</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.36</td>
<td>DMC</td>
<td>Questions</td>
<td></td>
<td>1421</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 11.40 | John Hubbard      | Representation        | TTR Mining Resource Consent Application Submission  
NZ45 Cape Egmont to Rangitikei River Map | 1425     |
| 11.55 | DMC               | Questions             |                                                                                               | 1432     |
| 12.06 | Lunch break       |                       |                                                                                               | 1437     |
| 1.04  | Lincoln and Deanne McCrea | Representation | Video                                                                                         | 1439     |
| 1.16  | DMC               | Questions             |                                                                                               | 1441     |
| 1.27  | Ian Poff          | Representation        |                                                                                               | 1444     |
| 1.37  | DMC               | Questions             |                                                                                               | 1446     |
| 1.40  | Ron Hepworth      | Representation        |                                                                                               | 1448     |
| 1.58  | DMC               | Questions             |                                                                                               | 1451     |
| 2.05  | Mark Donald       | Representation        |                                                                                               | 1452     |
| 2.17  | DMC               | Questions             |                                                                                               | 1454     |
| 2.19  | Michaela Stoneman | Representation        |                                                                                               | 1455     |
| 2.25  | DMC               | Questions             |                                                                                               |          |
| 2.26  | Lyn Pearson       | Representation        | Mole created coastal reserve                                                                  |          |

Devon Hotel, 390 Devon Street East, Strandon, New Plymouth 8.03.17
<table>
<thead>
<tr>
<th>Time</th>
<th>Name and Position</th>
<th>Topic</th>
<th>Details</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.37</td>
<td>DMC</td>
<td>Questions</td>
<td></td>
<td>1458</td>
</tr>
<tr>
<td>2.42</td>
<td>Hinemaria Ward-Holmes and Heather Cunningham</td>
<td>Representation</td>
<td>Submission</td>
<td>1460</td>
</tr>
</tbody>
</table>

  Save Māui's Dolphins today! Song, available at https://www.youtube.com/watch?v-OUYLBX-gbla

<table>
<thead>
<tr>
<th>Time</th>
<th>Name and Position</th>
<th>Topic</th>
<th>Details</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.58</td>
<td>DMC</td>
<td>Questions</td>
<td></td>
<td>1464</td>
</tr>
<tr>
<td>2.59</td>
<td>Afternoon break</td>
<td></td>
<td></td>
<td>1464</td>
</tr>
<tr>
<td>3.16</td>
<td>Paulina Sadowska and June Penn</td>
<td>Representation</td>
<td></td>
<td>1464</td>
</tr>
<tr>
<td>3.34</td>
<td>DMC</td>
<td>Questions</td>
<td></td>
<td>1471</td>
</tr>
<tr>
<td>3.37</td>
<td>Joanne Lynne Massey</td>
<td>Representation</td>
<td></td>
<td>1472</td>
</tr>
<tr>
<td>3.46</td>
<td>DMC</td>
<td>Questions</td>
<td></td>
<td>1475</td>
</tr>
<tr>
<td>3.49</td>
<td>Lisa Schill</td>
<td>Representation</td>
<td></td>
<td>1476</td>
</tr>
<tr>
<td>3.55</td>
<td>DMC</td>
<td>Questions</td>
<td></td>
<td>1479</td>
</tr>
<tr>
<td>3.56</td>
<td>Sebastian Mueller</td>
<td>Representation</td>
<td></td>
<td>1479</td>
</tr>
<tr>
<td>4.01</td>
<td>DMC</td>
<td>Questions</td>
<td></td>
<td>1481</td>
</tr>
<tr>
<td>4.02</td>
<td>Chris Wilkes</td>
<td>Representation</td>
<td></td>
<td>1482</td>
</tr>
<tr>
<td>4.08</td>
<td>DMC</td>
<td>Questions</td>
<td></td>
<td>1484</td>
</tr>
<tr>
<td>4.13</td>
<td>Denise Lockett</td>
<td>Representation</td>
<td></td>
<td>1486</td>
</tr>
<tr>
<td>4.26</td>
<td>DMC</td>
<td>Questions</td>
<td></td>
<td>1490</td>
</tr>
<tr>
<td>4.29</td>
<td>Adjourned</td>
<td></td>
<td></td>
<td>1492</td>
</tr>
</tbody>
</table>

Devon Hotel, 390 Devon Street East, Strandon, New Plymouth 8.03.17
MR SHAW: Good morning, everybody and I think it might be a case of welcome to the new normal in terms of numbers. But we'll move directly on to hearing from Ms Broughton and Ms Cheyne on behalf of the Taranaki/Whanganui Conservation Board and Dr Shaw. And on Skype, is that Ms Cheyne, is it?

DR CHEYNE: Yes.

MR SHAW: Yes. Welcome, Ms Cheyne.

CR CHEYNE: Thank you.

MR SHAW: Ms Broughton, would you care to introduce the rest of your colleagues for those that don't know them?

MS BROUGHTON: Yes, certainly.

(Māori content)

And before I do so, look, I really do want to just firstly acknowledge you all for the work that you are doing. This is my third day and I'm just astounded by the amount of material and the length of your days. And I hear that you didn't finish till about 8.00 pm last night so I just really want to acknowledge you and thank you for your stamina and your focus, and your engagement with us. So thank you very much.

MR SHAW: Could I say just on that, and I think it is worth doing this now, but this is addressed to Ms Broughton, personally and others in the room; that we have appreciated the undoubted - I'm sure - behind-the-scenes exercise of influence to ensure that this was run as it ought to be; respectfully, quietly and according to the rules. And I'd like to acknowledge that effort because it's important and it is appreciated and acknowledged by the DMC. So thank you.

MS BROUGHTON: Thank you. So, this morning with me I have two members of our Conservation Board; Vicky Dombroski and Dr Robert Shaw. And joining us on Skype is Dr Christine Cheyne. Dr Cheyne, mōrena.

DR CHEYNE: Mōrena.

MS BROUGHTON: She is not a current member of the board but she preceded me. I've been on the board for six years and Dr Cheyne was responsible for taking the lead in the first application by Trans-Tasman, and also in the preparation of our second submission. She also led the board portfolio for threatened species in her time, and specifically Māui’s dolphins.
So the board has eight members; six are appointed via the public process and two are iwi members -- sorry, appointed by iwi. They have a statutory position on the board.

MR SHAW: Just so I understand, and the balance of the members are appointed by the Minister?

MS BROUGHTON: Yes, through the public nomination process.

MR SHAW: Okay, thank you.

[9.05 am]

MS BROUGHTON: So the two iwi appointments; one is from Whanganui Iwi and the other one is from Taranaki Māori Trust Board, which represents the eight iwi north of Whanganui.

So we are an independent body. We are there to represent the public and specifically iwi. We are not constrained by the views or the position of the department so there are occasions when our position will be different to that of the department. It's rare not to agree; this is the first time in six years that the Conservation Board has taken a different position to that of the department.

So, one other comment I just did want to make before I hand over to Dr Cheyne is that I note that there was a paper released, looking at the submitted positions on matters. There was an analysis done on the submissions and there was a reference to about 98 per cent of the submissions received being received through a third party process. And 262 were direct submissions. I just want to communicate to the Board that it seemed in the analysis of those submissions that the -- it was curious that the submissions made by 98 per cent of the submitters weren't analysed in the same way that the 262 direct submissions were analysed. And the message it gave to us, was that it was like those 13,000 submissions were treated differently and perhaps weren't given the same weighting as the 262. So one of the things I want to communicate to you is that I would encourage you to look at the process for submitting via the EPA website. It was really difficult to find the submission form. So personally, we sent our people through the KASM website because it was easier for them to get to the submission form; being, straight up there on the front page. But on the EPA website, you had to trawl through to find it. So just some feedback. Thank you.

MS McGARRY: Just on that point, and I wanted to make it yesterday a couple of times and the opportunity moved on. But I just wanted to reassure everybody that despite the way the analysis was undertaken -- and I mean, we're
conscious that all of the submissions were sorted for us, and any pro forma submissions that had even one extra line were separated out for us. And I can hand on heart, say that I read every additional line on every submission and every page, even including Ms Pratt's 700-page submission. So I think that all parties in this process should be reassured that the DMC has in fact looked behind the analysis and we didn't have the analysis until we were actually into the hearing process. So, although that's something that we will look at, it's certainly not been the focus of our preparation going into the hearing. So I just wanted to reassure you and all parties that we have looked at every individual submission.

MS BROUGHTON: Thank you. Right, so now I hand over to Dr Cheyne.

DR CHEYNE: Thank you Anne Marie.

(Māori content)

Thank you for the opportunity to join by Skype because I'm in Palmerston North. Just want to follow-up on a couple of the points that our Cheer has made, Anne Marie. The board has an important statutory function to advocate for New Zealand's natural and historic resources in its area of responsibility, which is from North Taranaki, from the Mokau River, down to Turakina River in the south and inland.

[9.10 am]

So this is an area of the marine environment that the board has responsibility for and very strong interest in. And our interest of course, is in the marine mammals in our area but also the benthic species. And we've learned a lot over the years, partly as a result of the first application by TTRL. And at that time, even prior to the 2013 application, we had had presentations at a board meeting in Taranaki, and then closer to the time of the 2013 application, we had a second presentation. So the board really took upon itself -- took seriously, its responsibility to be informed about the proposed activity and the applications.

We are also - to reinforce some of the comments that Anne Marie has made about submissions - the board's role is to be the eyes and ears for the department in the community, so we have broad representation and we have listened very carefully to the community. Also, the relationship with the departments and iwi partners is really important to us so we've taken on board their concerns about this proposal when we have reflected on the application.
So just to go to some of the points in our application; I won't repeat the things that have -- sorry in our submission; I won't repeat the written submission but just want to highlight our main concern, which is around the benthic environment and the impact of that. Now we made our submission some time ago - October - and when we could get access to submissions that have been made, we've tried to find out, and we've read some of the evidence that has been presented as well to increase our level of understanding about the effects of the activity. And in particular, I think, Taranaki Regional Council's submission serves to reinforce the points that we're making and the concerns that we have about the impact on benthic species and on a range of organisms and so on that create -- that contribute to the health of the ecosystem.

So we are wanting to reinforce those points about the need to ensure that any activity does not disturb that part of the ecosystem. Of course, the impact on dolphins and whales, New Zealand's fur seals and seabirds in the area are really at the heart of our submission. We particularly concerned about Māui's dolphin and over the years, the board has received a number of updates from the department and from others involved in protection of Māui's dolphin and regulations around that. It's something that we've had a statutory role in. We've had to be consulted and have input into those decisions so we've had a high level -- I would argue, high level of understanding about the effects on marine mammals.

We're particularly concerned about the effects of the plume on both benthic species and marine mammals. The creation of sediments, the reduced primary production and that's something I see Taranaki Regional Council has reinforced. I think it's a really important submission that they've made.

We're concerned about the level of scientific information that has been available to us and we acknowledge that over time, partly as a result of this application, understanding is improving but there's still considerable uncertainty. And that highlights the really important weight that needs to be given to community values. We're aware of both recreational use in the area, as well as the seafood industry, but in particular, the values of iwi in South Taranaki.

[9.15 am]

So our submission wants to acknowledge the importance of the values of those groups in the community in particular. And we appreciate the importance of the economic benefits of this, but we think that the environmental, the health of the ecosystem there and cultural values and other community values must be paramount in the decision-making process. And those values often have very strong synergies with the conservation values that the board has statutory responsibility to uphold.
MS BROUGHTON: Thank you. Thank you, Christine. Just the last comment I would make is that our board has a strategic plan and one of the strategic objectives of our plan is to promote the conservation economy. So again, I would say that while our role is to advocate for the restoration, protection and enhancement of the environment, we are also very conscious of the place that our natural resources play in the development of our economy.

But we look at all of these applications through the lens of, what is the effect of this activity on conservation, on our natural environment? So, really just want to stress that the board has a wider view of conservation and is very conscious of the requirement to support the economic development of our region.

MR SHAW: Do your colleagues want to address us, at all?

DR SHAW: No, not really.

MR SHAW: Or even if you don't want to, do you intend to?

MS DOMBROSKI: Well if you ask a specific question, maybe then (overspeaking)

MR SHAW: That's fine. We'll move then to questions.

MS DOMBROSKI: Okay.

MR SHAW: And I think, begin with you, Mr Thompson?

MR THOMPSON: Thank you, I think your submission's quite clear. You've identified the key issues. We understand those key issues now and so I have no questions. Thanks very much.

MR SHAW: Mr Coates?

MR COATES: I notice you've done quite a lot site visits to the coastline: is the any particular things that you might point us to? Because we have yet to do a site visit in this area and we're just canvassing for suggestions from the applicant and other interested parties.

MS BROUGHTON: Yes, right. Well we -- certainly with my other hat on, as Te Kaahui o Rauru, we are looking for sites for you. But I think what was raised yesterday is the importance of the low-lying reefs and so that is something that we would definitely want to bring your attention to.

The other thing is we would want to bring your attention to the effects of the floods on our region. I was astounded actually yesterday, when you posed the question to Mr McLay about the weather events in our region
because I really would want to show you evidence of the floods that we
had in 2003 that flooded the Waitotara village and two of our marae and
many houses. The same in 2004 and the same in 2015. So I would
encourage you to look at the topography of our lands and the effects that
the flooding has had on our landscape, on our river and obviously, on
our marine environment. So I'm not sure that he actually understood the
question fully yesterday because I was surprised by his response.

But those are some of the areas that I can think of but I'll just ask my
colleagues here; they might have others.

[9.20 am]

MS BOMBROSKI: Well no, I gather that it will be difficult to get out onto the water. The
area is wild West Coast and I'm not sure how many -- if this application
goes through, how many days even that the mining operation will be able
to operate at. So it's pretty rough out there and can be unforgiving so,
good luck. If you choose to go by boat and sit out on the water that's
about all I have to say, I think.

MS BROUGHTON: Yes, okay.

DR SHAW: No, I don't.

MS BROUGHTON: I guess the only other regions that we would think of within our
catchment would be our marine reserves, which are obviously north of
the project area. They'll be a lot easier for you to get to. So yes, that's
what comes to top of mind.

DR CHEYNE: And if I could just add to that, yes, I was going to mention the marine
reserves because they are an important understanding of that wider ecosystem. And also, we had visits, going back many years, just looking
at the effects of erosion of the sea cliffs because it is a very dynamic
environment. There is actually some very important species on those sea
cliffs but they're also threatened by invasion of pest species and so on
and the changes that have happened on the coastline. But it's possible –
there are important things still there to protect.

MR COATES: Thank you very much.

MR SHAW: I must say I have thought occasionally during this hearing of a quarry
closure in Wellington; the Owhiro Bay quarry and when I was elected to
the Wellington City Council, a group of us resolved that was to be
purchased and closed. And it was a deal done by a group of counsellors
who aligned themselves with counsellors from an entirely different
political tradition and all hell broke loose about the overall relationship.
But the quarry was bought; the quarry was closed. Now this facility had
a huge impact on an inshore environment because basically, what was happening is the cliffs were being brought down. The material was being washed on the coastal platform and then taken away as aggregate. It's now a park and it was a very short while indeed, I've got to say, before the impact of that mining and the water that I'm talking about on the surface, as you're looking from the water, seemingly disappeared. And I fished and dived that area during those days as well.

And so it does go to that question, the extent to which you have as a board, considered this question of the regenerative capacity of the environment. And I'd like you to talk about that, because it is a material question. It's one of the factors that we're obliged to take into account. So I mean, I don't mind who answers it and I don't mind a fairly broad response. And you will, Dr Shaw, be entirely familiar with the territory I'm talking about.

DR SHAW: Yes, thank you, Mr Chairman. And yes, I am just make a couple of points about it; I mean, whilst we see the rejuvenation of areas of the coastline after events, and the restorations, and whilst I do appear to be quite prompt, and you can think of what happened at Leigh when they put the first marine reserve in. There's always a question to be asked about what species actually do come into the area after the event. And one of the concerns that we have in this particular case is with the sponge gardens and the periphera that is there because we really don't know all the species that are there at the present time. And that's significant for us for a number of reasons, but one of which is that they may have species, which have considerable commercial importance in relation to the pharmaceutical industry. So there's actually an opportunity cost or an opportunity hidden within this.

So it's going to depend; if we do go to the point where this restoration of the coast in - well, I don't know, 30 or 40 years' time - is it going to be the same species that are returned? Or will we be losing things that we will never get again? So that's how I'd answer your question, Mr Chairman.

[9.25 am]

MS DOMBROSKI: Yes, I tend to concur with my colleagues. We have to kind of position ourselves in the middle of two varying degrees, so where mining is a resource that has unknown effects and is an illusion based on human superiority and entitlement, to how do we support the spiritual needs and the people at place needs. When you look at the economy in Patea and surrounding districts, I would argue that there's probably a high deprivation index there. Can we assist then to utilise the environment, while at the same time restoring it to make ends meet? And I don't think...
mining is the answer, especially when 45 per cent of it is owned offshore. I don't know that the jobs will go to the people at place. Who knows that? Who knows the effects the mining of the sand there? Is it setting a precedent for more mining in between our two reserves? Parininihi Reserve, as Robert alluded, to has got unknown sponges there with unknown potential benefits to society.

I know that there is also reefs out off the Patea coast as well, which may well have the very same sponges that we could take advantage of, rather than the bulk mining process that is considered today. That's all my comment. Thank you, Anne Marie.

DR CHEYNE: And if I could just add to that, that the board is acutely aware of the need to regenerate and the possibility of regeneration of a lot of degraded environments and we're aware, and the department has been participating in ecological restoration in many parts of the conservancy.

We're also aware that that can be extremely challenging. Sometimes there are success stories for your habitat perhaps and some other -- but it's also very costly often and it's very long term in many cases. And it's preferable not to degrade the environment in most cases and so it would have to be approached very carefully I think. We see a lot of difficulties with adaptive management and weaknesses if it's not properly monitored over time and as part of the process.

So it's a challenging one and our statutory focus is on conservation. We see species that are on the brink of extinction; Māui's dolphin and it's a real challenge to regenerate in some cases and it will have implications on New Zealand's international standing in conservation. And so we do look very carefully and we are very heartened by some recovery that has happened but it takes enormous effort and investment.

MR SHAW: Actually, in the case of Owhiro Bay, it took stopping the mining and Tangaroa did the rest actually. Because there was nothing else to be done. Because boy oh boy, you think you've got rough water here, try that.

But anyway, that does bring me to another -- and that question of restoration is important and I raise -- just bear with me a moment, Ms Broughton? I raise it because it's this question of the things that we've got to take into account. And there's another matter in respect of how we take things into account that I want to talk to you about because it was a focus of your submission. And that is the weight given to community values. And Ms Broughton, who's been with us for the last two particularly, as days will understand that we've been struggling with that we think of it in the Māori realm and the impact of those values on the decision-making we have.
But the legislation's quite unlike the RMA in this respect. You know, it's a pretty clear piece of legislation that directs us to look at the physical impacts of the proposed activity. And there is no provision for talking about the cultural and spiritual development, which exists within the RMA; it's not there. And on one level, that's as if the EEZ was devoid of humanity in terms of the way it's drafted.

And so this question of values, I think, in the Māori dimension, it's pretty clear that what we do and the decisions we make have got to be consistent with, or take into account sorry, the principles of the Treaty.

So I want you to talk to me about this question of values because it's -- in the broad sense it's something that's been raised by many, many, many people. And I think when you got very close to saying it was about no disturbance to this realm, well that's not what the legislation says. So let's talk about that briefly, in terms of how we can account for these community values while also applying the law. And I'm not expecting lawyers' answers.

DR SHAW: Yes, thank you, Chairman, for a pretty profound question actually. I think that one way, and only one way, that you can approach this question is recognise that the statute that you are working under appears in a context. It comes in the context in New Zealand's parliament in terms of New Zealand's society and in terms of everything that's going on in our community and the changes that have taken place.

And I don't think that it's really an adequate take on the situation just to say the legislation has narrowed things down and we can only henceforth confine ourselves to a very narrow set of concepts.

The context important, and I think New Zealand's learnt that over a long period of time and I think it's one of the strengths of our country, and I think, therefore, that it's very legitimate that you should ask this question and that you should see a positive answer to it, because you are not just dealing with a set of very confined concepts, you are dealing with a whole range of societal matters, and that comes to you from an Act of Parliament.

DR CHEYNE: If I could just follow up, Anne-Marie?

MS BROUGHTON: Sure, go for it.
DR CHEYNE: Is that okay? I was just going to add that values are rooted in and sometimes inseparable from knowledge, and I would argue that that's particularly case in the situation of Iwi in their environment, in the mana whenua that they exercise. Its base values are based on the experience, the knowledge of what the impacts of human existence, for example, are on the environment, on the ecosystem. So sometimes the full understanding might not be there, but there is certainly knowledge, and that informs values around the way in which resources might be used.

MS DOMBROSKI: Kia ora, thanks, Christine. It's interesting, isn't it, value implies a dollar amount, but also -- I understand what you are saying, values also are intrinsic to human beings and potentially spiritual and tangible things that we can't feel or see but -- well I beg your pardon, we can't see or hear, but we do feel as human beings.

If we valued water with a dollar value, if we valued our species in the oceans with a dollar value, would they be more protected? Would they fit into the law as it currently stands?

I am not a lawyer, I have done some law papers and they just blow me away because I'm quite a people person and they don't tend to take people into effect. We are part of this ecosystem as well, and I think that we have this illusion of superiority and entitlement and it's kind of wrong. We are just another species here, albeit we are probably the top of the chain. Well, that's where we put ourselves anyway. But we also disturb that balance by bulk taking of natural resources that really have no chance to rejuvenate if you're taking so much in one confined space in a time limit.

So even Māori values are ones that resonate with our area and with our board, and why we have set our strategy so that we can -- when we are faced with conundrums like this, we can go to the strategy and go, "Is this -- does this fit within our strategy?" And we asked ourselves that. We have been working on this application for a long time and it just kind of doesn't. There's no balance in there. And I'm not sure if that answered your question at all. Probably not.

Okay, so you made particular mention to Māori values. I'm going to submit that Māori values are actually human values and much of them are the same. We might have different words, but if I think of myself as Māori and my husband who is non-Māori, you know we have a value of whanaungatanga and whakapapa, so a value of valuing our families and our history, he's exactly the same. We have a value of manaakitanga, hospitality, looking after people, he's exactly the same. We have a value of kaitiakitanga, and he's exactly the same, he's a conservationist.
have a value called wairuatanga, spirituality. My husband was bought up in a very strongly Christian family, which as an adult he doesn't relate to. He gets his spirituality from being on the land, working on the land and in the bush; he's a tramper. That's the same, you know.

And so I think that it's important that when we think about these values that we acknowledge there is a way -- some differences in the way that we practice them, but actually underlying them are values that are just very, very common to all of us as human beings.

So when you talk about the Act making no provision for talking about cultural and spiritual values, I don't think the Act is supposed to be devoid of being representing the human values, and I think that there are other -- as was pointed out by the lawyers, there are other pieces of legislation, other commitments that we have that sit within the EPA legislation, or sit above the EPA legislation, which you must give weight to. So that would be my take on your question, Mr Shaw.

MR SHAW: I suspect this is a conversation that could go on much longer than the hearing itself.

MS BROUGHTON: Sure.

MR SHAW: But we are going to stop it there. Thank you for having a crack at answering, because it is an issue we are going to have to grapple with, as I say, particularly when thinking about the issues that have been on the table over the last couple of days.

MS BROUGHTON: May I just answer --

MR SHAW: Absolutely.

MS BROUGHTON: -- your previous question with regards to the effects on the environment?

MR SHAW: Yes.

[9.40am]

MS BROUGHTON: So I want to communicate a conversation that I had with a DOC officer, who is a very long-standing DOC officer in our region, Jim Campbell, when we were talking about the Trans Tasman resources application, and talking about the project area, and that the applicant has stated that basically it's a pretty barren area of just sand. And he is a diver and he has very strong links into the community, particularly divers and fisherman, and he said to me, "Look, Anne-Marie, we don't know what's out there, because what we find is that you can be moving along the sea
floor, and it will look as though there's nothing much there and then this deep crack will open up."

I mean we heard yesterday about the 4 km crack, but he said that there are cracks out there that you just discover, and underneath those cracks are whole ecosystems that you wouldn't know are there unless you really explored them.

So I just leave you with that, that there's a lot of unknown out in our marine environment. Kia ora.

MR SHAW: Ms McGarry?

MS McGARRY: Has the board been in a position to keep up with the joint witness statements as they've been coming through, through the process?

MS BROUGHTON: No way.

MS McGARRY: No.

MS BROUGHTON: No way.

MS McGARRY: One of the things that's been coming through that is very much the idea that on a South Taranaki Bight scale context, and on a population context in terms of species, that the effect of this application will be minor. And then if you step back from that, back down to the more localised scale, I think there is a general acceptance between the experts that there will be a moderate effect on individuals. And we've scratched away at what that radius would be, but let's say it's looking like somewhere between 2 to 3 to 5 kilometres of the site.

My question really is about your submission really focusses on the proximity of this application, particularly to the Māui's dolphin habitat. And I guess my question for you is, is your focus really on the closeness, that proximity?

If this application wasn't, in your view, as close to those values, and it's a hypothetical question I know, but is it -- is that the key issue, or is the key issue for you not so much localised effect but more accumulative effect on the wider environment?

So there are a whole lot of questions in there, but it's really just -- when I look at your submission, you talk about proximity to the dolphins and that doesn't really give me an idea of what your key concern here is.

DR CHEYNE: Can I perhaps elaborate, or respond initially? The impact on Māui's dolphins' habitat is one element of the submission. It's been an
important one because of the attention that we've had to give to the regulations, Māui's dolphin and the information we have about its movement up and down the coast. But it's also the benthic species that we have had information about and learned about as a result of the last application and now this one.

And so the information that was there, and we refer quite a lot to the key issues report of the EPA, we also read some of just after this submission, was some sent in some of the more recent evidence from other experts around seabirds and penguin -- other species. I'm just trying to think, John Cochrane's evidence and so on.

So there are -- it's not just Māui's dolphin. Is it about the proximity or cumulative? It's both. So it's the effects of that plume over quite a -- over a very long time. So it is cumulative but it is also in the case of Māui's dolphin a concern about the range in which that dolphin has been found.

[9.45am]

MS BROUGHTON: And I would say that the -- our concern is for all the local effects within that project area and surrounding -- and the surrounding area, the distributed effects across the inshore areas, and the accumulated effects. And as to the question of the effects being minor or moderate, for whom? If you're at the bottom of the food chain, that benthic community, and you're being sucked up and ground and spat out again and defaunated, then I would say that the effects on that community, that habitat are major.

MS McGARRY: One of the other things we have to do as a DMC under the Act is to look at the effects of existing activities. And if we -- when we have to start scratching our way into those issues, a lot of things have come through the evidence that are having significant adverse effects already on the environment; sedimentation from the rivers, fishing, existing commercial fishing practices, particularly benthic trawling, effects on seabirds and mammals from fishing, the oil and gas industry, noise from traffic -- from marine traffic already. These are things that we are going to have to weigh up as existing lawful activities, whether they are permitted or consented. And then we need to look at the effect of this activity in comparison to, and also as a -- on top of these effects.

I just wonder if you could give us what your view is on -- it could be said, and I'm not saying it's my opinion, but it could be said that these effects are very minor in terms of on top of some of those other existing activities. I'm just wondering what your view on that would be?

MS BROUGHTON: Do you guys want to speak to that?
DR SHAW: Well it's a judgement to make, isn't it? And I don't know if I'm qualified to make that judgement having not heard the evidence that you've heard. But I would say that I'd ask you to consider the perspective that you must not just judge Taranaki as it is at this present time. I mean we are a very underdeveloped province, and I'll talk about that a little bit in my submission later. And so you must be considering also, I think, the opportunities that are there to develop Taranaki, and how your decision will impact on the potentials that are within the environment and within the population.

MS McGARRY: So in your view then our consideration of existing interests would include future interests?

DR SHAW: Well it has to because the applicant said in answer to one of Mr Shaw's questions that the -- no, it was Mr Coates' question, that this is a 20 year 24/7 operation, and -- well, he -- in his evidence he said 20, but perhaps he said 35 as well.

The -- that means that you've got to consider not just today, but where we are going in the future and what that might be.

MS McGARRY: Yes. Now I don't want to get into pitting the Conservation Board against the Department of Conservation but we have got an interesting situation where we will be looking at the obviously polarised views. And I must say I'm struck by one comment in the Department's analysis, which is that there are no further conservation gains to be had. And I just -- I know you're not the department, but I do want to hear your comment on that and whether even if we were in a position that we were going to grant consent and there was going to be some kind of a further comment on conditions, whether that's in fact your viewpoint that there's no further conservation gains at this point?

MS BROUGHTON: Look, we are dumbfounded that the department would make that kind of statement. Because it actually leaves out the essence of what we're about. It's not just about conservation gains, it's about conservation protection and conservation enhancement. And we are absolutely dumbfounded and extremely disappointed with the department's position and this statement in particular.

And to give some context, the department's position is the department's position, but what they acknowledged and apologised for is that they changed their position between their -- the 2013 and 2016 without talking to us as a board, and so we weren't aware of their position until after they stated it. So they did apologise and have acknowledged that...
their engagement with us, as representatives of the community, was inadequate, and we will be addressing that with them to ensure that, on their request, to ensure that processes are put in place so that it doesn't happen again.

Anything further to add?

DR SHAW: I mean the department has been very positive and open about this situation, and we are working with them to consider their procedures and what actually happened to give rise to the issue that you've raised, and I think that's going to work out well. Should we of course have had better procedures and greater consideration it might well have been that the department did not make that statement, which unfortunately they did.

MR SHAW: They did.

DR SHAW: Yes, they did. I know.

MS McGARRY: Well I guess my question was more along the lines of I am sure that all parties, including yourselves, that when we go through a process of revision of conditions and comment on those through this process, that you will see some value in having input to that, and that's where the nub of my question is really is that do you see there can be more conservation gains even within this process, regardless of the outcome?

DR SHAW: It's a difficult question. Because you're going to ask us if we say yes, what they are, and if we say no then we're signing up to something which we don't agree with.

MS McGARRY: Well, no, I'm not trying to hold you to anything, but I guess that it's an acknowledgement that being in the process itself could result in further conservation gains. Would you agree with that?

DR SHAW: I mean I think that all things considered, on balance, there are always opportunities to advance the conservation agenda, and particularly now that we are looking at conservation more in relation to economic matters. The concepts are changing in relation to conservation, and it's early days. And so I would say that we cannot be sure whether there are going to be enormous gains, but I would say that there have to be some gains.

MS McGARRY: Thank you.

MR SHAW: I'm just going to make a very brief comment of something that arose in the exchange between Dr Shaw and my colleague, Ms McGarry. We're not interested in holding people's feet to the fire so that they say something that may appear on the face of it to compromise something they've said earlier. Nonsense. It's not our intention. It's of no value in.
terms of making a decision, which is based on information. So as far as we're concerned there are no "gotcha" moments in this process that arise from what appear to be curly questions. These are simply intended to illicit information, not to entrap witnesses on any side at all. And indeed the procedures that we follow, which have been so heavily criticised by many submitters not to allow cross-examination, go particularly to that question of not creating a sort of enquiry that means you can't win when you answer it, because that doesn't help us. I mean you didn't do it, and I'm sure -- and that was clearly not Ms McGarry's purpose, but I say it because I think it's really important people understand why we've adopted the process as we have, because you put your finger on something that's been somewhat controversial in terms of the way that we've approached these things. That's just by way of explanation.

Any further questions, because I think we are probably heading into pressing on territory.

[9.55am]

20  MS BROUGHTON: Cup of tea time.

MR SHAW: Sorry?

MS BROUGHTON: Cup of tea time.

25  MR SHAW: Not quite, there's more duty to be followed before that, Ms Broughton.

Thank you all very much.

30  MS BROUGHTON: Thank you very much.

MR SHAW: Dr Cheyne, thank you for joining us from -- by Skype, through the ether.

MS BROUGHTON: Thank you, Christine.

35  MR SHAW: Okay.

And Mr Hassell, is Mr Hassell in the room?

40  A cup of tea may be getting closer by the moment.

Okay. Patea Historical Society? You're Ms Dwyer?

45  MS DWYER: Yes, I am.

MR SHAW: Welcome, Ms Dwyer.
MS DWYER: Yes, thank you. Thank you, so I'll just introduce myself to everyone. I am Jacq Dwyer, and I am the president of Patea Historical Society among other things, and I, of course, am speaking in opposition of the seabed mining on behalf of our organisation.

So in my written submission, which was incidentally via the KASM website, I outlined our concerns, the two main ones being the lack of consultation with the community of Patea in particular, and the lack of knowledge by TTR of the area that would be affected if the proposal goes ahead.

So I'll just give you a bit of a background on Patea, which I know you have had a few people from Patea speak already, but I will just reiterate that.

So we're a town and we have been stripped over the years of many resources and infrastructure, and in spite of this, or maybe because of this, we have become a town that prides itself in its popular beach and coastline and beyond this, the ocean. And the concept to us of being recompensed for what TTR want to do out there doesn't make our eyes light up at all.

Money or jobs cannot cover the risks involved in their proposed project, and their application documents show that most, and if not all of these highly skilled jobs will be coming from out of the region.

We found it odd that there were no community meetings organised by TTR in our area, and from what I understand, they only had meetings with the executive members of the South Taranaki District Council.

And I'm a member also of the Patea Community Board, and we weren't contacted at all by TTR, and for that reason, and a few others, the Patea Community Board, who I have spoken to about this, also oppose this project.

For us the possibility of up to 35 years of being locked into this seabed-mining project in an area where the township nearest to it is left in the dark, is just to us, rude and unethical on the part of TTR.

The fact that this type of extraction has not been tried anywhere else in the world either, and they want to do it in an area, which we have been told, and we all know, has the finest iron ore sand, and also a unique and abundant living reef colony, which has been discovered more and more every day, and also Blue whales, is like watching a bad car crash.

And from what I understand there's also nowhere else in the world where there has been a vessel of the size of the processing ship that would float
above the mining machine sitting in relatively the same position pumping out emissions constantly.

I've got a map here, which it's going to be a little bit hard to see, but it's from the proposal that Tonkin & Taylor did. And what it's showing is how the emissions will travel across the water. It's appendix B, and it's the concentration and contours plots, and it shows here this large emission sort of outlay, which goes up onto the coast here, and I'll just read what it says. So the first part is sort of okay:

"The maximum ground level concentrations predicted to occur on land for all contaminants considered in this study are well within the relevant New Zealand air quality standards and guidelines."

And but this is the more interesting bit. It says:

"The maximum predicted ground level concentration of SO2 on land exceeds the 24-hour average World Health Organisation guideline. However, it is noted that this guideline is based on exposure over a 24-hour period and it is unlikely that there would be people exposed for this period of time given that the location is an unpopulated area of coastline."

[10.00am]

Now interestingly enough, inside that long arm that goes up there, which is actually following the contour of the Patea river, so it's a slightly lower area of land, and the rays show that it comes over to it, is right in the middle is a house with people living in it, and these people are Brett and Gabe Honeyfield and their four children. They built their home in this isolated spot on their farm about 10 years ago so they can enjoy the sea views. And Brett has also listed three or four other families that are within the coastal perimeter, probably within maybe 500 metres of his house, his worker and his neighbour, who are also along that coastline that will be affected. It goes much further up, so I guess the rays of the emissions won't be as strong further inland. But there is no mention of any air quality monitors on the coast to check these emissions, and of course after a 35-year period they will accumulate.

So I would just like to sort of end with a point that I am from a dairy farm, and my family have been farming the land down there for over a hundred years. And I'm certainly all for business and growth opportunities, but only when the benefits are greater than the risks. And I liken this project to leasing out a part of the farm for a couple of years to somebody for -- actually for three or -- two or three decades in fact, and allowing them to take most of the topsoil off and then give it back in the end and trying to farm on it again. Yes, there are ways to replenish
the soil, but it takes time and it's expensive and no farmer worth their salt would do that.

So I would just like to end with a reminder that I am speaking for the whole of the community -- well not the whole of the community, but for a huge amount of the community down there who I have spoken to and we all just want our ocean left alone.

MR SHAW: Okay. Ms McGarry, any questions?

MS McGARRY: No. Thank you for coming to see us today, we do appreciate it, thank you.

MR SHAW: Mr Coates?

MR COATES: It's interesting that you -- good morning.

MS DWYER: Good morning.

MR COATES: It's interesting that you are focusing on the historical society, but you are focussing on current things like the airborne pollution. And I commend you for the breadth of your interests.

MS DWYER: Yes.

MR COATES: Also, I'm just wondering about this fact that you said you weren't consulted by TTR. Were there no opportunities to --

MS DWYER: No opportunities.

MR COATES: -- interact with them?

MS DWYER: No opportunities, no. The only reason I really submitted it under Patea Historical Society, I have also submitted a submission under my own name, but as the society who has been active in Patea for over 60 years and we've seen a lot of change, we just want -- really wanted to be vocal and to put a submission forward about this, and there's certainly been no contact with any local members of Patea's community.

MR COATES: And did you try and contact them, but did you get a response/

MS DWYER: Well, we didn't quite really know who to contact. It would be -- I would assume that it would be better if they organised a group meeting for the community, but they haven't. So when these submissions became -- you know, when we were able to put a submission in, we did. That's been our only contact really.
MR COATES: Were there no call -- public notices calling for expressions of concern or --

MS DWYER: No.

5 MR COATES: Thank you.

MR SHAW: Mr Thompson?

MR THOMPSON: Thanks for your submission. No questions, thanks.

MS DWYER: Okay, thank you.

MR SHAW: And none from me.

MS DWYER: Thank you.

MR SHAW: Thank you.

20 MS DWYER: Did you want to see this map?

MR SHAW: We've got it, I think.

MS DWYER: You've got it?

25 MR SHAW: Yes.

MS DWYER: Yes, okay, thank you.

MR SHAW: It actually reminds me, and I'll just say to the -- there's not so many people here. No difficulty with what you had to say, but one of the rules about this game is that you -- when you make an oral contribution it's to elucidate on matters that are raised in your submission. It's a rule that has been entirely honoured in the breach rather than the observance during this hearing, but I'll make the observation that we are being liberal about not saying it's not within the scope of the original submission, which is the case with your air discharge evidence. It's of no consequence, I wouldn't worry --

30 MS DWYER: The only reason why I've --

MR SHAW: These matters will all be put in to account, and it doesn't matter why, because we are not enforcing it.

35 MS DWYER: Right.

MR SHAW: That's actually just a comment to everybody who's here.
MS DWYER: Yes, I didn't notice that map till after my submission and I just wanted to point it out.

MR SHAW: We are not -- no one's upset.

MS DWYER: Okay.

MR SHAW: Okay.

MS DWYER: Thank you.

MR SHAW: Okay.

MS DWYER: Thank you.

MR SHAW: Right, Waitotara Surfcasters Club? It's Ms Ellett, is it?

MS ELLETT: Yes.

MR SHAW: And you, Sir?

MS ELLETT: And my husband, Graham.

MR SHAW: Mr Ellett?

MS ELLETT: Yes.

MR SHAW: There we go. Welcome.

MS ELLET: Thank you. (Māori content.) Sorry. I am the secretary of the Waitotara Patea Surfcasters Club and have been asked to speak on behalf of club members, who along with other locals are extremely concerned about the potential for harm of this proposal.

I am representing those who have found this process too daunting to be here. Many are low-income earners or retired, and rely on what they catch to supplement their pantry. In addition, there is a club history of fishing competitively and socially. These are, and have been responsible fisher folks since long before that term was coined.

The health and the diversity of our ocean is of huge concern to them. Should this process not work according to plan A, it's not acceptable to tell local fisher folk to go and fish somewhere else. A very polite of
version of their reply would be for the mining to go somewhere else. A large area of the South Taranaki Bight would be changed throughout that 20 to 35 year period and for a considerable period afterwards, and these changes we have already talked about on top of what nature and pollution from river and other sources has created.

Our club members wish you to know that this to them is unconscionable and prevention is better than attempted repair. Our concerns are as written: the effects of sediment disruption size affects drift of the plume, the many forms of pollution which will result, the safety, the mooring and movement of the vessels, ethics, movement and sand dispersal, loss of habitat, reduced biodiversity and harm to the environment, in addition to other issues raised by KASM which -- with which we agree. And all for the benefit of who in the long and short term?

We believe that environmental and social responsibilities have not been sufficiently taken into account. There would be very little, if any, benefit to the local community in South Taranaki, which would be at most risk. We also believe that any proposed benefits have been overstated. We recognise that some questions and concerns raised will have been addressed during the hearing, but are not up to date with.

We really hope that you will err on the side of caution and we urge the DMA to decline this application. Thank you.

MR SHAW: Thank you, Ms Ellett.

Mr Thompson, any questions?

MR THOMPSON: No questions, thanks.

MR SHAW: Ms McGarry?

MS McGARRY: Thank you. Thank you for coming to see us today. I'm just wondering what your membership is of your group? How many people have you got?

MS ELLETT: We are a very small club, but we have 30, and the members are from Whanganui to Wainui -- Wainiu, Whanganui, Waverley, and as far down as Wellington, and we had a -- our most recent event was just a week ago, and we meet monthly.

MS McGARRY: And how long has your club been in existence?

MS ELLETT: Since 1970s.

MS McGARRY: 1970s.
MS ELLETT: So there is a -- quite a history.

MS McGARRY: In terms of -- have you noticed any trends in fish? We have talked to other clubs about what they have seen in terms of fish numbers and the general environment that you're fishing in. Have you noticed anything -- any trends over the years?

MS ELLETT: Club members talk about a change once -- when there was mining at Waipipi, and they talk about recovery taking some time since then. There are at the moment good catches. We also notice when the trawlers go through that the numbers -- the catches go down.

MS McGARRY: But in general you find your fishery in pretty good health?

MR ELLETT: Very good, yes, for a beach.

MS ELLETT: Surfcasting, yes.

MS McGARRY: Great. Well, thank you for coming to see us today.

MR SHAW: Mr Coates?

MR COATES: Kia ora. I just wanted to ask you whether do you notice that there is a difference when there is turbidity in the sea? Is it more difficult to catch?

[10.10am]

MS ELLETT: Yes, we do. And there's a lot of run-off from the river in the storms, yes.

MR COATES: From the Waitotara River?

MS ELLETT: From the Waitotara. And -- yes.

MR ELLETT: It recovers quickly because of the massive drift southwards mainly, but it recovers very quickly after a storm.

MR COATES: Yes, but it -- obviously, if there was sediment in the sea that didn't come and go very quickly it may have a different effect.

MR ELLETT: I believe so, yes.

MR COATES: Thank you.

MR SHAW: Thank you very much.
The cup of tea that was so -- promised so prematurely by Ms Broughton is now on the cards. So we will break in 20 minutes.

MS McGARRY: Do you want to check with the submitter whether she's coming back?

MR SHAW: Ms Ellett, you were also submitting -- thank you, Ms McGarry. You are submitting as an individual as well. Did you have another submission to make?

MS ELLETT: Yes, I do.

MS McGARRY: Let's do that.

MR SHAW: Well, why don't we do that first and then you can -- I'm sorry about that.

MS ELLETT: Yes, no problems.

I'm one who did use the KASM site initially to access the submission information. It's reassuring to hear that they have been taken into account. I realise now there will be points made that you have heard before, but to me they are truths that need be repeating, and it's reassuring to us that so many others do feel the same way.

(Māori content)

MR HAMMOND: Ms Ellett has just communicated that she considers Taranaki to be her mana of significance. She is from the Waitotara. In saying that, however, her significant other is from the Stratford area. And is also expressing the fact that she is a mother, she is a grandmother, and is quite angry about the situation, the way that it's developed.

MS ELLETT: Worried, yes, thank you.

My husband is usually a quiet man. He was a farmer and has always been a fisherman, river and sea. Since eyeing our cottage at the beach ten years ago, we have minded our own business, made friends, but kept out of the politics of a small community, until this.

We initially used our cottage as a weekend retreat, but quickly came to love the place, and we are now permanent residents. We have the most wonderful view of the sea from our home, and people say we have one of the best spots in the settlement. I have never seen my husband more passionate about anything, motivated not just to talk, but to action. He is angry and worried.
At 68 years of age, he's been around long enough to have become a little cynical and disillusioned by the system and its processes where too often the outcome is predetermined and players merely go through the motions, and he is now having to trust this system.

A chance comment led to Graham attending a meeting about seabed mining and he came home extremely concerned. This meeting was announced by KASM and there were no meetings in the area that were called by TTR or any other opportunity to hear their side of the story.

A man who had previously kept to himself, only recently joining the fishing club, as it's situated next door to us, and he helps maintain it, read articles, attended meetings, could speak of little else, and pushed himself to bring this to the attention of every household in the community, bringing himself to their attention in the process by knocking on the door of every permanent resident in the settlement.

[10.15am]

Graham collected signatures easily with all but one household supporting it, and that equated about 98% of permanent residents spoken with, the feelings were running high. There's still a great deal of discussion and debate in the community, with neighbours who were virtual strangers coming to bring and discuss newspaper clippings and such. The locals don't want the seabed mining. They are like Graham, they are hugely, highly concerned about the risks and potential for disasters, concerned about the effects of processing and displacement, damage to coast, mammals, birds, sea creatures and their fishing. They are worried about all the unknowns.

The ocean's not a laboratory. We live by it; we see it in action with its power and unpredictability. We have stood beside a 22-metre pigmy Blue whale washed up on our beach. A hugely awe-inspiring and emotional experience. We've also seen the pilot whale bodies washed up, mollyhawks, penguins, and prions amongst other species.

We love to take our grandchildren to the rock pools to watch the seals swimming and to collect mussels for a meal. We wish to protect the ocean, the health of which is already under threat, as are its many varied inhabitants. We cannot watch this go ahead and do nothing to try and prevent it. We need to be responsible guardians and caretakers for the future.

You all make the decisions and go home, but we at Waiinu will live with the consequences. All New Zealanders, and our many visitors may end up paying for them. It's been reassuring seeing our beliefs and some common sense backed up by the research of others and by experts in
their fields. We hope that you will have the wisdom and courage to deny this application. We have had to gather our courage without resources or experience in order to follow our conscience and try to fight it.

Thank you.

MR SHAW: Do you want to add anything, Mr Ellett?

MR ELLETT: No, that's my thing. That's my words. Yeah, I'm not very --

MR SHAW: Mr Thompson, anything from you?

MR THOMPSON: Yes, Ms Ellett, I guess retirement and the sea are very much one in the same thing to you after a lifetime on the land. How would that retirement change if what you currently enjoy is impaired?

MS ELLETT: Our conscience -- perhaps our retirement now gives us more time to focus on these issues, as working people you are in a groove and you don't look as broadly.

For us, our home we have the view of the sea, and we like it how it is. We are so ... There are so many unknowns with this, the what ifs. Let's not make something worse than it already is. We are talking about the responsibilities. How will our retirement change? We hope it won't change, but we don't know.

MR ELLETT: At the moment we can go down and -- at the -- just last week people have caught a lot of snapper on rod, even the kids have, and it's a good thing because there's so many other places in New Zealand that it's not possible now. It's either fished out or it's still very good fishing, and the boats as well. Agree.

MR THOMPSON: But do you most of your fishing from the shore, do you?

MR ELLETT: I do, yes, I'm not a good sailor. Not in that west of coast.

MS ELLETT: We've seen that --

MR THOMPSON: That's why you have grown to the age you're at. Thank you.

MS ELLETT: Sorry, it doesn't really answer your question, but --

MS McGARRY: Well I just want to thank you for having the courage to participate in the process. This is what the legislation is all about, in letting every person who wants to have their say, have their say, and I can't guarantee you of any outcome here. We're sitting here with very much open minds, the way we need to approach this, but I can absolutely guarantee you that on
this side of the table we will -- we are not going through the motions and it is -- certainly is not a predetermined outcome. So I hope that gives you some reassurance.

5  MS ELLETT:  Thank you.

MR SHAW:  Mr Coates?

MR COATES:  No, thank you for your submission.

10  MR SHAW:  Mr and Mrs Ellett, thank you.

MS ELLETT:  Thank you.

15  MR SHAW:  And good fishing.

MR ELLETT:  Thanks.

MR SHAW:  Right, and now the promised cup of tea is at hand, so we will be back at 10.35 am.

ADJOURNED       [10.20am]

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25  MR SHAW:  Just before we start again, Mr McCabe, I’m sorry to interrupt you but I was going to have to anyway because we are going to start. Mr McCabe, do you want to just sit down and just a procedural matter I’d like some advice from you on. It may be that you can’t answer it; that’s fine. Just a question I think that Gen discussed with you, Mr McCabe, earlier about when you thought it might be possible for Dr Torres to talk to us again. She was keen or you were keen that she should appear again in rebuttal having heard the evidence of Dr Childerhouse.

30  MR McCabe:  Yes, I thought that Ms Haazen sent in a statement from Dr Torres a couple of days ago.

MR SHAW:  Yes, we’ve got that.

35  MR McCabe:  Okay, and you’re suggesting there’s an opportunity for Dr Torres to communicate via Skype with the Committee?

MR SHAW:  I thought that was (a) what was wanted and (b) I think we would find it helpful.

40  MR McCabe:  Okay. Certainly, sir, I wasn’t aware of that. I’ll put that forward to Dr Torres.

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MR SHAW: Because there are a lot of numbers floating around as you will be aware, Mr McCabe, and we want to get some clarity --

MR McCABE: To clear it up, sure, sir.

MR SHAW: -- about what people are, in fact, saying and some of that uncertainty’s been addressed if not entirely been settled by what Dr Torres has had to say in that additional evidence.

MR McCABE: It would be good to clear that up, sir, if there’s uncertainty there, yes.

MR SHAW: Okay. Thank you. I don’t know, it’s late in the day, but any procedural issues, Mr Holm?

MR HOLM: Dr Torres’s evidence, has that been posted today on the website?

MR SHAW: It’s just come.

MR HOLM: Just in, is it?

MR SHAW: Yes, so it will be with you presently, I think. Imminently.

MR HOLM: Thank you, sir.

MR McCABE: I thought it was sent yesterday --

MR SHAW: Yes, but we’ve only just got hold of it and with issues around sinking machines and so forth I only saw it this morning.

MR McCABE: Sure. Sir, I’ll be departing now heading home for the rest of the week.

MR SHAW: Well, that’s a piece of self-indulgence which I think is entirely intolerable.

MR McCABE: Hence my mufti clothes, sir.

MR SHAW: Okay. All right. Okay. Nothing further from anyone? Mr Holm?

MR HOLM: No, thank you, sir.

MR SHAW: No? Okay, we’ll go back if we can then to submitters and we have, I hope, Lyn Pearson. Welcome, Ms Pearson, and you’re representing Sustainable Whanganui and you’re accompanied by?

MS PEARSON: That’s right. My husband, Graeme Pearson.
MR SHAW: Hello, Mr Pearson.

MS PEARSON: We’re both trustees on Sustainable Whanganui Trust.

MR SHAW: That’s fine.

MS PEARSON: You’ve heard a couple of previous trustees and we’d like to apologise for the fact that Hadi Gurton couldn’t deliver this but he couldn’t get the time off. He’s a zero-waste educator in Whanganui and the Ruapehu area so you’re going to hear from me twice, I guess, sorry.

We thought we ought to say a bit about the Sustainable Whanganui group. It’s an environment group that works towards encouraging sustainability and resilience in the community. We have a trust of 7 supported by another 13 volunteers on a regular basis - weekly - and we have a Google mailing group of 250 and a larger active Facebook, and we’ve recently established on Instagram.

We feel that TTRL has failed to address our environmental concerns. The applicants have not proved their proposal is safe and poses no threat to future sustainability. It has failed to provide active protection to Māori fishing taonga and kaitiakitanga and Māori and has failed to adequately engage with tangata whenua and, in fact, with any locals.

[10:45 am]

We also feel activating this proposal would breach some of New Zealand’s international treaty obligations. A precautionary approach to the major project of this nature is internationally recognised as a safe and legal requirement. We think the applicant’s consultation is incomplete and insufficient and, at times, has lacked integrity and information sharing. We’d like to see accumulated effect considered.

We believe the South Taranaki Bight sea floor and reef support a wide variety of organisms which in turn support a healthy complex food web. It may seem obvious but mining here will produce a dead mined site. If we dig 11-metres on dry land and took out all the soil organisms, we would have to do some major composting, mulching etc to get it back to a productive state eventually. Now, we wonder how the sea floor … to recover all by itself seems to be beyond our comprehension. This mining will also renew a non-renewable sand reserve. Some of this at least will be fine papa. Without its heavy metal component, it will be easily driven by the north-westerly wind down the coast to remain suspended in the sea for days. We also wonder how such a deep hole can be dug in the seabed in the first place and not collapse around the digging machine, and we wonder whether there is something we are not
being told here. We think that this is the reason that cables in the sea are laid in trenches.

We want people to remember that this is a high-energy west coast area. Disturbing the seabed may also stir up pollutants and some heavy metals. We are also glad to hear from the fisher-folk about the reefs, sponges etc in the area. We were concerned that they all might be removed or perished before we even got them fully documented.

Much marine life not affected immediately in the Bight will die for lack of sunlight; of suffocation caused by the plume. Where this will go, no one can be 100 per cent sure about. We don’t believe modelling with buckets is a good enough comparison. It seems amazing that marine mammals are not even adequately surveyed in this area because we think they are big enough and surely easy to see. We know that Blue whales are sensitive to heavy metals and noise; two things this mining will stress for them. We also know that DOC keeps asking us to keep an eye out for migratory whales and dolphins that go past Whanganui so we know that they’re heading up to the South Taranaki Bight.

Light and noise will also affect sea birds. There seems no attempt to qualify such effects. And then there are the plankton that live in the water columns, food for the whales etc. We would also like to support the idea of a bond, if this project does go ahead, as well as a liability insurance. The Rena was only a small wreck and it cost $130 million so not even $100 million would cover an oil spill accident in this proposed venture. The proposed ship with grinder will be using toxic heavy marine oil.

As regards jobs, we are wondering how many New Zealanders are trained to crew and operate a mining ship. We don’t want this proposal to go ahead. We don’t want to have to tell us grandkids and great-grandkids that our generation was the one that destroyed much of the South Taranaki Bight and damaged Whanganui’s seashore, especially those that want to go fishing.

We know scrap metal prices have all gone down lately. There are lots of scrap metal merchants in Whanganui so why is this process being considered at this time? There are several things in this proposal which just don’t seem to make sense and meanwhile there are still debates or information coming through the EPA website about how this actual proposal may happen.

In some ways, this seems a disingenuous process. Submissions were submitted months ago and, even more, most oral submissions have already happened. That’s -- yes.
MR SHAW: Did you want to add anything, sir?

MR PEARSON: No, no. I’m just here in support really. Thanks.

MR SHAW: Mr Coates?

MR COATES: Tēnā Kōrua. I just wondered what’s the most important thing in your submission that you’d like us to bear in mind when reaching our decision?

[10.50 am]

MS PEARSON: Well, I think we are concerned about what is happening with the fact that the plume is going to … no one really knows what’s going to happen with that and what area that’s going to cover and also there’s looking at this 11 metres that they’re meant to be digging down. It just doesn’t make sense really.

MR COATES: In terms that you don’t think you can excavate an 11-metre pit without it collapsing in on you?

MS PEARSON: Yes.

MR COATES: I guess if it’s big enough … Thank you for that.

MR SHAW: Ms McGarry?

MS McGARRY: Thank you for coming in and seeing us today. I’m just interested to know how long or when was Sustainable Whanganui formed?

MS PEARSON: Oh, eight years ago it was incorporated but there’s been people talking about it long before that. Yes. We weren’t involved at that stage.

MS McGARRY: What kind of membership does your group have?

MS PEARSON: Well, it depends on what you call a membership. We’ve got this big Google mailing list and Facebook page, and then we’ve got a smaller group of trustees and WhEBsters, who run the Environment Base.

MS McGARRY: Thank you very much.

MR SHAW: Mr Thompson?

MR THOMPSON: Yes, thank you, Ms Pearson. You’ve raised a number of issues. I don’t think any of those issues are things that we haven’t been made aware of so I think you can rest assured we are turning our mind to a host of issues and as a committee we haven’t reached a conclusion. We are still
exploring, still tossing things around so that nothing is foregone by any means.

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MS PEARSON: Thank you.

MR SHAW: Thank you very much.

MS PEARSON: Thank you.

10  MR SHAW: Earlier in the day, we called Mr Hessell. He wasn’t there. Is Mr Hessell with us yet? No. That being the case, we’ll move directly to Mr Ian Poff. Is Mr Poff with us? I know that Dr Shaw is here because we saw him earlier. Dr Shaw, you’re the next one up. Welcome again.

15  DR SHAW: Thank you, Mr Chairman. There’s nothing like springing a surprise.

MR SHAW: Oh, I think you’re up to it.

DR SHAW: Thank you, Chairman, members of the Committee. My submission was written on 11 December and concerns the economic aspects of this particular application and since that time, of course, you have had quite a bit of input on these matters and, in particular, on day 6 you had the company representative, Jason Leung-Wai, and you asked him a range of questions. I’m going to relate my submission to the questions which you asked and to the answers which you had and give you an indication of what my answers might have been.

MR SHAW: You’ll leave us to guess the questions?

30  DR SHAW: No, I’ll try and remind you of the questions, Mr Chairman, and we’ll go from there.

I think the things to focus on today is just the interpretation of the criterion that you have, the economic benefit to New Zealand, and some of the likely economic effects of this; and one of the things which I can bring to the table for you is my own inquiries into the situation in South Taranaki because ten years ago I shifted to Opunake and that was so that I could work overseas and enjoy the benefits of a country lifestyle. It’s worked out quite well but I have taken an interest in the situation in South Taranaki and particularly the economic situation and some of the confusions that you can see there if you start to ask questions about it, and that seems to be one of the relevant matters that you’re considering today.

45  [10:55 am]
Then, finally, I’ll just say some things about the amelioration mechanisms that have been suggested to you with regards to South Taranaki. This criterion, the economic benefit to New Zealand, I think everybody quickly agreed that the benefits have to be assessed at the local and the regional/provincial level and at the national New Zealand level and that’s fine, but after that it gets a bit difficult because the company interpreted it in a particularly narrow way. Just to quote the evidence you had, it was defined as “additional employment and value-added” and that was said on day 6 to you good people.

It was said this additional employment and value-added would be assessed with a static model which is to say that the costs would be fixed and the result came up that this thing is worth $34.6 million locally and he said it included New Plymouth - which is not exactly local but however - and that meant that there would be 61 new people employed. This raises a lot of questions and you started the questioning yourself, Mr Chairman. You’ll remember your question is, is this a fly-in and fly-out operation and that began the questioning and the answer was that this is a 24/7 operation, it’s going to last for 20 years, and presumably they did their numbers on the basis of that and, of course, the application that you have before you is actually longer than that. I think that that becomes a relevant point in a moment.

You know, Mr Chairman, from your experience in local government that the roading projects in this country work under the same criteria and the mechanism that’s used there is to do a full cost benefit analysis. Of course, it’s a difficult piece of work. It’s going to be much argued about but, nevertheless, it gives a framework which has a logic to it and seems to be entirely consistent with what you’re asked to judge here which is the economic benefits to New Zealand and the notion that you could consider the economic benefits to New Zealand; that concept is not requiring you to look at the costs. I just find it very strange indeed and with the benefits to New Zealand, are those benefits which you achieve having considered all the disadvantages and the problems and the costs that that’s entailed? Otherwise, they’re simply not then benefits. So, I think you are obliged to work in that area even though the company’s submission didn’t encourage you into that.

When you do a cost benefit analysis the timeframe is really very critical and I think with something like an extractive industry such as you are dealing with here with the timeframes relatively long, I think that you need to consider the economic effects on the same sort of timeframe. You can’t just say we’ll look at it over the next 5 years during the start-up phase or over the next 10; you’ve got to try as hard as it might be to actually cast out and to look at the full effects over the maybe 30 - 35 years or whatever; a difficult task but nevertheless required of us.
Chairman, you asked also about the effects of the oil and gas industry on Taranaki and the reply was that it’s 18 to 20 per cent of the economy. I’ve looked at the figures for Taranaki in various ways and there are some things that seem to me they don’t seem to stack up very well. I don’t think you should overlook the fact that South Taranaki is very different from the rest of Taranaki. If you look at the figures which we have on the state of the people in little towns like Opunake or Manaia or Patea, there are real levels of poverty there and the deprivation index for New Zealand actually identifies these.

[11.00 am]

It’s quite remarkable when you look at it that way and you wonder why, in fact, if you look at the figure for the whole of Taranaki you don’t see that reflected because if you look at the whole of Taranaki, Taranaki looks to be okay as a province. I know it’s true it has had economic hard times recently. The Auckland Savings Bank regional reports, for example, have highlighted this. Month after month we come out at the bottom but you think that’s going to be only a short-term thing and if you look at the whole region, well, okay, the figures seem fine.

There are a couple of reasons for that. One is that the population is very small. We’re fewer than 120,000 people in Taranaki. It’s really tiny so it’s not difficult for some initiative in New Plymouth to swamp the effects in South Taranaki and I think the employment figures kind of reflect that. The other thing that I’ve discovered because I live there, if you go around and talk to people you don’t have to go very far to discover people who ought to be on benefits of one kind or another, be they sickness-type benefits or unemployment-type benefits, who aren’t. It’s remarkably common and I think there are reasons for that and I won’t rehearse them here; you’re familiar with that sort of thing.

So, the unemployment figures are underestimated in South Taranaki. It’s a small population. It’s remote. If you want a statistic which I do think is helpful, it just reflects that child obesity in the New Zealand provinces, the worst province in New Zealand for child obesity is, in fact, Taranaki and you say, “Well, why is it that we’ve got that figure?” We’re not always the worst province. Sometimes we’re the second to worst. It just depends which year you’re looking at but, by and large, we’re very much in a difficult situation and it shows in that figure.

So, it’s from that base that you asked the question, Mr Chairman, about the effect of the oil and gas industry and I think that’s a very good question. Mr Coates also asked a question and he asked it a different way. He asked it in terms of market fluctuations because the economic situation in South Taranaki could be seen as an outcome to a considerable extent of the economic fluctuations that have taken place in
the oil and gas industry. Because another thing that you can do if you
wander around South Taranaki is that you can meet people who were
involved in the oil and gas industry that lost their job in one of the
downturns. Characteristically, they never get back into that industry.
They find employment in other areas and usually it’s a lower end of the
economic scale and the effect on that we see in other statistics like, for
example, the education statistics which are very bad in our area and also
the effect on children.

Okay. So just in response to Mr Coates’s question, I just want to read
my answer if I may because I wrote specifically about it and this is the
question, Mr Coates, on the market fluctuations and the effect of the
business plan:

“To assess the effects of the current application, it’s necessary to
interrogate the business model of the company. Typically, extractive
industries seek to transfer the risks of market downturn to others. For
example, they own as little as possible, employ people on short-term
contracts and sub-contract work. South Taranaki district already suffers
from this business model in the oil and gas industry. Company
shareholder newsletters - for example, from TAG Oil which has
extensive holdings in Taranaki and they’re based in Toronto - are
positive and congratulatory in the current price downturn. In contrast,
the information gathered at the hairdressers and op shops in Hawera
indicates families suffer as employment dwindles and local business
activity declines. In the pubs at Opunake, you can learn about the fate of
families who lost financial support because of earlier downturns.

[11.05 am]

The risks described for oil and gas in the main pertain to the present
application because they are extractive industries and as the company
consultants admit on 28 January in their statement, a large proportion of
the direct employment is through TTR. Changes in TTR’s employment
intentions would have an impact.”

So, I then give you just something to indicate the volatility of the
processes as they’ve been affecting Taranaki and I think exactly the same
sort of volatility you can expect for the products that relate to your
current application, as anybody who follows the shares for Rio and BHP
will be able to tell you, it’s very sensitive.

Finally, Mr Chairman, I’ll just mention the amelioration mechanism that
was suggested. The company suggested that they could assist South
Taranaki by putting up a fund of $50,000 a year and the South Taranaki
District Council being a good district council said that it ought to be
$100,000 a year. I think if you’re going to have any mechanism like
that, it would be very useful to actually tie it to the value of the product that’s being shipped offshore. There are ways you can actually ascertain that and you could have a situation whereby any fund that was available in South Taranaki would be linked to the company’s fortunes and so all boats would rise together.

I thank you, Mr Chairman. I’m happy to answer any questions that you might have.

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MR SHAW: Dr Shaw, we’ll start with oil and gas and its overall impact on Taranaki and the question I’m going to ask is really simple. Is Taranaki better off for the oil and gas industry’s arrival?

DR SHAW: Well, there are plenty of reports that you will read and there are many statements that say, yes, that is so but I must say that I seriously question that it is.

MR SHAW: In economic terms, which is really the point of the question?

DR SHAW: Well, it might be for New Plymouth. It might be for New Plymouth, although if you go and have your hair cut at Dads & Lads in New Plymouth, the barbers there tell you that things have dropped off and have never recovered from the heyday which wasn’t that long ago, but certainly in South Taranaki I think we have to say that the effects of oil and gas have been negative and also I think the relative --

MR SHAW: Negative on the economy?

DR SHAW: Yes, on the economy because of the cyclical nature of it and because of people who start businesses with a rush of enthusiasm and get capital and then find that they can’t survive through a downturn; and the likewise people who have been employed directly in the industry and then find that they are out of work and can’t ever get back and, of course, you can’t stop children growing up and families having needs. These things hit and the effects are critical and they’re long term.

So, I would say that but overall, of course, the other aspect to your question is the government’s coffers and the income that the government receives from the projects and, of course, there is, in fact, a positive effect there but that’s got to be offset against the effects of unemployment and a whole lot of other stuff. It’s not all just jam and honey. In actual fact, there are other costs that you would need to take out to answer that question.

So, in summary, in South Taranaki my thought is that it’s negative. Possibly in New Plymouth it is positive, but the nation as a whole, it probably runs out a bit positive but not as much as we might expect.
MR SHAW: The second question I have goes to this question of the benefit cost approach and there was, as you noted, some debate obviously between Mr Binney on the one hand and Mr Leung-Wai --

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DR SHAW: Jason, yes.

MR SHAW: -- yes, on the other and the issue of double counting disbenefits is obviously central to any debate around the appropriateness or otherwise of a BCA for a private investment. I want you to tell me, you’ve said that the BCA is the appropriate way to go. How do you avoid double counting the disbenefits when it comes to assessing the value of a private investment?

[11.10 am]

DR SHAW: We’ve got to be clear that we're concerned with the benefits to New Zealand. That’s the criteria that you’re operating under and then the next part of it is that we all pretty much agree that we should look at local and provincial and nationwide, so that’s three separate studies before you start. If you think of your experience in local government, Chairman, we’ve had many, many years of experience doing this and the way that, in fact - and we’re talking about roading decisions here primarily; the cost and benefit of roading projects as they’re proposed - and look at the methodology that’s been used there, it’s evolved. It’s developed and the things that we were arguing about 20 years ago aren’t the things that we’re arguing about now. We get greater sophistication so the only answer that I can give you to your question is, okay, that’s one of the issues that are within but these things aren’t inseparable; that you can, in fact, work on it and develop a methodology.

MR SHAW: Yes, and they inevitably shade a result, don’t they, and that’s the fact? I mean there’s no perfect clarity.

35 DR SHAW: No, there’s no perfect clarity but you can improve it as you go.

MR SHAW: I wish I could agree with you that we just get better and better at doing these things and that things happen as they should. I suspect we’re going to be talking about the Basin Reserve and Mount Victoria tunnels for the next 30 years but there we go. I mean no matter how many analyses are done. Look, I’ve got no more questions for you, Dr Shaw, but my colleagues probably do. We’ll start with you Ms McGarry.

MS McGARRY: No questions. Thank you for coming and seeing us again.

45 DR SHAW: Thank you.
MR SHAW: Mr Thompson?

MR THOMPSON: Yes, Dr Shaw, employment; you’ve talked a bit about that and there’s been talk of the fly-in, fly-out. How many of the fly-in stay and do they stay in the industry or do they fall out of the industry and are they some of the casualties of the process?

DR SHAW: Well, the fly-in people, if you talk to the people that cut my hair in New Plymouth they will tell you that they had a lot of foreigners, including Canadians, a while back and they don’t anymore and so that’s all the evidence that I can get. I mean, there are a lot of social science projects that could be done to actually give us some information about this, but Taranaki’s very short of information. I couldn’t find any research that was very helpful in this situation.

MR THOMPSON: We just need a bit more hairdressers then.

DR SHAW: I think that’s about as good as you can do, I’m afraid.

MR SHAW: I’m beginning to wonder how often you get your hair cut given that --

DR SHAW: Not that often. I know, I know. I’m due for another one. Yes. I mean we don’t have the data but, anecdotally, it would suggest that, in fact, there has been a significant effect; that there’ve been people from overseas come in to do a job and then the downturn and they have left.

MR THOMPSON: They’ve gone. Have many stayed and fallen out of the industry but remained in the district?

DR SHAW: I can’t answer that, Chairman.

MR THOMPSON: Thank you.

DR SHAW: Thank you.

MR SHAW: Ms McGarry? Mr Coates?

MR COATES: Kia ora, Dr Shaw.

DR SHAW: Kia ora.

MR COATES: You talked about the equity. Well, you didn’t mention the word “equity” but essentially it would be benefits to community that the money doesn’t always flow back to the people who need it, particularly in South Taranaki and you suggest that possibly getting the District Council to have some skin in the game by having shares gifted to them --
DR SHAW: Yes.

MR COATES: -- and that would be a way of feeding back into the community, but it’s not really a very direct connection with the people that are going to be suffering necessarily.

DR SHAW: No, it depends on the wisdom. Well, if it was the District Council -- of the District Council in terms of how they used that money. I built that notion on the statement of the, I think it was the Executive Chairman of the company who said fine things about us and fine things about their wanting to be involved in New Zealand. Well, I think we could suggest a mechanism for them. In fact, they offered $50,000 a year. I think that’s quite small really.

[11.15 am]

MR COATES: Yes. Turning to commodity cycles, you’ve got a nice graph there which shows that 2009 to 2015 the commodity price was very good but it seems to be heading down to the more regular levels and you also mention that the oil and gas shareholder newsletters are very self-congratulatory but, in fact, the oil price has halved from what it was. Not a good time to be self-congratulatory perhaps in the oil industry.

DR SHAW: Well, that I think is the point, sir. You wouldn’t expect the companies to be happy in these circumstances but I signed myself up to some of the shareholders’ newsletters and things to find out what the -- well, it was in Toronto mainly but the people in Toronto were telling their shareholders. It’s quite a different picture from what you get if you’re on the ground here in New Zealand, and the companies expect to have downturns and they build this into their business planning and they cope with these downturns very well. I mean, basically, they reduce their outputs, they reduce their costs and they wait to see what happens and they know - well, they reasonably know - that there’ll be an increase in due course in the value of the product and then they will stoke up the business again. We’re seeing that in Taranaki now and the other thing that they’re doing is that they’re keeping an eye out on opportunities for future development so when times improve they will be in a position to spring forward, and that’s their business model. I think that we needn’t to take that into account.

If you wanted an industry for Taranaki, you would not choose an extractive industry. Extractive industries, if you pardon the pun, they’re at the bottom level of everything. Even Saudi Arabia’s been getting away from extractive industries for the last 20 years and so we have to look at it with a Taranaki perspective and say, “Well, what actually is in the interests of the Taranaki economy?” and it’s a diversity that doesn’t

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tie us even further into the difficulties associated with these extractive industries.

MR COATES: Also, the extractive industry for iron ore is competing with Australian industries which can dig it out on land. The benefits would really have to be obvious compared with the costs in an extractive industry which is based under the sea.

DR SHAW: It’s a competitive business and a lot of the price of that product depends on activities in China. It’s very sensitive and the BHP price reflects this and so does Rio, and so they jump all over the place but the long-term trend, of course, has been down.

MR COATES: Thank you for your very thoughtful submission.

DR SHAW: Thank you. Thank you, Mr Chairman.

MR SHAW: Thank you, Dr Shaw. Now, just again a check on where we are with submitters. Has Mr Poff joined us by any chance? No. Has Mr Hessell joined us? No. So, we’ll just go back, going up the list. Mr James Croker? Good morning, Mr Croker. Welcome.

MR CROKER: Kia ora koutou.

MR SHAW: I suspect you’ve been here long enough to know the drill.

MR CROKER: Yes, sir. Please first let me extend my gratitude for being given the opportunity to speak before you today. It is a privilege that I value greatly knowing that there’s many who can’t. I wish to take the opportunity to speak for those that have no voice; most importantly the inhabitants of the ocean who undoubtedly have the right to live free from harmful and anthropogenic interference and whose wellbeing is inexplicably linked to our own.

So, my name is James Croker. I’m a diver. I’m based in Whakatane but like many New Zealanders I’ve a deep and long-standing relationship with the sea. So, my soul rides in the waves, rests on the beaches and drifts through the ocean. I’m fortunate to retain a close connection to my surroundings through my work as a diver, explorer and educator. The health and integrity of our aquatic ecosystems is key both to my work and my wellbeing.

[11.20 am]

I’ve had the privilege of living along this coastline, the Taranaki coastline, for many years and I’m struck by the natural beauty that surrounds this area, not just in the land and the ocean but also in the
people who reside here and the kaitiakitanga expressed. So that’s why I’m here before you now, to protect not only what I and many others hold dear today but also to honour those who come before us and those who will come after. So, I’m opposed in full to this application and recommend that it be rejected based on the following reasons.

Firstly, the ocean is sick. Throughout history we, as a species, have viewed the ocean as this limitless resource, something so vast, so resilient that human actions can’t cause any harm. Only in recent times have we understood just how much our actions have destroyed ocean systems. The pace of change has increased drastically with the growth in human population and this has allowed us to remove the blindfold that has been created by a shifting baseline syndrome. We can now see the change within our own lifetimes; change that we are creating. For example, growing up I wouldn’t have thought twice about eating a fish. Now I think of several things - how is that fish caught; is it from a sustainable population; is it free from dangerous levels of toxins?

So, the ocean is our life support system. It’s our blue heart. It drives climate and weather. It regulates temperature, absorbs carbon dioxide from the atmosphere and contains the greatest abundance and diversity of life on the planet. So, to what extent should we inhibit its functions by placing strains on the system? Whatever that answer is, our decisions to date have not prevented it from being in an ongoing state of decline.

Furthermore, we must remediate the adverse effects we’ve had on the ocean before the system fails completely, so our survival depends on making smart choices that bring about positive changes that we need for a healthy ocean. We now understand more about ocean processes and their importance to the world and ourselves than at any time in history. It’s time to start paying off the environmental debt that we have accrued and provide a proper inheritance for future generations.

Now, marine scientists continue to debate how much of the ocean should be fully protected in order to preserve its vital function with figures of between 30 and 50 per cent routinely being suggested. We can see that globally but especially at a regional level here in New Zealand, we are well short of the mark. The tiny marine protected areas that we have here in our coastal Taranaki waters will in no way compensate for any large-scale disturbance brought about by new industries in the EEZ.

So, I think we first need to have a serious discussion about how to implement the appropriate protection for our ocean before allowing more industrial use. Limits on industries need to be set. We only have to look at our freshwater systems to see the effects of poor regulation. This, of course, leads to either a costly remediation or, worse, giving up and moving the goal posts to accommodate a new normal.
So, the ocean faces many pressures which joined together have left us with a lot of work to do - over-fishing, pollution, increased acidity, anoxic dead zones, global warming, coral reef destruction. So if we agree that the seabed mining will not contribute to remediating any of these effects but will instead magnify them, then the only prudent course of action currently is to object to it as an option for the marine industry.

The exclusion of other industries - the smart use of the marine environment allows for multiple industries to make use of the resource in a sustainable fashion. So, a new industry with a negative environmental effect should not take place at the expense of multiple established industries, especially if those existing industries have a positive or neutral effect environmentally.

In the case of TTR’s proposal, it will be to create what is effectively a no-go zone which will also affect a much larger area than itself. It’s extremely limiting and counter-protective. Putting all your eggs in one basket is never a good idea. There is fantastic research being undertaken in Waikato in the Bay of Plenty investigating the anti-cancer properties of sponges so our unique biodiversity found only within our coastal waters is our greatest asset, both now and in the long term.

[11.25 am]

These are the opportunities I believe we need to get behind as they can enhance our worldwide reputation and complement our $23 billion tourism industry. They protect our coastal waters and they enhance our economic and social wellbeing so, again, good planning in a spatial sense may help us to impose appropriate starting limits on new industries.

I also want to talk about the value of ecosystem services so:

“The collective value of the ecosystem services of our seas is so great we cannot afford to lose them. We must act now.”

That was a quote by Maria Agren who is a Director General of the Swedish Environmental Protection Agency. What is not monetary valued is often not accounted for and marine ecosystem services includes seafood protection, mitigation of eutrophication, water quality, suitable habitats for commercial species, recreational opportunities, carbon sequestering and functional diversity for dealing with change. These are essential for our survival and wellbeing and must be taken into account in decision-making.
I would refer the DMC to the information available from the Swedish EPA. They have undergone international conferences that focus on ways of integrating the value of the marine ecosystem into their decision-making so that the policies are designed to achieve sustainable management of these ecosystems. Selling off the functionality of our life support system is a deadly game as ocean acidity and temperatures are increasing, the ocean’s ability to absorb carbon dioxide is being reduced so creating non-functional areas of ocean in addition is of great concern at a time when CO₂ levels are still increasing.

In terms of the economics, I see no economic gain for New Zealand as a result of this operation. Instead, I see a long-term legacy of costly remediation. The quantities needed to make the venture profitable are huge and, as we’ve just heard, the market is volatile so trade-offs in relation to ecosystem services are certainly unfavourable. We know that much of the profit is going to go overseas and we know that there are few employee possibilities for locals with no added value being sought to the product before export.

We’re not dealing with an established company with years of expertise in this field. In fact, we’re not even dealing with an established industry. We don’t even know that TTR will operate the consent or sell it on and this makes the whole venture highly experimental and a risky investment. The figures could be well short of what is expected due to best guesses in terms of operational effectiveness in the field. This project will never provide a long-term sustainable industry for New Zealand.

In terms of the environmental impacts - the benthic ecology. The importance of the ecological role of benthic organisms is huge. The roles they play in reworking sediments through bioturbation, recycling nutrients and storing organic material are invaluable to us especially considering the pressure we are placing on marine systems. Nothing will be left alive in this mining process. The recovery times are estimated in multiple decades and, indeed, recovery may never be complete. The community structures could be altered forever and impact on the effectiveness of the role performed could be significant. Nature is a well-designed thing and I think there’s a reason we have so much soft sediment seabed.

In terms of the plume, the sediment plumes that will accompany this process have been insufficiently modelled, I believe. We’re not granting consent to operate under laboratory conditions. This is the South Taranaki Bight. There is huge uncertainty as to the extent of the surrounding area that will be affected. Again, the experimental nature of this process means that release heights may change and radically alter dispersal. There’s potential to affect a large surrounding area over a
period of many decades, including reefs of significant value such as the north and south traps. The smothering effect of the plume on filter feeders means that we need much more clarity with regards to the extent of the affected surrounding areas.

As a diver, sedimentation is something that I see a lot of in my daily life. Based in Whakatane we certainly have some pretty big river systems on that coastline and even taking something like the Whakatane River, yes, okay, it’s different sediment but when we get those heavy rain falls it’s quite easy to see visually what is happening with that sediment. We have an island off the coastline called Whale Island, Moutohora, and this is 10 kilometres off and you can see the sediment stretching all the way out to that island after heavy rainfall. As I said, the sediment is different from what we’re considering here but I wonder if there any lessons that can be learned from real infield monitoring and understanding that can then be applied with a greater certainty with respect to modelling in the ocean.

[11.30 am]

I see the degree to which marine life is impacted coastally and it’s not just in Whakatane; it’s all the way along the coastline. Further north, we have large bays that run off towards very deep water and you wouldn’t expect there to be as much sediment close in as there is but it’s certainly had a major effect. As you swim through the kelp, all the kelp is covered in fine sediment. The benthic environment itself is a heavy thick pile of sediment, similar to what you’d find in a lake, and this is obviously created over a long time from the lack of care, I suppose, to our water systems but it’s had an impact obviously on kaimoana. Many of the locals understand how things have changed in that regard and the lack of easy access to kaimoana, but they also believe that the issue is over collection rather than a strain on the ecosystem and something that needs to be remediated.

In terms of the phytoplankton, the associated effect of the plume on fighter plankton production is of huge concern. This combined with the loss of benthic life will disrupt the food chain, limit carbon sequestering and create dead zones within our waters. So, I also wonder about a constant plume that’s been generated through this process. We’ve heard the company’s planning on operating 365 days, 24/7 for 35 years potentially. Natural environments always ebb and flow where there may be a heavy build-up of sedimentation in an area through a natural process. It could be equally so that that sedimentation backs off in other times and there’s some kind of balance created, but to have constant disturbance in a limited area may produce effects that go well beyond those that are natural.
Marine mammals, so the presence of critically endangered species such as Māui’s dolphin in our coastal waters means that a proposal such as TTR’s is unacceptable. We have an obligation not only to ourselves but also to the international community to do our best to ensure survival for the species. Blue whales use the STB as a foraging ground and noise from the operation could have a detrimental effect on both these species. Pollution - operating a large vessel and a fleet of smaller vessels in heavy seas poses a risk from oil spill should damage or accidents occur. The light and noise pollution is also of concern and could affect behaviour in many species. And, yes, the thought of those large vessels operating in the South Taranaki Bight was certainly brought home this morning as I walked in to the hotel. It is quite an intense environment.

The lack of baseline data - so I think there needs to be a strong offshore and coastal baseline data set before an activity with a high possibility of wide spread damage takes place, and I’m still not seeing this in existence despite requests from the DMC during the previous application that this be addressed.

In terms of regulation, obviously if this does go ahead we need to know that this new industry shouldn’t be allowed to operate without strict regulation and daily monitoring.

[11.35 am]

The impact on recreational activities: there could be a detrimental effect on diving at the north and south traps and the Graham Banks and in the, indeed, other reefs in the area that we may or may not know about yet and this could be long lasting potentially affecting generations. It limits people’s ability to interact with and understand their local waters as species distribution, quantity and quality is altered. We forget what healthy waters look like and the next generation accepts another poor imitation as the new norm. Fishing could be severely affected for similar reasons and surf breaks could change as wave quality may be affected.

In conclusion, we now have sufficient knowledge to be able to avoid repeating the mistakes of the past. We know that the fate of the ocean is linked to our own and the decisions that we make over the next decade are likely to decide that fate so there’s no time to lose. New Zealand is well placed to create long-term sustainable industries that complement each other and in turn support the wellbeing of the nation; and we can truly live up to our international reputation but we must choose that path now. I find the proposal from TTR ill-considered and offensive, and the era of short-term smash and grab schemes and politics is at an end. I urge you to decline this application.
There is much good work being carried out in order to restore and protect the marine environment both by professionals but also by unpaid community volunteers whose time, passion and commitment are sadly undervalued. This is done on behalf of all New Zealanders and the global citizens that come to visit our shores. Their efforts should not be disrespected and trampled on by the stroke of a pen.

I believe that the nation has voiced its opinion on this application with unity. World-renowned oceanographer, Sylvia Earle, sums up the situation we are in perfectly when she says:

“Unless there are champions who can articulate and decision-makers who can understand the literally priceless importance of intact living systems in the sea, the value of rocks will almost certainly trump whatever might be lost.”

Thank you.

MR SHAW: Thank you, Mr Croker. Ms McGarry, do you have questions for Mr Croker?

MS McGARRY: No, but thank you for a very articulate and thoughtful submission and I also thank you for travelling to see us. I appreciate you’ve made a big effort to be here today so thank you for doing that.

MR SHAW: Mr Thompson?

MR THOMPSON: Thanks, Mr Croker; no questions.

MR SHAW: Mr Coates?

MR COATES: You say in your submission that there are no second chances to get this decision right and I just wonder, because you covered a lot of ground, what’s the most important thing you should think be uppermost in our minds when we’re making this decision?

MR CROKER: Look, I think in relation to your question one of the most important things we should have in our mind is the impact that we’ve had on the oceans in the last 35 years; what our oceans might look like in 35 years’ time if we don’t get these things right. So, I would say that in terms of a new industry that we know nothing about other than the fact that it’s certain to kill life where it’s operating, then we need to have a mechanism of balance in place if we choose to go down that route and I don’t see that there at the moment. We don’t have any protection in our EEZ and we have a very limited coastal marine protection and I think until we address those issues and have an understanding of the system as
a whole and how to trade off negative impacts with positive impacts, then I think we’ve got a lot of work to do in that regard.

Obviously, there are a lot of issues at stake but I think it’s irresponsible in terms of the generations that follow us to leave them a greater mess. Really, we need to put these mechanisms that we know what we’re doing and we know that we’ve got to fix this and we know potentially how we can fix this, but issuing consents to applications such as this are very premature in that regard.

For the reasons that I’ve stated as well, I guess uppermost in my mind is the sedimentation issue and I think there’s a lot more that can be done around projecting that and modelling that and understanding that before we allow such a large scale operation to take place over a long period of time.

MR COATES: Thank you very much.

MR SHAW: Mr Croker, I want to understand whether you can see of a circumstance or can see an approach to the extraction of this resource from the seabed which would meet the standards you’ve outlined to us.

MR CROKER: I can conceive something potentially in the future. Technology changes and I think, obviously, the resource seems to be something that within New Zealand might be quite unique globally, but I just believe that we need to allow those technologies more time to develop, and if we are going to make use of that resource it needs to be done in a way that is respectful to the environment and to the generations that come after us.

It’s a finite resource that needs the appropriate management because of its nature. We get one shot at it and if we’ve seen that if we create a huge amount of damage by jumping straight in and the costs of that damage further down the track … and I think particularly about the effect on our fresh water with dairy and maybe if that process had been better understood and how we’re affecting the waterways with a bit more time because, let’s face it, 50 years in the overall scheme of things is not a long period of time. I just believe that we need to have a much more protective approach to these finite resources.

MR SHAW: How old you are so how long 50 years seems to be, I think, Mr Croker. Look, thank you for that.

MR CROKER: Okay.

MR SHAW: Mr Croker, just finally before you go, you’re a dive educator, you said?
MR CROKER: Yes, I work in the industry taking --

MR SHAW: The recreational diving industry?

MR CROKER: Yes, recreational diving, yes.

MR SHAW: And before you did that?

MR CROKER: Before I did that, I’ve had some time with the Department of Conservation in a visitor centre capability and -- yes.

MR SHAW: All good stuff too, Mr Croker. Thank you very much for speaking with us.

MR CROKER: Thank you very much.

MR SHAW: Now, Mr Hubbard. Do we have Mr Hubbard with us? Welcome, Mr Hubbard.

MR HUBBARD: Good morning. Good morning, ladies and gentlemen. My name is John Hubbard. I’m a resident of Opunake and I used to live in New Plymouth for a considerable period of time. My information relates to the migration of whales southwards in the summer past and through the area to be mined and the negative impact this will have on the existing environment.

I have seen one pod of whales travelling directly into the area to be mined. The area where this sighting occurred was north, near the Māui A to shore platform, approximately 39°30’S latitude, when I and my crew were making a voyage in a small yacht from New Plymouth to the South Island on 13 January 1997.

On the evening of the first day away from port, a small pod of whales surfaced and blew on our starboard side. A few minutes later, a large whale surfaced closer to the vessel, making a braying noise like a horse. About ten minutes later, the pod surfaced and blew again about 100 metres away on the port side. The pod’s track was similar to ours but angled in a south-easterly direction. We were sailing in light winds at the time.

A short while later, a high-pitched whistling sound was heard and upon investigation appeared to be coming from underneath the vessel, near the bows. The motor was started and the whistling stopped. The whale was
never seen. The position of this sighting I refer to on NIWA report figure 1.1. I've got the original chart here. It's New Zealand 45, NZ45. You can see it's a chart of the South Taranaki Bight and you can see in this area here the Māui platform, and we were travelling on a pencil line roughly in that direction. The whales were headed straight for the area to be mined.

So, it appears that -- we saw other -- we've seen other whales since but it appears that the whales migrate relatively close to the coastline in a south-easterly direction towards Cook Strait. Whales were travelling on a traditional migration route southwards towards Cook Strait, that I said was partly described by other submitters, and I've put in words behind that, "I hope".

In Mr Croker's evidence or submission only a few moments ago, he put on his clause H, "Marine mammals: There have been no required surveys of marine mammals in the area". I find this absolutely astonishing.

"This is despite the first DMC finding that more baseline work should have been undertaken prior to the application being lodged. They have also said, 'We consider comprehensive and longer-term baseline studies of the presence of marine mammals in the STB [South Taranaki Bight] would have assisted us to understand the importance of the STB to various species' [etc]."

It is on a whale migration route and the effect of a huge sediment plume obviously is -- it's just going to cause mayhem.

[11.45 am]

The environmental consent application relates to mining approximately 8,000 tonnes of iron sand an hour, returning most of it to the ocean. A substantial portion of this is finer particles and, by NIWA's own measurements of the deposition rates, will take about three weeks to sink to 20 metres. Casual observation of floodwaters offshore bears out the science that it normally takes three or four weeks for the ocean to clear after a flood.

Given that the prevailing currents are approximately 1.44 km/h, it means that the mining residue will be spread from Cape Egmont to Cook Strait. That's a huge area it's going to be spread on with that amount of sediment. You've got to remember it's something like -- I think it's over 12 times the amount that's emitted from the Whanganui River, but it'll be emitted constantly.

What effect this plume of underwater pollution will have on marine life I do not know but I am willing to bet it will not be good, just as large
amounts of air pollution are devastating on surface life. The largest air pollution event I can think of in New Zealand's history was the Tarawera volcanic eruption. Photos of the aftermath show a landscape devoid of vegetation. To this day, scrub and vegetation are sparse and spindly compared to the rest of the country. All animal life had to exist on imported or stored food. I think something similar would happen to a large area of the ocean floor and the results would be equally or more devastating to undersea life.

Once the mining waste has been dumped into the ocean, it will be totally unrecoverable and non-biodegradable. Now, I want to repeat that. Once the mining waste has been dumped into the ocean, it will be totally unrecoverable and non-biodegradable. The amount of mining waste will be approximately 12 times the sediment coming from the Whanganui River.

Your attention is drawn to the paragraph at the bottom of page 20 of the NIWA report. "The Patea Shoals is a high-energy environment". It also goes to say, "Wave orbital velocities far exceed tidal current flows". So, sediments are not going to settle easily there and predicting the outcomes of depositing these sand and mud mining wastes is going to be very difficult. What can be done is to estimate the probabilities of what will happen based on the results of experiment and data obtained. At this point I must thank NIWA for their massive and courageous effort in obtaining the data. The hazards of navigating in this area are not well known and the organisation and their staff have done very well. To be honest, just to get a result is amazing.

To the Māori population, kai moana and its availability is an integral part of their culture. The loss of a diversified and productive marine environment would be devastating to an iwi's food supply, mana and standing.

I want to touch on the hazards of this enterprise. Whenever there is a marine disaster, it is usually accompanied by a significant amount of pollution in the form of scrap iron and spilt fuels. Where this mining activity is to be situated is in relatively shallow water with large waves and strong winds. Shallow water magnifies the height and steepness of the waves, a fact visible on any ocean beach. Large and steep waves are very, and I'd underline this, very hazardous to navigation, as demonstrated on numerous West Coast bars and sand banks. I want you to think of the Kaitawa tragedy, when a large coal ship sank with all hands on Pandora's Bank off Ninety Mile Beach at about the same depth as the Patea Shoals. The ship sank with the loss of all hands.

[11.50 am]
In April 2011, the drill ship Noble Discovery was engaged in drilling exploration wells for Shell on the Ruru-1 prospect south of Māui A. Now, I bring your attention to the chart here. Where's the Māui A platform? As you can see marked on the chart, they were in an area south, here. So, it's not far offshore but it's in considerable depth of water. The ship was well-found and equipped with a good mooring system which had not failed the ship's long life in service in the Arctic. Now, the vessel was about 40 years old at the time. It had been on exploration wells around the world.

One night, in a violent storm, the moorings had to be released when wave and wind forces overcame the power of the mooring winches. Now, you have mooring winches which keep the vessel positioned when it's drilling an oil well and of course, operation of the ship, it's vital that these winches can pull and release and maintain tension on the anchors. The vessel drifted without propulsion, broad side on to the waves, within 100 metres of an operational platform and came within a few degrees of capsizing. Over 110 workers were lucky to survive. The vessel was towed to Port Taranaki for repairs, where it stayed for months. The prospect, that is the original drilling prospect, was subsequently abandoned. It would -- says that winds on that terrible stormy night exceeded 150 km/h.

Now, we're not talking about a small toy here, we're talking about a well-found ship that had ballast tanks, it had everything known to man to keep it in -- you know, a fully ocean-going ship, and it came within a few degrees of capsizing. You can imagine the result. It was totally without power, that is propulsive power, so it wasn't able to turn into the wind to reduce the rocking. I'm not sure but I suspect that the extreme rolling caused the fuel to be unable to be pumped out of the tanks and into the engine to start it. You can imagine.

If this has happened to a well-found ship in 120 metres of water, what would have happened if it had been on the Patea Shoals only a few kilometres to the south? It doesn't take much imagination to think of the consequences.

The proposal is the mining vessel should weigh 180,000 tonnes. Operating such a large vessel in such shallow water seems to be a recipe for disaster. Whatever floats can sink, as proved by the Titanic and the world's largest floating oil platform off Brazil. As far as I'm aware, non-permanent mooring systems for such an environment and such a large vessel do not exist. Such risks to the environment must be considered by this Committee before granting any permission to mine the area. A suggestion would be a refundable bond of at least twice the recovery costs of the wreck, payable when all equipment is removed at the end of mining activities.
In conclusion, I can say the environmental consent not be released for this enterprise. I will repeat again that once the sediment is disposed of over the side of the mailing vessel it is unrecoverable. The effects will be permanent. The very reasonable probability of severe and permanent environmental damage far outweighs the financial benefit to the entire country. There is only one reasonable action available to this Committee and that is to decline, decline, decline. Thank you.

[11.55 am]

MR SHAW: Thank you, Mr Hubbard. Mr Thompson?

MR THOMPSON: Mr Hubbard, I found your description of the whale sighting fascinating. Has that information -- is that now included on the national database?

MR HUBBARD: No. I didn't know there was a national database.

MR THOMPSON: Those that are actively engaged in studying whales do record that, so it would be good if somehow that could be captured in that.

MR HUBBARD: Yes, okay.

MR THOMPSON: The other question, you mentioned that the sediment plume will deliver 12 times the amount of sediment that comes down the Whanganui River.

MR HUBBARD: That's correct.

MR THOMPSON: We spoke to Dr Dearnaley, who is an expert witness for the applicant, a couple of weeks ago, and he gave us some figures which was that annually the plume would deliver 0.7 million tonnes per year of sediment and the main rivers would deliver 12 million tonnes per year of sediment. Those numbers suggest about 6 per cent, so the plume would have 6 per cent of the impact.

MR HUBBARD: I just -- I based it entirely on the 8,000 tonnes an hour that is being deposited.

MR THOMPSON: Right, and most of that -- okay, the difference in understanding then is the majority of that is redeposited into the hole at the back end of the IMV and a proportion of that doesn't settle out and spreads out, and the proportion of that is the 0.7 million tonnes per year.

MR HUBBARD: The figures in the NIWA report are vastly different from that.

MR THOMPSON: From which?
MR HUBBARD: From the figures put out by the applicant.

MR THOMPSON: Okay. Okay.

MR HUBBARD: The --

MR THOMPSON: You would accept that the full output is not going into the --

MR HUBBARD: The full output isn't but of course it will be spread proportionately.

MR THOMPSON: Yes.

MR HUBBARD: As it -- the finer sediments, which I think comprise -- I think there are so many of -- 30 per cent or 40 per cent, I'm not sure of the exact figure but a substantial amount, will take approximately 560 hours to deposit from 20 metres and with a prevailing current of approximately 1 knot or 1.5 knots, that will put the finer sediment -- it would spread it effectively from the area as far south as the Kapiti Coast.

MR THOMPSON: Okay. Right, so we've been given those numbers anyway.

MR HUBBARD: Yes. Yes.

MR THOMPSON: Thank you.

MR SHAW: Ms McGarry?

MS McGARRY: Thank you, Mr Hubbard. Thank you for a snippet of your experience and observation which is quite different evidence to what we've had. Do you have any idea what type of whales they were that you saw?

MR HUBBARD: No, I don't. They weren't humpbacks and they weren't pilot whales. They had small fins. They were quite substantial. They were probably, I don't know, twice the length of our vessel, which was about 30 feet, so they would have been around 60 feet long at least. They had small hooked fins on top. I have yet to find out.

MS McGARRY: Interesting. Thank you. You have talked about a bond. Do you see a bond on top of the public liability insurance? You see the need for both?

MR HUBBARD: Yes. Insurance companies have a nasty habit of going broke when confronted with a requirement to dish out billions of dollars, as was put out in the -- as what happened in the Christchurch earthquake. I think a cash bond deposited to the New Zealand Government, the interest of which would be available to the New Zealand Government, would be a minimum requirement.
MS McGARRY: And you see that more for any legacy or irreversible effects, whereas the public liability insurance is more aligned to unplanned discharges such as an accidental oil spill or something like that? You said there was --

MR HUBBARD: That's right.

MS McGARRY: It's different.

MR HUBBARD: Yes. Most mining companies, when they finish their mining activities, have a great habit of leaving their scrap iron lying about or, in the last years of its operation, very poorly maintained. You will find that at the last -- when mining activities cease, you will be left or New Zealand will be left with a huge pile of scrap iron and God knows what to get rid of.

[12.00 pm]

MS McGARRY: What could be left behind here, sir? It's a bit different to on land, isn't it? The equipment? You're concerned about --

MR HUBBARD: Equipment, yes.

MS McGARRY: -- structures and equipment that could be left behind?

MR HUBBARD: Yes.

MS McGARRY: Thank you very much for coming to see us today.

MR SHAW: Kia ora, Mr Hubbard. Thank you for your observational notes for the whales. It adds to the documentary evidence we've already received. I just want to turn to the question you raised towards the end where you said non-permanent mooring systems in such an environment for such large vessels do not exist. How confident are you in making that statement?

MR HUBBARD: Reasonably confident because the largest floating vessels we have, I think, at the moment are what are called "floaters", usually used for drilling wells in deep water or even shallower water. These have -- while they have mooring systems, they're not intended to be permanent. They're there while the wells are being drilled and completed. They're not there to be as a floating production platform. Floating FTSOs are generally a lot smaller.

MR SHAW: You're aware that this vessel is 350 metres long?

MR HUBBARD: That's -- I'm thinking of its displacement, sir, 180,000 tonnes, and that's - - and maybe the vessel for retaining the sediment might be even larger.
MR SHAW: There are other transport vehicles to take it back to China but I'm -- and also proximity of it to the Kupe platform, within 1.5 kilometres of the -- well, at some point in the mining cycle.

MR HUBBARD: Yes.

MR SHAW: I think that's all I wanted to check up on.

MR HUBBARD: Okay.

MR SHAW: Thank you.

MR HUBBARD: I could -- you've mentioned -- that's interesting because if I was the owner of the Kupe platform I would be somewhat disturbed by this proposal because sediment, as you know, is sand and a lot of it is aluminium oxide and silica, and it's very, very bad for pumps. Now, on a platform you have cooling water pumps for your desalination plant, cooling water pumps for your generators, and also of course fire-water pumps in case of any emergencies. These pumps would wear out very rapidly in a -- if sand is present at -- or sediment is present in the water.

My experience at New Plymouth Power Station on this subject demonstrates -- from when I worked there. They had a -- if you like, a big swimming pool for the sand, you know, to settle in, and they had a labourer whose job was to operate a crane and scoop it all out, suck it all out, and this man was made redundant and within months serious damage occurred to the power station in the form of sediment getting onto the blades that are cooling the water pumps and wearing them out. Then the sand went into the condensers and it eroded all the walls of the condenser tubes. It also got into all the heat exchangers and blocked up the heat exchangers, and it caused basically millions' worth -- millions of dollars' worth of damage in only a few months. That -- the same would happen to a platform.

MR SHAW: Thank you, Mr Hubbard.

MR HUBBARD: Thank you for your time.

MR SHAW: Can I just do a check as to, again, whether any of our absent submitters have joined us yet? Mr Poff? Has Mr Poff joined us? No. And Mr Hessell? No. Okay, we will return at 1.00 pm and we will begin with Lincoln and Deanne McCrea. Thank you all.

ADJOURNED

RESUMED

[12.05 pm]

[1.03 pm]
MR SHAW: Ladies and gentlemen, I am going to begin and just see who we've got in the room, if I may, so that we can get some idea of the schedule ahead. But I'll just go through the folk that we've got scheduled in order and take it from there.

Lincoln and Deanne McCrea, you're here. Excellent. Mr Ron Hepworth? No. Mr Mark McDonald? Yes. Michaela Stoneman? No. We are probably getting a little -- getting a bit further ahead, but I'll find out. Lyn Pearson? Did I hear a yes? Okay, good. Jolly good.

Okay, look, we will begin. Are there others here whose names I've not called out who are scheduled to give evidence today or to speak to us today? Ian? Mr Poff. We had you scheduled for 11.00 this morning but that's okay. By the look of it, we are going to be able to fit you in. I think we will begin with Lincoln and Deanne McCrea and we'll pop you in as we can best do that, Mr Poff.

MR McCREA: Afternoon.

MR SHAW: Good afternoon. Welcome.

[1.05 pm]

MRS McCREA: Thank you.

MR SHAW: If you care to introduce yourselves. I've not sure whether you were here this morning.

MRS McCREA: Yes. Yes, we were.

MR SHAW: Well, then you've got a fair idea of how the game goes. Over to you.

MRS McCREA: Thank you. My name is Deanne McCrea and I'm a local business owner for the last 20 years, and this is my husband, Lincoln McCrea, who is a serving police officer in the New Zealand Police. We are parents to three young boys, Jacob, who's 11, Daniel, who's 10, and Christian, who's 9. We are from Hawea and members of the Patea District Boating Club and we access the ocean via the Patea River.

Lincoln will speak to our submission on our concerns regarding TTR's application to mine iron sands off the South Taranaki coast. In our submission, which we made via the KASM website, we also speak of our passion for the environment we have off our coast and the enjoyment we receive from it. We would like to show a short two-minute video I have made for today which illustrates this part of our submission.
MR SHAW: Is that video with our staff?

MRS McCREA: Yes.

MR SHAW: Okay. Would you like to begin with that or move directly --

MRS McCREA: Yes.

MR McCREA: Yes, please.

MR SHAW: Yes, okay. Well, we'll do that first, then.

(Video played)

MR McCREA: We just really wanted to try and get across to the decision-makers the depth of feeling that we have for the ocean out there. It's an outstanding place to spend a day, especially when you should be working and mowing the lawns. As my wife said, my name is Lincoln McCrea and, as you see, we have three boys that we feed from the ocean reasonably frequently.

We are not scientists. We are not economists. We are just local people that enjoy using the ocean, having access to it and raising our children around it. So, as such, I'm not sure that we can add in any meaningful way any scientific evidence or any economic analysis, as it were. However, one thing I would like to do if you don't mind is just quickly go through what we understand as being what we know and what we do not know.

The South Taranaki Bight has traditionally been used as a traditional source of kai moana for the local people and up until (inaudible) and all the locals now. There are recognised populations of marine mammals, including whales and seals. The odd Orca. There are penguins that come through and feed in the general area.

There is possibly, I would argue, one of the healthiest recreational fisheries that I have come across, and I've fished from Southland, around Stewart Island, Fiordland and up around the Bay of Islands. Patea is outstanding. You can't get at it very often - if you get out there about six or seven times a year you're doing pretty well - but the fishery out there is outstanding. We get good catches of whitebait when they're in season as it runs up the river. As you can see -- I had to put that shot of the crayfish in there. That's me boasting a wee bit. It was my first dive in 20-odd years and I picked up a cray. We know that there are healthy fish populations, healthy life, that cruise through the area out there.

[1.10 pm]
The other thing that we know is that TTR have put in an application to effectively strip-mine 75 kilometres of seabed. To put that in a little bit of context, Hawera to Patea is about a 20-kilometre drive. It would be the equivalent of 1.5 kilometres either side of the road from Hawera to Patea having the top 10 to 11 metres of soil ripped up, churned up and dropped back. Personally, I would suggest that if we were putting an application for that, it would possibly be turned down.

We know that the 65 square kilometres will be -- any life that effectively cannot swim away from the area, it will be completely destroyed. There are no ifs, ands or buts. Even TTR recognise that. That area will be completely decimated.

Effectively, when the mining takes place there will also be a plume produced. That we know as a fact.

Folks, with all due respect, that's about as far as our concrete knowledge of what is going to happen goes. We know there is going to be a plume produced from the mine. We do not know how large it is. We do not know how long it is going to stay suspended in the water. We don't know realistically and in real time how it will be affected by the currents. We just don't know. We have no idea, long-term, in real-time, concrete evidence because this technology is all pretty experimental. The mining of this material on this scale in these sorts of conditions, as far as I know - correct me if I'm wrong - has not been done anywhere else in the world. We do not know how this activity is going to affect the bird life, the marine mammals, the whitebait - which I'm really hoping it doesn't; we usually get a couple or 3 kilograms a year - the crayfish, the fishing stocks. We just don't know.

You will have heard from expert witnesses that will be basing their information, the information that they are giving you, on modelling. All due respect to those experts, it is modelling. It is not the real world. The ecosystems, the currents, everything out there is incredibly complex. I do not know how you can realistically get any real indication of what the downstream effects of this particular activity are going to be.

I am not really prepared to comment on the economic side of it, ladies and gentlemen. I just don't know. I'm not sure anybody actually does. I'm not sure TTR do. As far as I can work out, we're not even 100 per cent sure they're the ones going to be doing the mining, so I'm not sure that we can -- I certainly can't make any intelligent comments myself.

The scary thing is, and what's worrying the vast majority of people in the local community, of which I am now a part, is the uncertainty. We just don't know what's going to happen. A lot of people go out there
collecting seafood. A lot of the people are like myself, they have a -- the sea, raising their kids around the ocean, taking them gulling around the rocks, snorkelling, all that sort of stuff. It's just such a large part of their lives and all of a sudden we have this uncertainty as to whether or not we are going to be able to hand these skills on to our kids and them on to their kids. I'd love the thought that my kids, who you just saw hauling in blue cod, are going to be able to have exactly the same experience with their children. So that, and you will have seen that through the other submitters, that appears to be the basis of a lot of people's concerns. It's just the sheer uncertainty of it.

Based on that, and I know it's been short -- based on that, I would respectfully urge the Decision-making Committee to decline the application.

[1.15 pm]

I would like to add that we are not anti-development and if there was a better way, better technology, of extracting those minerals without causing such widespread devastation to the seabed and the ongoing after-effects, which we can't really quantify, I would certainly be open to exploring those different avenues. But it just seems like such a destructive process for uncertain long-term gains at huge, possibly huge, unknown destruction and losses. Thank you for listening.

MR SHAW: Mrs McCrea, anything you wish to add?

MRS McCREA: No, thank you.

MR SHAW: Well, can I say that it's not often we see as evocative a set of images as those you provided for us today in your video and it's good to know what it is that people value in these exercises. Pretty hard for any New Zealander not to identify with those things that you've identified as the things that you value in this space.

I want to start by asking you: if you were confident that the substance that underpins the images you showed us was not going to be damaged -- accepting the fact that there is going to be damage, no question about it, in the immediate mining area. The question is how long that damage, you know, survives for and so forth. But if you were confident that the images and the -- that you portrayed in that video were going to still be images of how you lived your life in the future and how your kids were able to live their life, would you be submitting against it?

MR McCREA: The level of confidence that would be required or information that would be required to -- I've tried, as an exercise, to get past this evocative -- this "mining" idea. You hear "mining" and all the bells start ringing and all
this other sort of stuff. If I knew that there were no downstream effects, then possibly not. But once again, sir, it is the unknown that is concerning. I want to be able to hand on to my kids a reasonably undamaged marine environment that they can go and play in as well as their backyard, because as backyards go it's not bad.

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MR SHAW: It's pretty cool. I must say, you picked a hell of a day to film. Or days.

MR McCREA: I would have had an enormous ethical dilemma had it been a good fishing day.

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MRS McCREA: We were talking about that on the way up.

MR SHAW: But no, the job was well done in terms of illustrating, as I say, the things that you value. Look, I just want to ask you one other thing. We've spoken already with individual fishermen, recreational fishermen and the collective interests represented by some of the clubs, and we have asked people two things: whether or not they would be prepared to identify, so that this can be tested by experts, the reefs that are talked about but never identified, the reefs that people say are there. The evidence we have had thus far doesn't support what's been said so we've asked people if they can identify those so that they can be tested and checked, and I put the same question to you if you've got particular places that are of importance to you. We're not talking about broadcasting these on --

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MR McCREA: Yes, you'd get a negative response then.

MR SHAW: I'm sure we would. A fisherman's generosity only goes so far, Mr McCrea.

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[1.20 pm]

MR McCREA: The scenes of the blue cod that were getting pulled up is about 6.5, 7 kilometres directly down-current of the proposed mining site.

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MR SHAW: So it's well within the Coastal Marine Area.

MR McCREA: Yes.

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MR SHAW: Do you fish much outside that Coastal Marine Area? Do you go outside the 12-mile limit very much?

MR McCREA: No. No, I've only owned a boat about three years. I'm still getting brave with it. The boat can handle more than I can.

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MR SHAW: I think the word that resonates in this room in that respect is "cautious".

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Devon Hotel, 390 Devon Street East, Strandon, New Plymouth 8.03.17
MR McCREA: Yes.

MR SHAW: The other question was that, again in terms of the identification not just of the thing that you value but the means by which you might understand that it's threatened, whether or not recreational fishing interests would be prepared to look at the formulation of conditions so that if, in the event that the consent was granted, appropriate and viable steps could be taken to protect --

MR McCREA: I can't comment for other fishermen but for myself --

MR SHAW: I'm asking you.

MR McCREA: Yes, I would. I'd certainly like to be involved because in the end, if the conditions got -- or the application got granted, I'd like to think that there is going to be some sort of built-in ability to -- if it turns into a complete and utter unmitigated disaster, that there is the ability to stop it without hitting the High Court for five years while the destruction continues.

MR SHAW: So this question of identifying triggers, for want of a better word, would be quite important to you.

MR McCREA: Absolutely.

MR SHAW: Because we are -- there's an argument that has got to be had and resolved here about what's referred to as "adaptive management" and it could mean a very large number of things. But there are questions that say: what's the extent to which we can impose thresholds, triggers, call it what you will, when exactly that happens? You stop and you can't go on until you fix it.

MR McCREA: Yes.

MR SHAW: It's interesting because you're not using the language of it but you're certainly identifying the practical effect of what we're talking about and I think it's an entirely reasonable thing to say. I'm going to leave that there but I'll just make a final comment about the beauty of the day that you selected. Quite clearly, judging by your accent, you've endured weather far worse than Taranaki's ever likely to impose upon you as a fisherman.

MR McCREA: Oh, yes. Absolutely.

MR SHAW: Anyway, very good to talk to you. My colleagues, I am sure, have got questions for you.

MR McCREA: Thank you, sir.
MR SHAW: We'll start with Mr Coates.

MR COATES: Tēnā korua. I don't have any questions, actually, but I was really impressed by the video. Very professional and it gave a good idea as to what -- I've never been down to the beach at Patea or seen the river mouth but it's that sort of on-the-ground -- not evidence but knowledge that is useful to us, so thank you.

MRS McCREA: Thank you.

MR McCREA: It always gets a bit uncomfortable if it gets put on Facebook if you pulled a sickie from work in order to go.

MR SHAW: It didn't have a date on it.

MR McCREA: The secret is to take the boss with you. I've discovered that.

MR SHAW: What, a uniformed boss?

MR McCREA: Yes.

MR SHAW: But in plain clothes.

MR McCREA: Take the senior sergeant, yes. Throw him on the boat as well, he's more than happy.

MR SHAW: Ms McGarry?

MS McGARRY: Yes, I've got no questions for you but thanks for taking the time to come and speak to us face-to-face today. We do appreciate it so thank you.

MRS McCREA: Thank you.

MR McCREA: Thank you.

MR SHAW: Mr Thompson?

MR THOMPSON: Yes, great video and a great day out too. I thought the senior sergeant might have been the grandfather. You can pass that on to him.

You made a comment that it's a great fishery, one of the best in New Zealand, and then almost -- and then saying you could get out about seven times a year because of the weather. Is the great fishery a factor of that many can't get out there every day so it's fished infrequently?

MR McCREA: That would be my suggestion, sir. If you talk to any fisherman basically between probably Palmerston North and maybe as far north as Raglan,
they all know that the best spot round here to go to get fish, get good
snapper, good blue cod, is to head out off Patea, but there's a couple of
things that slow them down. One is that there are not that many good
days where you can safely get across the bar. The bar will scare the hell
out of you, going out off there. It is pretty spooky on a rough day and I
think that that's probably what actually protects the fishery.

[1.25 pm]

MR THOMPSON: Okay, thank you.

MRS McCREA: And in his role he's helped a few people out that have capsized as well.

MR THOMPSON: Thanks.

MR SHAW: That's raised an interesting question in my mind and that is the "good
day". Is the good day something which is influenced entirely by the
weather and wave conditions or is the good day influenced by issues of
turbidity in the water? I've not talking about when you dive, I'm talking
about when you're line fishing.

MR McCREA: When you're line fishing, sir, it's hard to pick. We've gone out -- I went
out on a day that you would have said was absolutely ideal: crystal clear
water, everything was right. The fish weren't hungry. What do you do?
You go out there. You throw bait down. You know they're out there
because you can see them on the sounder but there's nothing going on.
The one thing I can say is that it is definitely affected by the condition of
the water. You'll go out on great days and get rubbish fishing. You're
not going to go out on a rubbish day where the water is completely and
utterly mucky and get a great days' fishing. You'll catch a few but it all
depends on the weather, the tides, the condition of the water. Certainly
rule of thumb that the better the water, the better the fishing. It's been
my experience.

MRS McCREA: A great day for me is when the water is quite flat.

MR SHAW: Well, you couldn't operate that camera so successfully if it wasn't, could
you?

MR McCREA: A good day is when you manage to walk away from it at the end of the
day.

MR SHAW: I think a good day ends in dinner, doesn't it?

MR McCREA: It does indeed.
MR SHAW: Yes. Look, I've going to thank you both very much. It was a bit of a relief for us, I think, to see the thing that we're talking about in the way -- in the brilliance in which you demonstrated that to us, so thank you very much.

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MR McCREA: Thank you very much for the time.

MR SHAW: And Mr Poff, we're going to go back to you. Welcome. Welcome, Mr Poff.

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MR POFF: Good afternoon. Do you want me to introduce myself?

MR SHAW: That would be a good idea.

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MR POFF: That's -- he's a hard act to follow, though, so -- the last guy, so --

MR SHAW: It is.

MR POFF: I'll do my best but -- my name's Ian Poff. I live down the coast here in Taranaki and I've lived here for about seven years, luckily enough to recently become a New Zealand citizen. Great country, great region to live in. I like to surf, fish, dive and just enjoy the coastline. I consider that a big part of my life. I'm originally from California.

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I guess I'm here to oppose the application for a few reasons. I just -- I believe that a thriving, healthy ocean is vital for humanity and our existence is dependent on ecosystems. I think seabed mining threatens the interdependency of life in the sea by disrupting it on multiple levels, including from the benthic level, all the organisms that live down in the sand, all the way up to probably one of my main concerns, the largest mammal to ever exist on Earth, which is Blue whales.

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From what I understand, that area in the South Taranaki Bight is a known congregation area for Blue whales, one of the few in the world. They're an endangered species with only 8 per cent of the pre-whaling population in existence globally, and if this is an important area for those whales I think to go in there and mine it -- for an endangered species, to push them closer to extinction doesn't really seem like the best idea. And also southern right whales also use the area as a birthing ground and they're also endangered. So I think any disruption to endangered species threatens the entire ecosystem and I wouldn't want to see those species pushed closer to extinction.

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[1.30 pm]

Since whales communicate with sonar, there are a lot of studies out there that suggest that any noise pollution really affects them. So, if you've
got industrial activity it can be really detrimental to whales because it can drive them away from their -- the areas that are really important to them for reproduction and a lot of other things. That's one of the main reasons.

I just don't think it's worth any economic benefit to push species towards extinction. When there's only 8 per cent of the original population of Blue whales, I don't really think it's worth any amount of money or any jobs to push our environment closer to not supporting us as humans and damaging the ecosystem. I think today -- you know, maybe in 1950 we would consider mining the seabed and probably not think about it but I think in 2017 it's all about sustainability. I don't think it's a sustainable industry. I don't think you could say that we're going to go mine the seabed in perpetuity and not cause any permanent damage.

Just a couple of other little things. I think as far as who is providing evidence, some of the scientific experts that have been -- I think there's a young woman from the Oregon University who was studying Blue whales down there and was saying how many Blue whales they'd seen. I tend to trust in scientific experts who don't really have anything monetarily to gain. If they don't have any money to gain from it, they're just providing their honest opinion.

Then there's TTR, who stand to make millions of dollars, so they'll pretty much do or say anything to get you to approve it because they want to make a bunch of money, whereas if they're scientists they don't have any money to make. I tend to trust them, some scientists, more than some businesspeople who just kind of want to make a bunch of money.

Then, as far as I understand, the citizens of New Zealand collectively own the seabed. Correct me if I'm wrong but -- and just from the amount of submissions, it seems that the people opposing it -- basically the owners of the seabed are the citizens of New Zealand and it seems to me like most of them oppose it, so shouldn't the owners of that area have a say?

Then my third and final point is it does seem like there's a little bit of pressure from the government on the EPA to approve this. I just -- my hope is that the government's wishes don't affect the EPA's decision. I hope it's just an independent opinion on whether they approve it or not. Just some of the things that I hear, you know, like the only fishery to support this is Sanford's fishery and the head of the National Party is one of the top investors in Sanford's fishery, and apparently TTR paid for the head scientific experts from this fishery to provide evidence. It just seems like a little bit of a conflict of interest.
The last time this application got declined, you had an MP, Simon Bridges, stating that he would review the EPA after they had declined this and invited them to reapply. It just seems a little bit like a conflict of interest. There just seems to be some pressure from the Government and I just hope that that doesn't come through in the decision. I hope and I trust the Decision-making Committee here to be independent and make their own decision, but I just wonder if they are feeling -- the EPA is feeling pressure to approve this.

But thank you very much for the opportunity to speak here and participate in democracy. My hope is that the application is declined for future generations to be able to enjoy the ocean and to support life in general. I think the oceans are in a really poor state overall so I think this could be kind of like the straw that broke the camel's back. To go strip-mine the seabed is kind of like clear-cutting a forest. I think this could be the beginning of further mining up the coast, it sounds like, and a slow decline in the ocean and all the life in it. I just want to enjoy it for the rest of my life and my kids to enjoy it, you know, so I hope that it doesn't go through. Thank you very much.

MR SHAW: Mr Poff, thank you. I'm going to just say something about one or two things you've raised with us before I see what questions people may have for you. You talked about the government wanting it and expressed the hope that the Committee would exercise its judgment independently. The government as such may or may not want it and the government as such has no greater right to tell us what it wants than any other party.

What we have had is a representation from the Ministry of Business, Innovation and Employment. The material we've had from them has been quite narrow because it's from that major department, a huge department. A single business unit of theirs is responsible for assessing and granting mining licences. When they grant a mining licence, it's on the basis that they know that the applicant -- or they have to be confident the applicant has the resources and the skill, the capability to extract the resource efficiently. By "efficiently", that means pretty quickly and without leaving patches of resource that are isolated and therefore difficult or uneconomic to mine. They certainly made a submission in support but that's from a single perspective.

The EPA is an independent organisation and we are a step removed from the EPA itself as well, as independent members of the Decision-making Committee. One of the members of this panel by law has to be a member of the board of the Environmental Protection Agency and that's Mr Thompson in this case. The rest of us don't and aren't.
I think we're, all of us -- whatever we do, people will have views about the judgment we exercise and it's in human nature to very often try to find bad reasons for why people made assessments and judgments. All I can say is that I'm confident that all of my colleagues -- and confident for myself that I'll do what I'm expected to do under the law, which is to make an independent assessment of the material that's in front of us, to apply that to consideration and assessment of the effects that are being described by people and people like you, and set that against the criteria set out in the Act and then make a decision whether or not we can grant or refuse. No one comes here on this side of the table -- probably the only people in the room who don't come here with a view as to what the outcome should be because we are obliged not to have a view on what the outcome should be until we have been through the exercise.

But you raised in a - how shall I put it? - a gentle and respectful way, and with rather more subtlety, I might say, than most people who are going to raise issues like that would do, so I thank you for that. Okay, so I will leave the lecture there. You achieved it without offending anybody and that's a pretty good effort, really. Not necessarily characteristic of -- no, I won't go any further. Mr Coates, any questions?

MR COATES: Tēnā koe. You said in your submission, "I rely on the sea for fishing, collecting paua, surfing, swimming, etc", which I don't think there's any - - anyone in New Zealand would dispute that. I think it's important that those things are sustainable. As you've said, we need sustainable industries in the same way that we need a sustainable sea so I hear what you're saying and thank you for making the trip here today.

[1.40 pm]

MR POFF: Thank you.

MR SHAW: Ms McGarry?

MS McGARRY: Yes, I've got no questions for you. Thank you for coming to see us today and for exercising your statutory right to come here and be heard, so thank you.

MR POFF: Thank you.

MR THOMPSON: No questions from me. Thanks for your presentation and thank you for giving our Chair the opportunity to put the record straight for so many who may hold a view that you may have had about the independence of the Committee. So, thanks.

MR POFF: All right. Thank you.
MR SHAW: There will be no telephone call from Mr Bridges tonight or any other night, Mr Poff.

MR POFF: Yes. Okay.

MR SHAW: Okay. Thank you very much.

MR POFF: Thank you very much.

MR SHAW: We will now hear -- I'll just do -- this is going to be the last possible chance saloon for Mr Hessell. Is he here, by any chance? No more questions there. So, Mr Hepworth. Good afternoon, Mr Hepworth.

MR HEPWORTH: Good afternoon.

MR SHAW: Over to you.

MR HEPWORTH: Thank you. My name's Ron Hepworth. I've come down from just out of Auckland. I come from a multicultural whanau and we're here to speak on behalf of a large number of people, our family, who have governance over a piece of land called the Anawhata.

MR SHAW: Sorry?

MR HEPWORTH: The Anawhata. Anawhata is a series of valleys and two beaches out from Auckland on the West Coast and we have been living there for a long time. We have certain practices there which we hold very dear and so we would like to speak to that which we see threatens that. So, some of that is the fact that we gather seafood. We fish. We hold the beaches as very special. We are the lifeguards. We are the first response team down there. There are no other houses but our one singular house down there. And we also scatter the ashes of our old people. We have a practice there where we plant a tree, spread the ashes in the stream that's closest to the tree, washes down over the land, comes down through the streams, down to the foreshore and mixes with the ocean. That's our practice. We are concerned that if there was a mining eventually up in that area that this would seriously offend us. We find this extremely disrespectful. That is how we sit in our piece of whenua, piece of land.

There are some other things that we'd like to speak to here which wash up on this piece of coastline which don't have a voice, can't make a submission. So, these things are the Southern Albatross, the Tākapu, the Beaked whale, baleen from the filter whale. All these just wash up on our piece of coastline but have lived a full life. They've had a complete cycle of life. I'd like to speak to the fact that we do not think it's appropriate that this should be interfered with: taro, kelp and this stuff here. So, this is pumice sand and it's a fine porous material that came
out of Taranaki a long time ago, has swept right up the coast, up past the Three Kings and is amongst all of the offshore and inshore rivers and beds and sand and when it's dry it's pretty much inert but if you put water on it, it smells very fishy. It is the home for countless billions of small micro-organisms which would be killed in a mining process.

So, while speaking of these things, I also want to speak of something of my experience as an individual with a 40-year or more experience in terms of being on the ocean, delivering yachts, involved in mining and involved in all the drilling platforms. And what I'd like to say is that in my experience, and I maintain contact with a couple of people that are still involved in these rigs and drilling processes, that the practice is far removed from some of the information that you'll be getting.

So, what I'd like to talk about is some of our concerns and just perhaps just one example of each of these concerns. So, I'd like to just explain that it costs a lot of money to get materials on board a platform and it costs an awful lot more money to get materials off a platform. So, the practice when you're working on a platform is that nothing goes off the platform. So, if you're welding a tow rail around a helicopter landing site, you're welding this thing and you unscrew the rod and it just goes over. If you're grinding out the disc, it goes over. This isn't a policy which people stick to but it's just practice because nothing goes back.

When I was working on a rig off the Australian coastline, there was a cage which was perhaps 6 metres plus square, it had a 2-metre rail around it, it was hung off the crane, and it's just hung off the side of the platform. So, all rubbish, hydraulic fuel, leftovers, stuff that is out of machines, stuff from the kitchens, cardboard boxes, plastic wrappers, it's endless, gets dumped into this thing. It goes swung off the rig downwind, a match is put to it and it burns. And so you end up with this great toxic mass in the bottom of this thing which melts down and then the cage is dropped into the water and jiggled up and down in the big swells until there's nothing in it and then you start again and nothing went off that rig.

So, that's how it is in practice and that's a long time ago but it would be interesting to see whether those practices have changed. I would say they probably have not. But technology and the engineering has moved a long way in some of these industries. The belief system as we see in our offshore fishing industries have not changed at all.

Health and safety: the process with health and safety is that you just do your job and the moment that there's any objection or any resistance to fulfilling your specific task is you do not get on that plane. You are
screened every time you get on to the helicopter or the plane. You do not get on the plane if you are a problem.

So, one example, a single example of when I was on the Endeavour 2 off Port Hedland was that there was a man that was killed. So, by today's standards it was an extreme abuse of health and safety. It was a ladder put against the steel railing at great height. He climbed up this ladder. There was a movement, he slipped off, went over the side and he was never seen again. So, by the time you fall 100 feet down into the water, nobody saw where he went and there was a tender off the boat all the time and so by the time this tender came in, they were quite a big boat the tender, we were 200 miles off the coast, so by the time the tender gets in they never found anything.

But what over the years has really concerned me is that in the months that followed that not one person was asked a question. There was no inquiry. So, all of those people that were working on that rig and those people that were involved saw what happened. Firstly, the work process didn't stop, the cycle of work, like you do not stop, you continue with your task. There's been a man killed and then over the months, "Did anyone speak to you about this or has anyone?" No, there was nobody that was contacted.

[1.50 pm]

So, the point I'm making is that there's health and safety issues. The reason that recruitment is done from outside, in this case it would be done from outside of Taranaki, would be the fact that you do not want to have questions asked. If there's a fuel spill, if there's an industrial accident, if there are labour law problems, if there are issues involved, you do not want to be talking with people that are based in Gisborne, New Plymouth or elsewhere. You will be recruiting these people from Jakarta, from Perth, from Hong Kong, from everywhere except here. That's how they will employ.

Likewise, the economics of running a place like this; their food, everything is brought in, substantial quantities. It's an international purchasing process probably through serving quite a number of organisations all at the same time. So, these people that are working on these rigs aren't going to be eating salads. It's going to be really good food but it's going to be wholesaled food which is brought out in bulk and it's not going to be coming from local sources primarily.

The people that will be coming will be flying in and they will be flying out. They're not going to be staying here. In terms of the spending or what can be considered their contribution to the local economy, at best it
is a beer, a taxi and a stop at a brothel. These are the people that will be coming in.

I have concern also just as a person who's spent a lot of time on the sea, lived on the coast up here, seen it in all of its different natures, it's a dangerous place. As a seaman, there's always risk involved in being on the sea. They are managed risks. The concept of holding a vessel on a leash or with the concept of the expectation that there are going to be systems coming through regularly which are going to be potentially extreme is an absolute no-no, an absolute no-no and bearing in mind the fact that if you did need to run for shelter you're going into a place which is progressively more dangerous. If you're bringing a boat up the coastline, you never come close to this piece in the coastline, never.

The depth here varies from between 50 metres, 70 metres out to 150, 200. It scallops deeper outside the harbours whether they be Kawhia, Manukau, others. But there is a zone there which you're extremely careful of and as a seaman, you would watch for what's called the five-day cycle. So, the five-day cycle is the expected pattern of weather systems that come down and the pressure gradients that follow that and you apply a very significant margin of safety to those elements. You would expect to hold off a coastline such as this. If two pressure systems came down and concertinaed up as you would expect them to perhaps three times a year, you would never, no matter what sort of anchoring system you had, you wouldn't be able to hold. That's my opinion. I have delivered dozens and dozens of boats offshore. We've never had an accident. We've got our boat safely home every time and there aren't many people that deliver boats that can say that. That's over 40 years.

[1.55 pm]

So, there are a number of concerns that are real in my observation. Above all else, I'm concerned about the way that decisions are made societally. I have seen the degradation of the fish life and just to life generally in the oceans. When I was first sailing out into the Pacific, we were being followed by huge tuna, by sharks constantly. You'd look over the side of a yacht and you'd see these things just following the keel. They'd be with you for weeks. They were always there. They're not there now. There would be birds everywhere. You'd get up on every shift, the first thing you'd have to do was to clean all the flying fish off the deck. I've done passages, we saw not one flying fish.

The last time I went up there which was a year or so ago, we stopped at Minerva Reef which is the hallowed ground for fishermen. There were 17 boats in there and nobody could catch a tuna. Nobody could catch a fish for dinner and there were 17 boats inside this huge encircled reef. It
would break the heart of somebody that's spent a life in this place. Everywhere up there you see these FADs, fish attracting devices. They are just like the great blocks of these things; they're enclosed nets which just get picked up on a regular basis. So, I'm not saying this happens out here but this happens on the other side.

The impact that we have on our environment is appalling, the way we make decisions. It's archaic. It's 200 years out of date and if we want to have something which is of value to these things, to our mokos, to our grandchildren, we need to be doing it differently. So, what I'm asking for is that yourselves, as representatives of the protection of the environment of the concerns that you hear us making, that your statement, that the kaupapa that you're holding to is one where you consider the overall wellbeing of all entities within the environment, not only us as a species, that we look at the wellbeing and the health that exists on this coastline out here as opposed to a financial imperative, that we prioritise ourselves differently and from a place from these sorts of decisions then this will roll out into the way that we make decisions in other areas of our community. So, we have a great opportunity here to actually do things differently because there are a lot of things here which are relying on us to get it right. So, I think that's probably most of what I have to say at this point.

MR SHAW: Okay, well thank you, Mr Hepworth. I've got to say that many of the issues you raise, while I'm in no position to know whether what you told us was true or false, but certainly the practices you described are practices that are governed by entirely different regimes than ours. They are looked after by MB, Marine Maritime New Zealand. They are looked after by Health and Safety New Zealand and we're not going there because they're not --

MR HEPWROTH: Yes, I understand.

MR SHAW: Just bear with me. They are not part of the consideration that is in our framework and we're not heading into that space and we're not going to get into a "we wouldn't do this" or "yes you would do this" because it would be entirely fruitless and irrelevant to our job because somebody else will be dealing with that and they will be talking to the hearing next week, I think, we're hearing from those agencies around maritime safety and practices.

The other point I'd make is that some of the issues you refer to are certainly matters that were consent to be granted that we would expect to see managed by conditions and setting aside all the other instruments of New Zealand law around industrial practices and so forth. But look, thank you. You obviously lead a markedly more interesting life than
some of us perhaps. In fact not perhaps, undoubtedly you do. I'll just see whether my colleagues have got questions for you.

MS McGARRY: I'd just like to thank you as I have everybody else today for making the effort and taking the time to come and speak to us. I assume that you also see a fair amount of the plastic bag that you have the pumice in on your share of the coastline. I thought that's what you were going to say to us that we also find plenty of this.

Just one thing, and it's been raised by other submitters, that if consent was to be granted that they would like to see an actual observer 24/7 on the vessel to observe the compliance with conditions. So, just following up from what the chair has just said, presumably that's something that you would support.

[2.00 pm]

MR HEPWORTH: That was actually part of my application which I didn't read it word for word but I did ask that should this application be approved that there would be on-board monitoring from OSH, Department of Conservation and Maritime New Zealand.

MS McGARRY: Yes. So, thank you for coming to see us today.

MR HEPWORTH: Thank you.

MR SHAW: Mr Thompson?

MR THOMPSON: Thanks, Mr Hepworth. No questions, thanks.

MR SHAW: Mr Coates?

MR COATES: Tēnā korua. Thank you for making this journey down from Anawhata which is another, I understand, beach I think, isn't it?

MR HEPWORTH: It is.

MR COATES: So, is one of your concerns the fact that this might be the thin end of the wedge and that you would have seabed mining further up the west coast of the North Island?

MR HEPWORTH: Absolutely. In addition to the experience I had for many years in terms of surfing down here and the beautiful beaches down here but, yes, we're concerned that this would be the thin end of the wedge, that it would set a precedent, that it would then progressively give permission to industries to just proceed with extractive and destructive industries and that would be right on our doorstep. We are as the holders of this piece
of land at Anawhata, the public come through and down walkways because you can't drive down there, just down walkways to the beach, and what they really enjoy is the fact that it is totally unspoilt, that the water is crystal clear. Lagoons can be swum in. The walking up to the hills is beautiful and that there are no houses or development in this beautiful piece of coastline.

MR COATES: Thank you. Another point you make is that the position of anchoring on a lee shore, I presume that the ships that take the iron sand from Waiuku are in the same position of anchoring on a lee shore and loading up from the pipeline there, the ones down by (overspeaking)

MR HEPWORTH: Down by Kawhia?

MR COATES: Yes, and by the Waikato.

MR HEPWORTH: I understand they're inside the harbour mouth.

MR COATES: Are they?

MR HEPWORTH: I'm sorry, I'm not absolutely sure, actually, on that but I didn't think they were offshore. Just to elaborate for a moment, when I say "anchoring", the chains involved in anchoring, each of the links is the size of your table. When they lay an anchor like that, they need to have something which goes out for half a kilometre or more.

MR SHAW: Look, I am going to interrupt. This is in territory which has got absolutely nothing to do with the EPA or the steps --

MR HEPWORTH: The noise involved in the laying of these chains and the sweep on the ocean shore would be massive.

MR SHAW: That bit is of consequence to us but we need to be careful where we tread.

MR HEPWORTH: Would you like me to speak to that?

MR SHAW: Briefly.

MR HEPWORTH: There is a thing called seabed rub which is if you're in a small boat it gives you great reassurance because you know the anchor's doing the job but what happens is that you lay your anchor down, it's reliant totally on weight, it goes down and it meets the sea floor. You're not reliant on your anchor to hook in particularly into the ground. You're reliant on the weight of hundreds and hundreds of metres of chain. You would normally put out two or three of them and they sweep with every swell that comes up, they drop down. The percussion is enormous. The
sweep levels everything on the seabed and that’s a constant motion for as long as your boat is in that position and if you want to be moving up and down the coastline you need to be lifting and dropping that stuff constantly. It’s a big feat.

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MR COATES: Thank you for those insights.
MR HEPWORTH: Thank you.

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MR SHAW: Thank you, Mr Hepworth.
MR COATES: And thank you for bringing the artefacts to show us. I thought you might have some ambergris in the plastic bag.

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MR HEPWORTH: No, no.
MR SHAW: You’d be travelling business class on the way home. Thank you very much.

20  
MR HEPWORTH: Thank you.

(Off mic comment)

MR SHAW: I don't think anyone's going to be worried by it to be honest.

25  
FEMALE SPEAKER: All nature.
MR SHAW: Absolutely.

30  
MR HEPWORTH: Thank you for the opportunity to speak.

[2.05 pm]

MR SHAW: Thank you. Mark Donald, do we have Mark Donald here? Welcome, Mr Donald.

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MR DONALD: Afternoon.
MR SHAW: Good afternoon.

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MR DONALD: Yes, my name's Mark Donald. I'm 46 years old. I'm currently living in Waitara which is North Taranaki. I've been living in Taranaki for 17 years now. So, I've lived out the coast, I've lived in New Plymouth itself and I've lived in Waitara now for nine years.

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I've also studied environmental management so I have an understanding of ecosystems and how everything ties in together. I am, however, no
expert on the scientific details of when it comes down to the number crunching and the evidence that's been presented based on the modelling that's been done. Is that right? Does that sound right? That's my understanding of what's been presented. I also spoke at the first hearing so it's my second time sitting here in front of this panel.

So, several issues for me. I mean, some of them are going to cross paths with the last two speakers, sorry, the first after lunch and the guy from Patea and this most recent speaker, okay. So, you're going to get the same sort of things coming up. I've actually been out off the Patea bar and been fishing out there and been out to roughly about where Graham Bank is which is into the zone. Is that right? So, that's into the EEZ, into the economic zone, right, that we're talking about and that's also roughly in that area that they're going to be mining, right, correct. So, you're asking for names of fishing spots, right? That's definitely one of them, Graham Bank.

MR SHAW: Well, we've certainly got that.

MR DONALD: I'm sure you have.

MR SHAW: That's well documented here.

MR DONALD: Okay, well I'm not afraid to drop a name of a fishing break, a fishing spot and the place is called Snapper 13. You will never find it unless you get the co-ordinates off a local fisherman. The place consistently produces just plentiful snapper, massive fish, mate, you know. Massive fish stock, five-pound Blue Cod, the sort of fish that you just won't catch anywhere else which is basically the best place I've been fishing in this country and I've fished a fair part of the country.

Look, you've seen on the video yourself, you get out there, you get out to sea there and it's just like there's the mountain, you're miles away from it all, you're out at sea, it's just a magic place, mate, when you're out there you know, it is. I don't understand how you could even really consider mining the seabed based on, you know, the place is a one of a kind spot, right. We're in a unique country here. I just don't understand how you can even consider passing the application based on the modelling that’s been done. Yes, I mean, it's basically untested waters, isn't it? No one's really dug up the seabed to that level before and done that and tried to replace it down. It's never been done, has it?

So, my concerns are, obviously, you've got the risks involved, you've got the response time, right. If there was an accident, what's the response time and what's the variation in that response time. Does the boat come from Australia, does it take how many days to get here and how long would it take to get here if there was adverse weather? If there was
extreme conditions which is if there is going to be an incident, it's going to be when there's a big swell or big wind, big water moving and it's massive on the surface as well and the force of the ocean and the power of nature you can't under-estimate it.

[2.10 pm]

Like I said, I'm a surfer. There are a number of surf breaks down in the South Taranaki Coast there. The Peta River mouth itself is quite a well-known surf break and there's another surf spot called Waitotara. I don't know if you're aware of that place on the map but it's directly in the plume where the modelling, the suggested plume is going to go down towards Whanganui there. It's another place that I would call magical. When the surf breaks down there, it's not just a little big break or whatever, this is a point break that's -- it's a set-up.

Okay, so that's probably not significant to you but to me those surf breaks down there are and to the rest of the surfers and the tourist industry that brings how many surfers here to this region. Probably thousands a year I would imagine. It's hard to put a statistic on that. Who knows what the effects are going to be on those surf breaks. No one knows. You'd be guessing.

When you're a long way out at sea, the impression that I got was you're just a long, long way away from any witness, any watching eyes. That's another concern of mine is that what would go on at sea, how different would that be to what TTR are telling you and what the monitoring is tell you. What's actually going to be going on out there and how's that going to be monitored and how's that going to be policed?

It's a pretty big question for me, yes, and what is the percentage of time that the monitoring will be done and are they given notice that there's going to be monitoring.

You'll shut me down if this is irrelevant but, firstly, I'm questioning whether TTR are actually after our iron from the extraction process or whether they're actually after titanium. The titanium, titanio magnitide, I actually don't know the official term for the compound, but it's found bonded with other elements. Many elements such as iron, aluminium, nickel and vanadium are alloyed with titanium and they produce strong alloys. These alloys are used in the manufacturing of naval ships, spacecraft, missiles and aircraft, also surgical implants, those suitable implants that have titanium alloy will last up to 20 years or more. Titanium was actually produced by a New Zealander called Matthew A Hunter. He was the first person to produce titanium, 99.9 per cent purity in 1910.
A final question from me which is really for me is the core of the issue here is, and because it's up to you guys, right, you're making this decision, sorry, and lady, you people, the question is where do you draw the line at respecting our mother because that's what's happening here. This is our home that we're talking about. It's about mana. It's about the state of the planet that we're bringing our children up in and leaving our planet to and it seems to me to make more sense for us as humans to be cleaning up our mess from the oceans, like plastics and chemical pollutants, and making the oceans a safer place and cleaner unadulterated part of our unique and highly treasured planet. That's all from me.

MR SHAW: You've --

MR DONALD: That's me, yes.

MR SHAW: You've finished it?

MR DONALD: Yes.

MR SHAW: Thank you very much. Mr Thompson, any questions?

MR THOMPSON: Thanks, Mr Donald, very thought provoking. No questions, thanks.

MR SHAW: Ms McGarry?

MS McGARRY: Mr Donald, thanks for taking the effort to come and speak to us today and I can see the emotion and the passion that you're speaking with today so thank you and you've done really well to, obviously, keep some of those emotions under control. I've just got one question for you and that's about your Snapper 13 spot.

MR DONALD: Yes.

MS McGARRY: Any idea how close to the mining area that would be?

MR DONALD: I believe it's downstream. I've only been there twice myself and you either get on the spot or you don't. Even if you've got the GPS co-ordinate, when you drop an anchor the boat goes right, so whoever's putting you on the spot needs to be experienced with going there and fishing. You could be just off and you're not catching fish.

MS McGARRY: And that's out from Patea, is it?

MR DONALD: That is, I think, directly out from Patea and it would be in the downstream of the plume.
MS McGARRY: Okay, well thanks very much.

MR DONALD: As far as I understand. Like I say, I couldn't show you where it is. It's done GPS co-ordinates, right. It is down there. A local probably secret spot but a quite well known spot, okay.

MS McGARRY: For the locals. Thank you.

MR SHAW: Mr Coates?

MR COATES: Thank you, Mr Donald, for coming in and presenting to us. I've heard your concerns and certainly will take them on board. Thank you.

MR DONALD: Thank you.

MR SHAW: Thank you, Mr Donald and that's it.

MR DONALD: That's it, no questions. Thank you.

MR SHAW: Michaela Stoneman? Good afternoon, Ms Stoneman.

MS STONEMAN: Afternoon, kia ora koutou.

MR SHAW: Kia ora.

MS STONEMAN: My name is Michaela Stoneman. I'm born and bred in Taranaki and have lived in the beautiful community of Patea for the past 13 years with my husband, Kevin.

Patea is the closest town of proximity to this application for experimental seabed mining. I have deep concerns of how this proposal will affect our coastal environment, our lifestyle and the future of our community. I'm an artist and I work for the district council as the Arts Co-ordinator.

I became aware of seabed mining around three years ago with TTR's first proposal. A couple of people from Kiwis Against Seabed Mining (KASM) came and held a public meeting in the Patea Old Folks hall. There were a handful of people there. We went in knowing nothing and went out with a lot of questions and concerns. While this is the first we'd heard about this, KASM were not scaremongering, they were raising awareness. Their commitment and insistence of precautionary principles in regards to seabed mining in New Zealand have remained strong.

[2.20 pm]
A few months later I went to a public presentation by TTR in Hawera to find out more and to ask questions. I left frustrated by the lack of evidence of environmental security and unconvinced that the marine life in the South Taranaki Bight would not be adversely affected. Also, the scale and duration proposed seemed to be driven purely by profit and projected targets. This made me feel protective of my place, frustrated at the lack of solid evidence that the mining would be safe and vulnerable in a small town without a large active collective voice to resist.

It's three years on from TTR's first proposal to which I submitted against. I was thrilled to hear that TTR had failed to gain consent based on the lack of evidence that it would be safe for our marine environment. I felt like the EPA had really listened. I was so relieved and felt optimistic once again about the potential future of our town and our district.

This time around with the new proposal, which in essence seems to me to have not changed very much, it's been different. TTR did not hold public meetings in our community with maps and diagrams and savvy suited PR crew. Instead, we were left a daunting stack of fact photocopies at the local library, largely impenetrable and incomprehensible to the general public. This to me was a clear indication that TTR were not concerned with us with presenting their revised proposal to the community that it would affect. They did afford us a full-page advertisement placed in local newspapers with bullet points stating that there will be minimal effect to the environment and promising jobs that may never eventuate. This time around, we were not allowed hearings in our local towns or marae. TTR did not consult with our community.

While the proposal has not significantly changed, things have changed in the community since last time. Patea marched to Parliament with a clear message, "No seabed mining in Patea". Public awareness has grown hugely. Local artists held an art auction in Patea to raise funds to help KASM sustain the support of experts and lawyers. Organised within a few weeks, artists from all over Taranaki donated art works for auction. People from all walks of life within the community attended the auction: farmers, boaties, schoolteachers, freezing workers, all sorts. These people generously supported the auction and raised $12,000 in a few hours. That's a huge achievement in a town with only 1,200 people. This result is indicative of the support of the work of KASM and our community's strong opposition to seabed mining in South Taranaki and New Zealand.

Another change has increased interest in the South Taranaki Bight which has in turn initiated new investigative research in the area. The South Taranaki Reef Life Project held an exhibition of underwater photographs.
at our local museum in Patea showing the wide diversity of marine life. Funding from the Ministry of Business, Innovation in Employment and Adventure Taranaki has allowed unique education opportunities for our local students. Leigh Torres's documentation and descriptions of a Blue whale foraging ground in the South Taranaki Bight recently reported sightings of over 60 Blue whales. How awesome is that?

While TTR's main intent is to profit from this proposal, the environmental risks are borne by our community with little or no tangible benefits or compensation offered. Are there substantial changes to the seabed-mining proposal that was denied consent to the one that we're addressing today? I do not believe that TTR can guarantee that the environment and marine ecology will not be damaged or negatively compromised. Assurances based on concepts and modelling are not good enough. I believe there's no certainty that the methodology proposed will ensure the marine environment will be safe. If something goes wrong, the risks will create irreversible damage that no amount of money can fix. I'm sure you'll agree the ocean plays a huge part in our sustenance and lifestyle in Aotearoa New Zealand. The potential impacts of this proposal are diverse and would directly affect an environment which has little baseline data or research. Seabed mining cannot be undone.

This forum enables decisions based on facts, science and comprehensive evidence. I believe morals and ethics should also be considered. Our ocean surrounds and sustains us. It is our collective responsibility to protect it from harm and preserve it for future generations. Your decision will create a legacy in New Zealand. Please choose well. Thanks for the opportunity to be able to speak to this submission today.

Tēnā koutou.

[2.25 pm]

MR SHAW: Thank you, Ms Stoneman. Mr Coates?

MR COATES: Tēnā koe, Ms Stoneman. You live in Patea?

MS STONEMAN: Pardon?

MR COATES: You live in Patea?

MS STONEMAN: Yes.

MR COATES: So, you're directly concerned with the results of this application?

MS STONEMAN: Yes, and how it will affect our community.
MR COATES: Right. And we've had several submitters from Patea so we're getting a good idea as to what values you have particularly regarding fishing and the sea. So, thank you for giving us your direct evidence or submission representation and we'll take it into account. Thank you.

MS STONEMAN: Thank you.

MR SHAW: Ms McGarry?

MS McGARRY: Yes, no questions but again it surprises me that everybody we've heard comes from a slightly different angle each time so I thank you for your contribution and for coming and speaking to us today.

MS STONEMAN: Thank you.

MR SHAW: Mr Thompson?

MR THOMPSON: Yes, thanks for your submission. No questions, thanks.

MR SHAW: Thank you, Ms Stoneman.

MS STONEMAN: Okay.

MR SHAW: Lyn Pearson?

MS PEARSON: Kia ora. Thank you for providing this opportunity for some of us concerned about this issue to be heard. In looking at this I feel that there's a huge range of considerations about the environment impact of digging up 5 million tonnes of seabed over a period of well I'm not quite, I'm confused about how many years now, and I find it impossible to imagine this amount of matter but I do know about the massive amount of sand that sea currents from Taranaki bring to my beach at Castlecliff, Whanganui each year. My husband and I are involved in Castlecliff Coast Care and we have received a whole lot of information from various people about the currents and how come we've got these massive sand dunes in Castlecliff and where the sand comes from.

So, apparently ever since the engineers in Whanganui have been pushing out the moles on either side of the river mouth to create a safe passage for boats, the sand that used to be carried down to South Beach and further down, it went as far as Otaki, has remained north of the mole. So, we've got this triangular bit of sand building up and that's -- hopefully you can see on the first slide. I've got a bigger picture here but it was impossible to get this scanned at this size so I don't know whether it's helpful for you to see that or not but, yes.

MR PEARSON(?): Perhaps you're monitoring some that are just as good as this.

Devon Hotel, 390 Devon Street East, Strandon, New Plymouth 8.03.17
MS PEARSON: Yes, it might be, I don't know.

MS McGARRY: Yes, it probably is (overspeaking)

MS PEARSON: Yes. So, down the river it's got the years that the mole was pushed out and then that key at the top on the left shows you the years where the sea came to in those years. So, in Victorian times it was possible to get out of the tram and paddle your feet and Seafront Road was on the seafront. People used to hire out deck chairs to sit on the sea. So, this is an impressive amount of sand that has been built up since then between the Whanganui River mouth and the Karaka Stream. So, it's approximately 2,500 metres and approximately 200 metres wide from high tide line to the previous shoreline.

[2.30 pm]

Sand morphologists and engineers tell us that this build-up has been previously 1 metre and is probably slowing down to half a metre a year these days. Now, this may not sound like much until you look at Castlecliff sand dunes formation. So that's the second slide. So, this picture was taken in 1939 and you can see the sea. There was a ship that ran aground so a lot of people with their cars were down there and so pictures were taken and if we compare that to the third slide which was taken in 2012 you can no longer see the sea. There's a great big sand dune there which has been moved from Taranaki by the sea.

Then I've got another slide of a Second World War gun emplacement and, no, this was not built to do damage to Japanese crawling through the sand dunes, it was actually looking at the sea during the Second World War and it was meant to shoot at enemy shipping.

We have also noticed on the Google Map, sorry I haven't got a copy of that, but on the south side of the swimming beach, it is now out of date, the picture, because it no longer shows the lovely Spinifex dune which has grown which is in the fifth slide. Right down you've got the Duncan Pavilion on the left and right down on the right you've got a Spinifex sand dune. It's that lower dune. Now, that has built up since Google have been making maps of Castlecliff and putting them on there.

Presentations; so this knowledge of how our dunes have grown mainly thanks to sea currents means I cannot comprehend how any sand seabed material dropped or deposited on the ocean floor in the South Taranaki Bight will just obligingly stay there where deposited. Then when I think of the material coming out of the proposed TTRL process has had its heaviest part of its components removed, the iron, and all the living things that might kind of hold it together, I am suffering even more
disbelief. I am aware that this is a wild West Coast area and the Roaring Forties wind belt that we are talking about and I have heard it described by sand morphologists, I have trouble with that word, as a high energy area.

I am concerned all the material from the extraction plume will cover many hectares of living ocean floor and also kill all the life there. We could be facing a huge area of seafloor desert no good for supporting any life. The issue of sediment plume needs careful and meticulous analysing. This has not yet happened. I feel the efforts to establish how this might work has been very haphazard and clumsy and do not really seem to fit into the area where the mining is supposed to be happening. There may be no longer a commercial fishery here in the South Taranaki Bight although there has been in the past and there is certainly a recreational fishery here.

So, I'd like to show you in the sixth slide some of the boats, some of the evidence of some of the boats. There's boat trailers there parked all over the place. Sometimes we've got to queue up to get from Castlecliff into town waiting for vehicles with their trailers to park there. So, it's not only boats going out from South Taranaki to fish in the South Taranaki Bight but they're also going out from Whanganui. So, it's supporting a large amount of recreational fisheries. This slide was taken last month. So, it's hard to believe that there's nothing out there.

The district council believes that this is important too and they are developing plans for a marina, wharf, ablution block and better wharf facilities. A costly exercise but one that all of us locals can see a need for. This could also develop into a money-making venture for our council but, obviously, we need the fisheries out there for this to work. There are also charter boats that operate from Whanganui out into the South Taranaki Bight for fishing trips or bird watching expeditions because there are a lot of birds out there living on the creatures, the sea life that lives out there. So, we're concerned about what will happen also to the threatened and if they're periodically covered with this dusty plume or continuously, I suppose.

There are issues that much further examination such as the modelling of the sediment plume. This is critical. How far will the sediment from the mining spread through the waters of the bight and will the plume, in fact, manage to stay in the South Taranaki Bight? I feel this cannot be guaranteed.

In conclusion, I wish to say how hard it has been for some people to come from Whanganui to New Plymouth to these hearings. I know a
teacher, an orchardist and a solo mum who just couldn’t afford taking a long day off to travel here. It takes about two and a half hours here and then two and a half hours back and you have got to wait around for the hearing. So, I'm grateful that I am able to do that.

I'm also concerned that many written submissions seem to have been lost somewhere in the process and we haven't had time to work out why our email doesn't seem to come through our server properly but we appreciate that people have communicated with us about trying to sort it out. All this makes me feel concerned about this democratic process and so I feel really lucky to be here and to be able to present this.

So, I'm asking for this application to be declined and that the process of submission into oral hearing in the EPA to be more transparent and a fair process and I realise that that's nothing you can probably do but that's one of my concerns. Thank you.

MR SHAW: Thank you.

MR COATES: Tēnā koe. Welcome and thank you for coming all the way from Whanganui. I have got your submission up on my screen so it certainly is in the system.

MS PEARSON: Oh, good.

MR COATES: And let me just understand your concern with the pictures, is that you're concerned that sand from the mining site is going to end up increasing the beach and therefore the distance from the sea at Castlecliff?

MS PEARSON: Well, the fact that the sand comes down from Taranaki makes me realise that these ocean currents are very strong. They've got this power to move so much sand. If they're moving a metre or a metre and a half of sand a year, I just can't see how a plume that's light in the water is going to actually just stay there if the east currents are continually pushing down towards our beach.

MR COATES: Thank you. I just wanted to clarify that because they're very good pictures particularly over a historical sequence.

MS PEARSON: Thank you.

MR PEARSON: Can I comment to that? I guess the question really for us is just how well the plume has been modelled. We know that sand travels that far so have the people modelling the plume really, really understood the currents? I guess that's our concern from a practical observation point of view.
MR COATES: Thank you.

MR SHAW: Ms McGarry?

MS McGARRY: We've seen information about different consistencies of sand up and down the coast and how coarser sand and finer sand behaves. The build-up here, how would you describe the sand in this area?

MS PEARSON: The sand that's arrived to fill up this triangular is quite coarse sand, yes. The sand underneath it is not as coarse and, in fact, I think it's even probably a browner colour than what's arriving from Taranaki.

MS McGARRY: And when you dig a hole in the beach which I'm not sure whether you've got grandkids and you still do that kind of thing but when you dig down into the beach is it all quite a consistent, the sand that's arrived there, is it all quite consistent or do you see layers within the sand of different sized material?

MS PEARSON: It probably depends where we dig it because it will actually change depending on whether there's been a full moon and a high tide. Sometimes we'll get some browny sand coming through anyway naturally, yes.

MS McGARRY: In one of your pictures here it appears to show a street light in the middle of the beach. Are my eyes deceiving me?

MS PEARSON: No, it's not actually that. If you actually …

MS McGARRY: I've got your third, fourth one, which one is it?

MS PEARSON: Yes, I noticed that and I thought --

MS McGARRY: Fifth one.

MR PEARSON: It's on the edge of the carpark I think. There's a carpark, there's several carparks and then there's a long beach which is 90 metres wide after that.

MS McGARRY: I thought you were going to tell me there was a road there at some stage that's been buried.

MR PEARSON: Well, it does get buried periodically and they dig it out. That's another issue for another committee - yes, anyway.

MR SHAW: Certainly not for this one.

[2.40 pm]
MS McGARRY: Well, again, we appreciate that you have travelled a long way to come and see us today and thank you for doing that.

MS PEARSON: Thank you.

MR SHAW: Mr Thompson?

MR THOMPSON: Thanks, Mrs Pearson. It does underline your argument that there is a strong tidal drift down south and there's a transportation of sand along with that. It must play havoc with property titles, mustn't it, as you find you've got a beachside property and then someone else is able to purchase land on the seaside of you.

MS PEARSON: Well, actually what's happened is they've created a domain and so there's a grass domain where there used to be sea and then there's sand hills. So, yes, we're quite lucky, we've got some of the biggest sand dunes in the country, yes.

MR THOMPSON: Thank you.

MR SHAW: Thank you very much.

MS PEARSON: Thank you.

MR SHAW: Joanne Massey? No, that's nature's way of helping us to catch up to where we ought to be. So, Sean Oliver?

(off mic conversation)

MR SHAW: Joanne Massey, yes or no? I've just called Mr Oliver.

(off mic conversation)


MS WARD-HOLMES: Hi.

MR SHAW: Good afternoon.

MS WARD-HOLMES: Hi. Hi. Thank you for the opportunity to speak today. I'm a mother. I have two children. We live in Raglan on the west coast.

I love to go to the beach. I love the ocean. I love the fact that we have this amazing backyard to play in. It's what I have grown up with and my children are growing up with, and I, too, want to keep this amazing playground for my children's children and future generations. It's our
life. Yes, we are lucky. I love to eat kaimoana. I do like to go fishing but, even better, if someone brings back a fish for me to eat.

And, over the years, we are brought up to care for this ocean. We learn to respect the ocean and, over time, we learn to look after this ocean. I always remember going to find crabs, and we would lift up the rocks and find all these crabs running underneath, and there was always someone telling you, "Remember to put the rock back how you found it because that is the crab's home". And now I tell my children the same words, and I hear them telling their friends the same words, and that's how it begins, the caring for the environment, the caring for our environment. It is in us to do this.

And, as we know, over time we get more involved in caring for the creatures we find at the beach and the fish that we fish in the ocean, not keeping the small fish and putting them back in the water. Then there's the land around us. Again, it's in us; we know to care for this land. All around us, we're being reminded to care for, look after, to be the guardians of this land and ocean. We as people just know that that is our natural job. And, if we don't do what we know is the right thing, then there will be consequences, and bad things will happen. It is our responsibility to do the right thing as people.

And that's why I'm confused as to why I'm here today, why I've spent money on transport, driving four hours, and spending money on accommodation to be in this room speaking to some strangers.

(off-mic discussion)

[2.45 pm]

MS CUNNINGHAM: Hinemaria has asked me to read for her on her behalf:

"Why have I had to spend money on transport, etc? We know the story about putting the crab's house back into the same place that we found it, what I have just talked about, and as children people teaching us to care for our environment.

My experiencing of growing up with my family, my Māori heritage and learning the values and practices of caring for the ocean and the environment makes me an expert, too. To me, it is very obvious that, if you take, dig, scrape, suck, however the applicant plans to do it, anything away from the bottom of the seabed, you will destroy anything that is living there. The evidence has been given to you by many experts. It's against kaitiakitanga.
I was here yesterday at the hearing and saw the photos of that amazing colourful sea life, and that's where the applicants wish me to allow the mining of the seabed. I heard the fishing guides from Patea give us their stories and knowledge of this area that the applicant has chosen, the South Taranaki Bight. How dare we allow this to happen? The economics is in all this. You've heard all the stories and the evidence. Tourism from fishing, tourism from marine life, the blue whales, the orca, the Hector's and the Māui's dolphins. Māui's dolphins are on the brink of extinction, a critically endangered species, and cannot tolerate any further human impacts on their environment, ecosystems, food chain.

I understand that, if there is only 50 animals of a species remaining, it is considered to be extinct. Just because they live in the ocean and we cannot view them at all times like birds, does that mean that we have the right to endanger their lives? Seabed mining means no more Māui's dolphin, gone forever, deleted, extinct. I definitely do not want to be a part of a generation that did not save a mammal from becoming extinct. Why would we not want to support a breed of mammal, the Māui's dolphin, from dying out? It's just that simple.

A precautionary approach to this type of activity is absolutely necessary to ensure the lasting health of the marine environment. This means having a full understanding of the life that exists in the area, resident or transient, and how that life interrelates within the surrounding environment. Why would any New Zealander want to allow any impacts on such marine mammals? Why would any person of the land allow this?

The mining site is to be left as a dead zone, and it may take decades or generations to regenerate. The seabed supports a wide variety of organisms that in turn support an extremely healthy fishery as we saw in those pictures yesterday. When would one wish to reduce life within that food web?

It was only a few years ago, a couple of generations ago now, when we experienced colonialism, with which came the taking of the land, the poisoning of the land and the rivers, the introduction of unwanted plant and animal pests and diseases and sickness, banishing the many native people, Māori. When will the Government realise that they are wanting to repeat history all over? It is not worth the risk of allowing such an outrageous idea as seabed mining. It is not worth the risk of this precedent-setting application to go ahead.

I believe there is more than enough evidence for any sound-minded unbiased human being to understand; if you take away the food chain,
you take away the Māori. The Māori is destroyed. It will be just absolutely devastating.

Of real concern to me is the applicant's plan to have vessels seeking the shelter in Admiralty Bay in the Marlborough Sounds. Sheltering; what does this mean? How will the vessels shelter in Admiralty Bay? If and when these vessels shelter in Admiralty Bay, will they require fuel, oil, to allow the vessels to function? Will they bring their toxic waste to Admiralty Bay?

Admiralty Bay lies approximately 100 kilometres south of the project area within Te Tau Ihu, top of the South Island region where eight iwi groups are represented under Te Tau Ihu Settlement Bill, currently hosts long-line mussel farming and is part of around $276 million aquaculture export industry within the Marlborough Sounds. I am one of the eight iwi groups, and this is my taonga. I have huge concerns about the sheltering of the Marlborough Sounds. It is my responsibility to not allow the crown jewels of this area to be damaged or to disappear. That would be totally unacceptable and just plain stupid. Again, kaitiakitanga.

Please, what is the assurance that there will be no spillages or impacts on these pristine waters of Aotearoa? I believe that both the Government and the Trans-Tasman Resources Limited have neither informed nor consulted properly with me, my family, my whanau and my friends, the people of Te Tau Ihu and the peoples of the Marlborough Sounds area. We have not had enough time or information to properly understand the effects of seabed mining.

Many thanks for your time. Please make the best decision for you and I and all other New Zealanders including our children and the children still to be born. This land, our land, this earth. We are clever people. We don't allow destruction for no good reason, for no real gain."

Hinemaria continues:

"My daughter Wairere Tepania, who is six years old, is not able to make it here today because she is at school back in Raglan. This is a song that the Raglan Area School children with the help of their teachers wrote a few years ago to show their concerns for seabed mining."

(video played)
MR SHAW: Mr Thompson.

MR THOMPSON: Thanks, Mrs Ward-Holmes. We understand, I think, precisely where you're coming from and what's driving you. So, thanks for your presentation.

MR SHAW: Ms McGarry?

MS McGARRY: Yes. And I repeat again thank you for taking the time and coming to see us. Thank you.

MR SHAW: Mr Coates?

MR COATES: I understand your concerns about the plan to take shelter in Admiralty Bay especially since, with your name, you're obviously from down there. So, yes, tautoko ki a koe.

MR SHAW: Thank you very much.

MS WARD-HOLMES: Kia ora.

MR SHAW: We're going to break for coffee now and we'll be back in 15 minutes. Thank you.

Joanne Massey has not turned up yet? Sean Oliver? No. And what about Paulina and Alecia Sadowska? Are you both here? Just you. We'll see you immediately after coffee. And Lisa Schill? Okay. And you'll follow. Thank you.

ADJOURNED [2.59 pm]

RESUMED [3.16 pm]

MR SHAW: Hello, Ms Schill, how are you?

MS SADOWSKA: Paulina.

MR SHAW: A bit past that, aren't we? No, you're not Ms Schill, you're --

MS SADOWSKA: Paulina.

MR SHAW: -- Ms -- Sorry?

MS SADOWSKA: Yes. Yes, Sadowska.
MR SHAW: Paulina -- I'm sorry and I gather that one of the earlier submitters has arrived. It's you, is it ma'am? What's your name?

MS MASSEY: Joanne Massey.

MR SHAW: Okay, Ms Massey. We'll talk to you after we've spoken with Ms Sadowska. Is it Sadowska?

MS SADOWSKA: Yes.

MR SHAW: Here we go.

MS SADOWSKA: Good afternoon, EPA. DMC, thank you very much for allowing us to be here and it's quite special to be able to be in this process. Not a lot of countries have this and, please, DMC, don't take a lack of eye contact as disrespect, I'm just going to read so I don't pass out.

I will start with a quote:

"It is a curious situation that the sea, from which life first arose, should now be threatened by the activities of one form of that life, but the sea, though changed in a sinister way, will continue to exist. The threat is rather to life itself."

This is by Rachel Carson, she is a marine biologist. So, my name is Paulina Sadowska and I hold an environmental studies bachelor's degree and a master's degree in environmental management, but, more importantly I am a concerned individual.

From an early age, I felt a strong connection to the natural world and I have no idea how by eighth grade in '96, I have already made a statement at my Honoural Society induction that I want to strive to conserve what is possible. I came to visit New Zealand for the first time in 2005 with four friends. I fell in love with the beauty and the diversity of the land and the sea. I'm sure you must know that New Zealand is a magical, special place for people from the northern hemisphere. All of my friends and colleagues were jealous and amazed that I can afford such a far and expensive journey and New Zealand is by the far the most expensive country I have travelled to. Tourists easily spend thousands of dollars here, yet New Zealand is a special place where one can enjoy the bounty of nature which draws a lot of people, regardless of high costs. So much so in 2010, I came here again with my mum and two other friends to visit; Mum was paying.

Lonely Planet named Taranaki as one of the world's best regions to visit in 2017. This is an indication that people are interested in this area. Obviously, not for mining activities, not to explore the proposed massive
machinery, as they won't be able to dive there anymore or fish and not to listen to the noisy machinery digging up huge amounts of sand for up to 35 years.

[3.20 pm]

They want to enjoy the natural world and interact with it and the friendly and welcoming people that live here. New Zealand prides itself on being 100 per cent pure and I do hope this is not going to be changing in the near future to a 50 per cent as this will cost quite a bit to roll out this new slogan around the world.

I have been lucky to have lived in Poland, New York City and Australia and I find New Zealand to be quite exceptional. Many towns have very specific and special communities which thrive because they are able to build local economies, such as cooperatives and local markets. In a dynamic of a town, especially a coastal town, people are able to flourish because in summer tourists come out in hordes to enjoy the beach and the ocean. Shop-owners, surf instructors, local clubs and pubs can make a decent amount of money. These are places where artists can thrive and kids have a beautiful, nourishing place to grow and learn in. These places put emphasis on growing the community as a whole and a tight-knit community provides support for each other and are able to create a sustainable, local economy. For example, Extreme Waste in Raglan, where I live, is our locally-owned, community enterprise rubbish collection, which diverts 75 per cent of rubbish from landfill through recycling, reclaiming, reselling resources which otherwise would be lost rotting away. It employs locals and keeps money in the community and invests money into the community.

Oceans are the lifeblood of Planet Earth and humankind. They flow over nearly three-quarters of our planet and hold 97 per cent of the planet’s water. They produce more than half of the oxygen in the atmosphere and absorb the most carbon from it. This is the oxygen we breathe.

Challenges facing the ocean affect us all and it’s up to all of us to work together to tackle them because, ultimately, saving nature is the only way to save ourselves. We are connected to the health of our planet. The more destruction we cause, the more we are putting ourselves at risk. If you approve this application, you are ultimately putting profits of a company over the health of New Zealanders.

The ocean is already suffering, as we’ve heard: overfishing, pollution, warming, habitat destruction. Humans for centuries thought that the vastness of the oceans mean we can do whatever we want to it and it
will not have a big impact. Alongside ethical and aesthetical reasons to preserve our ocean, is the monetary value it brings to us. Carbon sequestering, food production, medicine, tourism, production of energy. We have not yet even explored all the areas the ocean benefits us sustainably and how much actual money it brings for free. Scientists find new species and habitats frequently. We lose that if we start such aggressive mining, hence decimating the ocean.

Over 1.5 million square kilometres of ocean floor are already under exploration leaseholds for deep sea mining. Many of these leases are in the South Pacific. This will have devastating effects on our oceans cumulatively. We all know that mining on land has all sorts of environmental impacts. It's very difficult to contain mine tailings and accidents happen often. In the ocean, which, of course, is a fluid environment, dumping 45 million tonnes of tailings back into the water, we can expect widespread pollution, even without modelling, we know there will be pollution and this will have negative effect on the sea life. How much pollution is acceptable? I'm worried about the plume which can potentially travel hundreds of kilometres, carrying potential toxins with them. Midwater plumes may impact photosynthetic microalgae or animals within the water column. Heavy metals have bioactive impacts.

Despite considerable samplings in certain locations, other than this one, and study of the deep sea over the past century, knowledge of species distribution across most spatial and temporary scales is still very poor, hence, current levels of biogeographic knowledge are not sufficient to make accurate predictions of the consequences of seabed mining.

A sixty-six square kilometre area and only three samples is highly questionable. I have first-hand knowledge working for an environmental consultancy, which was paid by companies to produce reports from gathering samples from paint to assess if lead and asbestos were present in housing units. Strangely enough, samples of said lead and asbestos could be easily omitted from such reports for which the company paid.

We are not seeing independent studies being done, but are made to believe consultancies paid by TTR are providing full disclosure. Independent research outside contractor area is necessary to address such issues, in my view.

Digging up the sea floor will be totally destructive. TTR has no idea on the impacts and no amount of computer modelling can predict
what will happen in the deep waters at the present moment. The decision seems to be, do we want to destroy this particular ecosystem or not? Is it worth conserving or not? This will affect all the surrounding area for fish, marine mammals, birds, people, changing the chemistry of the water and opening up the area for accidents such as oil spills. Scientists agree that, as we are changing the ecosystem so fast, the life there does not have enough time to adapt. Do we really want to be following in the USA's footsteps and allow brazen ransacking of our seas by corporations?

This is a small gain for New Zealanders, both moneywise, a drop in the bucket in my view in comparison to what we are losing in other possible ventures. Also, jobwise, the number is also very small and not even confirmed. How many skilled workers will actually be able to work who are from this area? How many from New Zealand?

Dear DMC, please -- I am sorry ... for the sake of the future of humanity, please ...

(off mic conversation)

MS PENN: Dear DMC, for the sake of the future of humanity, decline this application. This is our legacy. What we need is caution and conservation. Let's strive to be the nation of strong leaders in doing what is right for us now and in the future. Let's think about the health of our ocean and not just profit. We cannot follow the path of destruction any more as we have been and have for quite some time. We are supposed to be guardians of resources for future generations.

Seabed mining should not be considered if we want to preserve the ocean and life in it.

The Chair mentioned in an interview that this is not a popularity contest and the volume of submissions does not matter, but rather the expert evidence matters. Although this is not scientific evidence, it is clear from the volume of submitters that people do not want this to be happening on their shores and in their waters.

(off mic conversation)

MS SADOWSKA: Yes, right. Sorry. Thirteen thousand plus people, the highest number of submissions ever is evidence, in my eyes, and in the eyes of those people who took the time to make those submissions. New Zealand is not dependent on this. This is not a poor Third World country. We have other, non-destructive ways to create employment, like said tourism which is very lucrative. How about growing hemp or creating
an industry that is both highly sought after and environmentally sound? Or a seaweed industry?

There's a laser recently developed by a Belgian company which blasts away rust, paint and any other coating revealing virgin, bare metal in seconds, P-Laser QF-1000. This is a handheld instrument. Besides being able to reclaim all those materials we already dug up, sitting all over the country rusting away, there is technology out there to be developed to utilise what we already have. We don't have to keep digging.

[3.30 pm]

TTR is not a small company that will bring clear benefits to New Zealand. Their economic figures sound like modelling to me. Quite interestingly, the shares have been shifted, a month before TTR applied again in September, from TTR Investment Holding Netherlands Cooperative to Mr Eggers, through security lending through Claymore law firm which looks like it is a New Zealand-owned company now. Will they be shifted back if this proposal goes ahead? Back to people who actually own them? I don't know, but I'm curious. How will the EPA keep them accountable? Can they?

New Zealanders are proud people and care about their environment and their valued way of life. We do not need this devastating experimental activity in our moana. We love fishing, surfing, whale watching. Each time the orcas come to Raglan to cruise by in the harbour, we all gather and admire them. This is an amazing experience, very appreciated. Again, people pay to come here and see this. We are the lucky ones. We get it for free. Walking on the beach, swimming, boating, jumping off the bridge and spending time with our loved ones there. How can we quantify this so it means enough for the law? This is treated as an externality and it definitely should not be. We know this.

I would also like to quickly mention that our economy is manmade. We have created it. We are reaching a point where continuous growth and GDP will have to shift into less consumption and better management of our resources and what we already have. I believe, in the light of the evidence provided by experts and the unknowns, New Zealand needs a moratorium on seabed mining and should put more effort into robust research. New Zealand has a chance here to pride itself on being a responsible and respectful nation which treats their environment as a treasure and not a destroyer of all the ecosystems it has. Such rich ecosystems.

And I will close with another quote:
"Now, there are some things in the world we can't change. Gravity, entropy, the speed of light, the first and second laws of thermodynamics and our biological nature that requires clean air, clean water, clean soil, clean energy and biodiversity for our health and wellbeing. Protecting the biosphere should be our highest priority, or else we sicken and die. Other things like capitalism, free enterprise, the economy, currency, the market, are not forces of nature. We invented them. They are not immutable and we can change them. It makes no sense to elevate economics above the biosphere."

That's David Suzuki, scientist. Thank you.

MR SHAW: Thank you. Look, I didn't hear very clearly what you had to say about Mr Eggers.

MS SADOWSKA: Sorry.

MR SHAW: I suspect it's possibly just as well I didn't, because I must say this: that, generally, this process has proceeded with people being polite to each other no matter what they thought of each other on both sides and that's the way it's got to be. The only the question that's a material question is whether or not the applicant's entitled to make the application. Yes, they are and you can have your views about the system and all the rest of it but I would ask that you don't try and personalise it, that's the first point I want to make.

The second point that I want to make is that the comment I made about the number of submissions was not made in an interview because I don't give interviews in this role.

MS SADOWSKA: Okay.

MR SHAW: It was made at opening comments at this hearing.

MS SADOWSKA: I'm sorry, I read it in the paper.

MR SHAW: No, I understand it, I'm just telling you, because it's again important because we're not participants.

MS SADOWSKA: Yes.

MR SHAW: And that's the important thing there. I don't think we can take these issues any further. Mr Holm? No?

Devon Hotel, 390 Devon Street East, Strandon, New Plymouth 8.03.17
MR HOLM: No, sir, they're just further KASM submissions, so I give them about that weight.

MS PENN: Just further KASM submissions?

MR SHAW: Look, let's all try and keep the temperature down. You're not, at the moment, madam, making submissions. Your friend is and so we don't need to hear from you. Thank you.

MS SADOWSKA: Thank you.

MR SHAW: Any questions?

MS McGARRY: No questions, but thank you for coming today and taking the time to write was a very eloquent piece delivered to us and you nearly got right through so thanks for coming.

MS SADOWSKA: Thanks for listening.

MR SHAW: Mr Coates?

MR COATES: Yes, Tēnā koe and thank you for coming down from Raglan, which is a very nice place. What I heard from your submission was that you'd like more options and less uncertainty. Sorry to paraphrase you in such a short way --

MS SADOWSKA: That's all right.

MR COATES: -- but I take your point. Thank you.

MS SADOWSKA: Thank you.

MR SHAW: Thank you.

MR THOMPSON: Thanks for your submission. I didn't realise New Zealand was a very expensive country. Many of us find it difficult to travel overseas and afford to travel to the UK or to the US so we learned something, but thanks very much.

MS SADOWSKA: Thank you.


Devon Hotel, 390 Devon Street East, Strandon, New Plymouth 8.03.17
MS MASSEY: Thank you, and, firstly, I'd like to apologise for my non-appearance earlier and I appreciate that you're going to hear me. Thank you for that.

MR SHAW: It wasn't a non-appearance, it was just a slightly late appearance, that's all.

MS MASSEY: Yes, right day.

MR SHAW: That's all good and no punishment is to be expected.

MS MASSEY: Thank you and I'll just be reading because I'm likely to go off track very easily if I don't.

MR SHAW: Whatever suits you.

MS MASSEY: My name is Jo Massey and I have lived, despite sounding like I've just come off the boat from Australia, in Taranaki for over 30 years, enjoying our coastal environment, both as a sailor, diver, fisherperson and swimmer. I have a background in social analysis and environmental and community welfare projects and have worked as a contractor on sand dune stabilisation along the western Victorian coastline in Australia and was a supporter of the establishment of our local marine park.

In my opinion, much of what TTR Limited are stating as fact is information that has been interpreted in its very best light to support the notion that this is an environmentally safe and economically advantageous project. There are omissions and suppositions in the TTR studies, yet conclusions in this study are consistently being drawn from the supporting and presented as most likely outcomes. I share many of the concerns raised in the EPA Key Issue Report and agree with Mr Young's submission and that made by Maria Cashmore.

I share a number of concerns Maria Cashmore identifies in her summary of uncertainties, specifically the true population of species in the intended mining sites, the state of the existing marine environment, the accuracy of the predicted sediment settling rates and the effect of light penetration and the sediment sampling and the predicted stability and instability of the seabed.

Considering the EPA Key Issue Report, I fail to see how accurate forecasts on potential environmental damage is possible, when the modelling is not based on the actual prospective mining sites and done in areas chosen by TTR.
I do not believe it can be safely assumed that the naturally existing environment and its recovery could be modelled accurately, when a ten per cent mineral component has been extracted, the profile of the seabed altered and lighter sediment created effecting light penetration and the sediment being deposited in an adjacent, unnaturally-formed trench.

[3.40 pm]

There is a lack of information on factors that will influence the likelihood of a more environmentally destructive plume, the likely behaviour of the lighter, de-ored sediment and its movement once it has settled. The TTR's environmental impact study states:

"The seabed lies in an area of constantly shifting sands, so is largely featureless and no real vulnerable ecosystems or threatened species have been found in the area."

Not only does this ignore the presence of an endangered eel species and marine mammal activity in the area, but describes the area as one of "constantly shifting sands". In such a dynamic environment, it would be reasonable to conclude that the lighter, de-ored sands could be prone to migration, resulting in the creation of unnatural pits and smothering adjacent unmined areas.

Furthermore, the TTR asserts:

"The project area is not a recognised habitat for marine mammals and Māui's dolphins and Blue whales are not found in the vicinity."

This is another statement I take issue with. I find this curious as our government tourism site promotes whale watching in the Taranaki coastal areas and has photographs of whales diving and surfacing in the South Taranaki Bight. I have also personally seen orcas and a whale off our coast and, three years ago, some excitement was generated locally when a mother and calf sighting suggested that the Taranaki Bight may be a nursery area for Blue whales. The only other one in the whole southern hemisphere is in Warnambool in Victoria. It's a huge puller of tourists.

The TTR proposal also states:

"We will, however, establish strict protocols to ensure our operations will have no adverse effects, should any marine mammals come near the area of operations."

Devon Hotel, 390 Devon Street East, Strandon, New Plymouth 8.03.17
It's intriguing and contradictory that they have made provision for an event that the immediately preceding sentence states would not occur since the mammals are never found in the area.

I'm also concerned that the mining area is constantly presented as only involving a small area of the seabed. This area of 67.76 square kilometres may seem small in comparison to the whole ocean bed, but logic does not support that an activity in a supposedly small area does not potentially affect a much larger area, especially in an interrelated ecosystem. If this logic was correct, we could convince ourselves that nuclear power plants and fully-laden oil supertankers pose minimum environmental risk because their activities occur in a small, confined area of the earth's surface. Past experience denies this.

Now, that's my environmental submission, but now to address my economic concerns. At the risk of preaching to the educated, it is the very nature of a capitalistic venture to put the economic welfare of its investors and shareholders first. Environmental concerns are not the top priority --

MR SHAW: Can I just ask you to pause for a moment? I'm just going to ask staff if they could close the doors, because we're having difficulty hearing you.

MS MASSEY: Oh, hold on.

MR SHAW: No, it's just the noise outside. That's all.

MS MASSEY: I could use my big voice.

MS McGARRY: No, you're doing fine, there's just this grumble in the background.

MR SHAW: Sorry to interrupt.

MS MASSEY: Oh, no. At the risk of preaching to the educated, it is the very nature of a capitalistic venture to put the economic welfare of its investors and shareholders first. Environmental concerns are not the top priority when making operational decisions. The largest profit is. To gain the consent, it is incumbent on the applicant to create whatever --

I've used the word spin, but that sounds a little derogatory, so I apologise for that -- so disseminate the information that will show the application in the best light. So, it is realistic to expect a minimisation of negative environmental effects and an exaggeration of forecast economic benefits. I believe that TTR has a corporate culture of paying lip service to the principle of environmental protection. Presently its website paints a picture of there being no likely environmental degradation or damage when the mining is
carried out in the South Taranaki Bight and presents the information which is under question at this hearing as being infallible and proven.

[3.45 pm]

I also, personally, object in principle, to the TTR or any corporate entity distributing their profits to shareholders, especially when it concentrates wealth into a limited number of investors who are most likely to be from overseas. This is iron ore taken from within New Zealand's Exclusive Economic Zone and I believe strongly that the government should pursue this type of venture so that the entire benefit is returned to New Zealand and its citizens in general, not into the coffers of TTR's investors.

I would encourage the DMC to consider the suggested economic benefit to New Zealand as not fair or equitable, given only the taxation is a guaranteed benefit to New Zealanders in general and an undefined and possibly minimal amount of local work suggested for the Taranaki region.

I would also ask that the DMC exercise the precautionary principle when considering this application and, rather than following Mr Holm's suggestion that his definition for favour be used to encourage the DMC's support for the application, you consider his other offered definitions for caution and protection when considering your decision and decline the consent and place a moratorium of iron ore sanding in New Zealand's Economic Exclusion Zone until my and other's areas of concerns are addressed.

And that really concludes. I got it down as small as I could.

MR SHAW: Thank you, Ms Massey.

MS MASSEY: Thank you.

MR SHAW: Ms McGarry, any questions?

MS McGARRY: You did well. You weren't over time, so well done.

You've talked about living in the region and being a fisher and a diver. Have you done any diving around the South Taranaki Bight area, around the application site?

MS MASSEY: No, it's been mostly in the Motuora Park. I don't do very deep diving but, no, I haven't. I've got no experience of the benthic zone.
MS McGARRY: Okay, well, thanks very much for coming and speaking to us today. Don't run away, because that's just me.

MR SHAW: Mr Coates?

5 MR COATES: No, I have no questions, but thank you very much for your thoughtful submission, and I think you've said that you have got experience of dune stabilisation, is that right?

10 MS MASSEY: Yes, and that raised a concern for me because in Australia, despite extensive modelling on how we expected the coastal fringes to be affected when we did different things, some of which was putting in different bunds, it was very, very rarely right. We found predictability of sand movements almost impossible, even in small areas or defined areas, to model accurately, so I'm concerned about that kind of modelling's accuracy.

MR COATES: Thank you for your advice.

20 MR SHAW: Mr Thompson?

MR THOMPSON: Thanks, Ms Massey. No questions.

MS MASSEY: Oh good, because I'm scared of people asking me questions. Thank you.

25 MR SHAW: Has Mr Oliver arrived yet? No?

(Off mic conversation)

30 MR SHAW: Oh, he's asked to be Skyped in Wellington. That's fine. I hope that the staff have got that record. I don't think they have, so if you're in touch with him, let him know to make contact. So we can take him off. And Lisa, Lisa Schill, is she available? Welcome.

35 MS SCHILL: Good afternoon.

MR SHAW: Good afternoon.

MS SCHILL: My name is Lisa Schill, and I'm 24 years old, and I'm from Germany where I grew up in a harbour city on the coast to the Baltic Sea. My mother's family is from an island in the National Park of the North Sea. My grandpa's a captain, and he taught me to take care of the ocean as it used to be the foundation to provide food and work for the family. Since I was a little girl, he has taken me on cruises through the National Park of the North Sea to show me the diversity of marine animals and fish. My biggest dream has always been to swim with dolphins and whales.
I know that the coast of Taranaki is home to a large population of blue whales. Maybe one day my dream will become true in Taranaki.

I've graduated from both the University of Southern Denmark and Europe University Flensburg from which I received a Bachelor of Science and International Business Administration in Modern Language.

[3.50 pm]

I've lived in New Zealand for 1½ years now. My partner and I chose New Zealand because we love the ocean and we wanted to live close to the coast while working, a luxury you can only have in a few countries.

Being close to the ocean is part of my daily life as I love surfing, swimming and running along the beach. I grew up with big parts of the North Sea being National Parks, so respecting and taking care of the ocean and its animals is common sense to me.

I don't understand how a region like Taranaki does not protect the environment, especially when it's known that animals like the blue whale and the endangered Māui dolphin live in it. I believe that capturing the world's first footage of a blue whale calf feeding from its mother is reason enough to protect this environment and its animals. Isn't that a great opportunity for Taranaki to attract scientists, researchers, ocean and whale lovers?

My partner and I both fell in love with New Zealand and we agreed that we want to stay here, so September last year I applied for residency in New Zealand. Today I'm very happy to announce that my application has been accepted and I'm on my way to becoming a Kiwi. I'm looking forward to my future here, but at the same time I'm also worried about my career prospects. Being at the beginning of my career, I want to live in a country with a flourishing and sustainable economy. It makes me really sad that the New Zealand Government is in favour of seabed mining. This is one aspect that made me realise that New Zealand's clean green image, which has attracted me to come, deviates from the truth. I want to generally be proud to live and work in New Zealand, knowing that the government accepts its responsibility and creates jobs and industries that develop a sustainable future for New Zealand.

Last year I did an internship with a consultancy for environmental service. I learnt more about the concept of sustainability in the New Zealand economy. Sustainability in the business world is a funny topic. There's a variety of definitions for sustainability which open space for interpretation and action.
Some businesses, like Kathmandu, totally believe in it and integrate it in their organisational philosophy. Other businesses start sustainable initiatives to save money, and other businesses pretend to care about the sustainable issue of their business.

I believe the foundation to create strategies and development for a sustainable future, or a sustainable society, or a sustainable business practice, is to live in balance with nature. Left to its own device, nature is a sustainable system. But as we continue to learn the impacts of human activity are now threatening our wellbeing and it's damaging nature, we cannot take stuff up from the earth at a rate faster than it naturally returns. We cannot cause deconstruction to the planet at a rate faster than it takes to regrow.

The sea floor supports a wide variety of organisms, like mussels and other shellfish, which support an extremely healthy fishery through a complex food web.

I wonder how a crawler that will suck up 8,000 tonnes per hour and remove the entire top surface of a seabed will reinstate a sea floor if it takes out its minerals and kills the plants and animals that are from the sea floor and that are the bottom of the food chain?

I do not believe that the fishermen who rely on a healthy fishery will not be influenced by its 65 square kilometre dead zone if the generation time is unknown. I do not believe that seabed mining as a strategy is moving the region of Taranaki towards developing a sustainable future for its community.

I know that the results will not be visible from the shore, but it is not just about what people can see or hear. It is about the image and the brand of a place. New Zealand is known for its clean green image, which attracts huge numbers of tourists every year, me included in 2015. Anything that will scratch on New Zealand's global clean green image will affect the whole county, and especially the large tourism industry.

Also, Taranaki has an image, and it's known for its beautiful nature and fun outdoor activities, attracting lots of surfers, hikers, and general outdoor lovers. I came down to Taranaki to go surfing a few months ago, and I can genuinely say that I will not come back if I know that the region prefers to support seabed mining instead of investing in the conservation of its environment.

With the global travel guide publisher, Lonely Planet, judging the region of Taranaki the world's number two region to visit in its Best in Travel 2017 yearbook, Taranaki’s tourism numbers should expect to raise, especially with New Zealand's total tourism numbers rising every year.
Going back to sustainability, I agree with Aine Conaghan, who has already presented about ecotourism and its benefits for Taranaki.

I can assure that stimulating Taranaki’s sustainable tourism industry will not just benefit the region regarding tourists, it will also attract young professionals like me.

[3.55 pm]

This mining proposal scares me, and with over 13,000 submissions against seabed mining, I’m not alone with being afraid of the seabed mining proposal. My new home should not be an experiment. Thank you very much.

MR SHAW: Thank you. Questions, Mr Thompson?
MR THOMPSON: No questions thanks, but thanks very much for coming down and talking to us.

MR SHAW: Ms McGarry?
MS McGARRY: Yes, again, thank you for a very thoughtful presentation and for travelling to see us. Thank you.

MR SHAW: Mr Coates?
MR COATES: Tēnā kōrua. Nau mai, haere mai. I’ve just taken on board your comments about sustainability, which were very thoughtful. Thank you, and we’ll try and incorporate these into our decision-making.

MS SCHILL: Thank you.
MR SHAW: Okay. Thank you.

Now, you’re Mr Mueller, are you?
MR MUELLER: Yes, that’s correct.

MR SHAW: I wondered that that might prove to be the case.
MR MUELLER: Yes.

MR SHAW: Welcome, Mr Mueller.
MR MUELLER: Thank you. Kia ora. My name is Sebastian Mueller. I would like to thank the EPA for hosting the hearing and giving me the opportunity to share my opinion about seabed mining in Taranaki.

I'm here today to speak for the ocean, the wide variety of organism, the ones without a voice, including plants, mussels, shellfish, worms, crustaceans, fish, mammals and birds. These animals are living in the Taranaki region and will be affected by the seabed mining project. Some of the creatures, like Maui dolphins, are already threatened by humans. Humans change ecosystems by burning fossil fuels, overfishing oceans and doing other things that affect the climate of the particular environment. These are all actions affecting the oceans, and this is why I just cannot believe that dredging a crawler over the seabed will not cause any damage to the ecosystem in the Taranaki region.

I moved to New Zealand almost three years ago. For years I have been drawn to this beautiful green country. It did not take me long to decide that I would like to live here. Today I'm proud to say I'm on my way to become a resident of New Zealand.

I'm calling Raglan my home. Working as a chef in a tourist destination can be very stressful during the holiday seasons. Sometimes I enjoy escaping Raglan's business and enjoy some of the remote surf spots around the Taranaki's surf highway. Here you're able to walk to the beach, have amazing surf, catch a fish from the coast for dinner, and enjoy the wilderness.

For me, this represents the quality of life. I spend most of my free time in the water, whether it be surfing, swimming or collecting food. It's hard for me to articulate the emotions and the moments that I experience from being in, on and around the ocean. This has formed a deep connection, a personal relationship, with our ocean.

A part of a healthy and good relationship is taking care of each other. The ocean gives me so much and I want to make sure I look after it and protect it. The oceanographer, Sylvia Earle, said before you can protect something you have to love it, and I really agree with that.

As a surfer I am concerned that the seabed mining project which is planned in the large coastal area in front of Taranaki will manipulate the sand flow on this coast, changing the way the waves break. I've seen the big impact that small scale sand stripping operation has had on the renowned surf spot, Kirra, in the Gold Coast. Years on from the sand stripping and the waves form is only slowly returning now. Considering large scale of the planned seabed mining on the Taranaki coast, I fear that many of the renown breaks here may be completely changed, which has probably a negative effect on the tourism in that area.
I have also been a chef for 13 years now. Over the years I had the opportunity to travel through different countries and I worked in a variety of restaurants. My favourite part of working as a chef is to use locally serviced produce, such as fish, and create a delicious new meal out of it. Being surrounded by the ocean, seafood is essential in every Kiwi kitchen. I do not believe that a seabed mining of Taranaki will not affect the fishery in a negative way.

I also would like to mention that a few months ago there was a large ship sitting off the coast of Raglan. Within hours the ship was talk of the town, with everyone voicing extremely concerned as to what the ship was doing. It turns out it was just laying internet cables, but it showed the collective fear of the community has towards seabed mining ships arriving in our waters. It showed that when ships were inside of the shore, the whole town was concerned, but just because the ships here are going to be so far offshore Taranaki’s coast does not mean that it’s out of mind for all of us.

That is why I believe that the application in full as to proposed mining will devastate the marine environment within the mining area and have significant and unacceptable negative impacts on the surrounding marine area. I wish for a healthy and safe future for the west coast and New Zealand. Thank you.

[4.00 pm]

MR SHAW: Thank you. Just tell me, you mentioned the sand stripping operation.

MR MUELLER: Yes.

MR SHAW: Where was that?

MR MUELLER: Kirra and Coolangatta, Gold Coast, Australia.

MR SHAW: All right.

MR MUELLER: Yes.

MR SHAW: And what sort of depth was that occurring, do you know?

MR MUELLER: I'm certainly not aware of like the depth, but I know it was quite regional on the coastline.

MR SHAW: Okay, I don't think I've got any other questions, but others may. Mr Thompson?
MR THOMPSON: No questions thanks.

MR MUELLER: Thank you.

MR SHAW: Ms McGarry?

MS McGARRY: No questions. Thanks for coming in.

MR COATES: I might have to declare a conflict of interest. There are so many people from Raglan here that I must declare that my son lives in Raglan with my grandson, so I hope that isn't held against me. But, no, thank you for coming, and I appreciate that people have travelled a long way to come here, and I hope you feel that you've been listened to.

MR MUELLER: Thank you.

MR SHAW: Back to the pans, Mr Mueller.

Now, just so that we know where we are, Chris Wilkes, is Chris Wilkes here? Hello, Chris. Denise Lockett? Yes. And I suspect that Wairere Tepania was the daughter referred to in the presentation by Ms Ward-Holmes, is that right? Okay. So, there's only two people further to see this afternoon that I'm aware off, Mr Wilkes and Ms Lockett. Mr Wilkes, you're first up.

MR WILKES: Well, good afternoon. Thanks for taking the time to see us. As I said, my name's Chris Wilkes. I'm a resident of Waiorea down the coast, and I'm the surfers' rep for Surfing Taranaki and a committee member for Kiwis Against Seabed Mining. I've been involved with KASM for probably about ten years or so. I kind of first got involved based on the fact that I'm an ocean-going person, I surf, I've been surfing for 29 years, and I do a lot of fishing and stuff like that, so to me the ocean's an extremely important part of our planet.

I'm sure you've heard a lot of people talk about a lot of different reasons why they don't want seabed mining to go ahead. I don't really want to repeat too many other people's statements, and I'm sure you've heard a lot of people doubling up on a lot of information. I guess I can only just relate it to myself personally, and where I think New Zealand needs to go in terms of our environmental protection, which is the organisation you people are representing.

We're in a unique position here in New Zealand to be able to be world leaders in our environment, in our environmental protection, and this is reflected in our tourism, increases in tourism numbers, and people are flocking to New Zealand. Ever since our nuclear free position, we've had an increase of environmental tourists in New Zealand, and I believe
it's really important that we maintain and sustain our reputation, and given that seabed mining isn't really undertaken anywhere else in the world, it's an extremely important precedent not to set. We don't want to give the world the impression that New Zealand as world leaders in environmental degradation, which is what this activity would be, no doubt about it.

The company has admitted that there'll be a large dead zone created by this activity, which means the killing of marine life, so I don't know if you're aware though, but soil microbes, one handful of soil contains more life than humans on earth.

[4.05 pm]

Now, the seabed contains even more microbes and microbiological life than actual soil itself, so the fact that all of that sea life which can't be here to speak for itself, we have to speak on behalf of that marine life. The fact that all that marine life in an area the size of New Plymouth is facing death, ultimate death, is extremely concerning for someone like myself who I view all life as important, whether it be human life or in fact microbiological life. It's all part of the web of life that we all enjoy.

For a human being, no matter who they are, to believe that they can put something like financial gain above something like marine life, or any life, is -- it's actually diabolical and it's a trail of our species, in my opinion. We all have a responsibility as beings on the planet to look after our planet, and that's the reason why I'm an environmentalist personally. I believe that we need to speak for those which cannot speak for themselves, and coming to such a forum as this is extremely intimidating for someone like myself. I'm a natural person, and this seems like a rather unnatural kind of process to be engaged in, so, yes, I don't know, I just kind of -- I would just like to question where we're heading as a nation if we're going to put a manmade concept of economics ahead of nature, because to me nature is what sustains us as humans, and so, yes, this should be held with high regard in this, so …

I'm extremely disappointed that TTR's come back for a second attempt at this application. It's taken a lot of time and resources and wasted a lot of energy from our perspectives. You know, I'm a dialysis patient, and I don't have the energy to do this sort of thing but, yes, it's just extremely upsetting. I feel a little bit betrayed by our fellow man for doing something like this.

But, yes, there's not much more I can say. I'm sure you've heard a lot of information already, and I just really urge you to take on this information.
The people of Patea have clearly stated that they don't want this activity to go ahead, despite whatever potential economic benefits there may be. It's almost like force-feeding someone who's not hungry. You know, you can force something on people and say it's for their own benefit and that it will be good for them, but if they don't want it, then you're actually breaching their human rights. So, the people of Patea and Taranaki and the west coast, we've declared quite strongly that we don't want this activity, despite what we've been told could be the potential benefits, so I just want you to take that on board and, you know, ten minutes isn't very long. I won't use my whole ten minutes I'm sure but, yes, I just appreciate the fact that you've come here to listen to us, and it's been a long couple of weeks for you guys and, yes, I don't know, there's not much more I can say really.

All the best with your decision-making.

MR SHAW: Mr Coates?

MR COATES: I notice in your representation you said that you urge the Environmental Protection Authority to live up to its name and protect the environment for future generations, so all I can say is that I hope that's part of our job.

MR WILKES: Good luck.

MR COATES: Thank you.

MR SHAW: Ms McGarry?

MS McGARRY: Well, thank you for coming to talk to us, and I know it is a very intimidating kind of process, and we do try and make it as informal as it possibly can be with a kind of juggernaut of this size but, interestingly enough, nobody's been that repetitious. The only repetitious bit is the no. Everybody actually has had a very different perspective, and yours was different again, so I do appreciate you coming and speaking to us. Thank you.

MR WILKES: Thank you.

MR SHAW: Mr Thompson?

MR THOMPSON: Thanks, Mr Wilkes. I hope you're feeling a bit more relaxed now that you've been through the process and realise that we're not big ogres. The process we're going through is to assess the environmental effects, and the EPA is that, is the Environmental Protection Authority, to ensure that if anything does proceed, it doesn't have bad consequences. So, I guess you need at the moment to trust the process and the enquiry that we're
going through. So, thanks for coming, and I hope your health improves if that is possible.

MR WILKES: Thank you.

MR THOMPSON: All the best.

MR SHAW: Mr Wilkes, I was interested in one comment you made about the people of Patea don't want, they don't want to be force fed. Would your view about the advisability of proceeding with a seabed-mining project be different if the people of Patea were saying, "Yes, we want this?"

[4.10 pm]

MR WILKES: I think there'd be … If the people of Patea were saying they wanted it, yes, I think I'd have to reassess my values around it. Yes, I can't see that. I can't see the benefit of speculation.

MR SHAW: No, no. Look, I accept that that's not on the horizon.

MR WILKES: Yes.

MR SHAW: But the reason I'm asking is, you know, to really try and understand just what the basis of your opposition is.

MR WILKES: Oh, I just don't like the idea of killing marine life and increased pollution on the planet. I mean, the oceans are suffering under a burden of human habitation as they are, and we should be cleaning them up, not making it worse.

MR SHAW: Okay.

MR WILKES: So, a lot of it comes down to the smothering effect of the plume and all that information you've already heard about that. Some of the footage that I've seen of the reefs in the area, amazing reefs, new life being discovered and things like that, I just think there's no way TTR can contain the effects of their sediment plume, and other information that you've already heard.

The loss of life will be overwhelming and, to me, that's just not acceptable in any way, shape or form. So, if they can find a way of mining sand without those negative effects, then it's a resource that I guess they want to use. I mean, an onshore operation, such as Taharoa, is a lot less invasive on the -- there's not a lot of sea life destroyed from that operation, so I mean there's other ways of attacking this issue and the lack of revenue for New Zealand is also another major issue. There's not really -- the cost, it's not really that cost beneficial for New Zealand
as far as royalties and stuff go. If we were somehow utilising the resource here as opposed to sending the raw material away, then there may be another, you know, cost benefit analysis that you could do there, but a lot of the profits are going to be seen offshore. We're not really going to see the benefits, in my opinion.

I'm sure you've heard experts saying enough evidence to back that up, you know. Yes, I don't know. It's just … I think it's a backward step to allow something like this to happen, but that's just my opinion. Yes. I'm not an expert, apart from I'm an expert surfer, and I understand that the benefits that the ocean can have for humanity, and it's amazing. We're surfing with all sorts of little fish eggs and stuff all around us, and you see it and you feel it. Yes, the amount of life there is just unprecedented and to say it's a desert, a lifeless desert, as TTR have described it, it's just not true, so, yes. Yes, it's really upsetting to be in this situation yet again.

Yes, so, anyway, that's about all I've got.

MR SHAW: Okay. Thank you. Thank you, Mr Wilkes.

MR WILKES: Thank you.

MR SHAW: Denise Lockett?

MS LOCKETT: Kia ora.

MR SHAW: Kia ora, Ms Lockett.

I've come from Whanganui, just down the road from Patea. You could say we're cousins. I'm here today, not only for my descendants, but I am with my ancestors. My father was a warrior and it is in his honour that I wear this shirt commemorating the 50th anniversary of El Alamein, not because I wish to support warmongering in any way, just in honour of my warrior father. First, he was an ecowarrior with a passionate love for his land. He built our home from that very land, a rammed-earth house, never a damaging chemical or process was used on the land.

Second, he was a warrior who went to war. He believed for king and country, for freedom and democracy, which he didn't believe by the time he'd finished after 4½ years.

He fought at Alamein to Brook and the Egyptian campaign, Crete and at Monte Casino. He was there when hundreds of thousands of his fellow soldiers were slaughtered, and he saw people's bank accounts becoming very fat whilst these young people lost their lives.
His third warrior status, he then protested against the Vietnam War and was thrown out of the RSA because of it. He protested against apartheid in the 1981 tour, and took part in the movement to ensure our country became nuclear free. I do hope we can uphold that principle.

At this stage I wish to say how disappointed I am at the submission process. I attempted to submit ten times on EPA's website, until I thought it must have gone through. Being rather aged and not technically savvy, I just thought it has to have happened, but it didn't, and I found that out when I confirmed I wished to speak at this process, at this hearing, and I was told the submissions had closed in December. I actually submitted right before the first closing date, and that was repeated to me, they have closed. Now that is not democratic to have a website that doesn't work, that is not sufficiently efficient to accept the submissions as they come in. In fact, I'd say at best that was slack, and I do hope there was no deliberate machinations within that process.

I wonder how many others were lost in the process, because I have heard of some, and I have heard of people speaking of this and telling of their concerns. So, I would like to see the democracy and the democratic processes that my father fought for upheld and carried out.

I also hold concerns for the fact there were only two lots of hearings, Wellington and here, and Patea Marae was refused. That too is not democratic. It does not allow the majority of our citizens who wish to submit to access this hearing. I don't believe the EPA has kept to its democratic duties.

While planning this submission, I asked my son to help me with a PowerPoint. He said, "Oh, that's easy, mum, you do this, this, this and this and press tab and shift and da-da-da-da-da-da-da and then you set up your slides", hence I have these. Sorry, it was blah blah blah blah blah to me, and I couldn't understand very much of it at all.

So, I want to set my submission here on land. I am not a scientist or specialist in any area other than as backbone of the nation, mother, grandmother and great grandmother, who grew up down the road in Whanganui. I swam at our west coast beach, Castlecliff, during my childhood. Although I have swum and snorkelled in the sea all my long life, I find it difficult to clearly visualise the picture of absolute destruction of an entire underwater ecosystem 30 kilometres off our coast, off the Patea coast, so I am endeavouring to bring this scenario closer to home, making the proposed process more vivid and more real. To do this, I want you all to picture these processes happening right here.
where you sit now. They’re digging it up, right now, here in New Plymouth.

The first application to destroy the seabed and all that lives there and depends upon it, covers an area of 65 square kilometres, or about the equivalent area of land on this map. This covers New Plymouth and its environs and part of the sea. It covers homes, suburbs, dairy farms, orchards, gardens, places where people live, ecosystems where they survive, ecosystems which are set up so that each part of that ecosystem helps the rest to live.

So, this will be dug up to approximately 11 metres as far as I understand, which is approximately three house depths. Right? Picture that in your own back yard going down, taking your garden, your orchards and everything else with it. This is the ecosystem I see on land, the home, which might be a hole in the reef for the fish, it might be under the kelp, or a nest in the sand, the progeny of that home right there, the food sources, the kelp beds, the orchards, the sheep, the pigs. We even have worms, dogs, hens, snails, because they’re all part of that ecosystem and they all thrive with each other, and some, there’s the cat and the mouse, the predators which thrive on the food sources. And once they’re destroyed, there is nothing.

You could place this scenario in your own bag yard. Imagine the gigantic suction forces required for this machinery to do its work? It will be consuming all within its reach, cows, dogs, trees … oops there goes the toddler, caterpillars, slaters, earwigs, no trees for the birds, just sheer devastation. You could also place this scenario in your own back yard. Let your own children play there, or your own grandchildren, and feel the stirrings of horror as you think about that and picture it.

[4.20 pm]

This conglomeration of animals, earth, etc, is sucked up to one of the cigar shapes looming 12 kilometres above you, the first ship. It is then passed amongst the conglomeration of these forces, mixed with tonnes of dirt, and you wonder if life can survive this trauma and suffocation, passed on to cigar number two, ship number two above you, where it is separated and 90 per cent passed on to the third cigar shape above you, ship number three. Ten per cent is spat back down into the ocean. Gone.

The resuming 90 per cent is spat back down to be distributed by wind currents over a huge area. How would I know this, you may ask? Well, we on the west coast of the North Island know when there are fires in Australia we have the most amazing sunsets. Why? Because the ash is carried hundreds of kilometres from the west, our suburb out there,
across the Tasman sea, to light up our skies. Hundreds of kilometres. So, why would that not happen in the sea currents, especially with this lighter substance once the iron has been taken out of the sand?

It makes sense, surely, that this can act in the same manner. This rejected matter will be suspended for a long period of time and cover great distances. If any living creatures remain amongst the disruption of their habitat, they will be smothered in this maelstrom. What do we see once the whole process has been completed? No sun, a sky filled with dirt and rubbish, landscape barren and dead. Surely all the birds and flying insects have left. There is nothing for them here, only silence and death.

We also have the danger of massive machinery operating in once pristine ocean. This machinery is diesel driven no doubt. There has just been an incident which has covered almost all of the Broughton peninsula coast, USA, of an underwater machinery working on a fish farm spilling over 3,000 litres of diesel. The spill, it seems, will be killing large numbers of fish stock, crucial herring spawning ground and clam beds. That is many people's livelihoods wiped out by the large scale underwater contamination.

Nobody can guarantee this won't happen in our underwater scenario. The company involved has been less than truthful regarding the extent of the spill. Does that surprise you? This seems to be one of the problems when dealing with corporations. Truth seems to be an almost unrecognisable concept for them.

Many independent scientists are speaking out against this process because the long-term effects of this devastation are unknown. I ask as a grandmother, a great grandmother, who has a deep and sincere desire for a healthy future for my descendants, please do not allow this wholesale destruction of an entire area under the sea.

Keep in mind this is the first application from a company who want to continue this operation all the way up to Cape Reinga. Behind them, others are waiting, having staked their claims even closer to the shore. Ask yourselves, haven't we done enough to damage our mother the earth? Please do not allow Aotearoa New Zealand be the first nation to destroy its seabed and all that inhabits that ecosystem.

We understand the pressure you are working under. With big money, and it seems possibly our government on one side spouting the mantra that this will create jobs and will be good for our economy, no doubt you have heard the figures which deny that. My feeling is that to allow TTR's application works against the wellbeing of our country and fellow Kiwis, and I have to state here EPA, Environment Protection Agency.
that's what we believe it exists for. That's why we pay for it to exist. That's why we pay for this process, because we believe that sincerely they will protect us and our nation.

So, my feeling is that allowing this application works against the wellbeing of our country and fellow Kiwis and will lead to your grandchildren and my grandchildren and great grandchildren despising you with a vengeance for your part in ruining our country if you allow this, and I want to ask you to think about whether or not that is the legacy you wish to leave behind.

Thank you for at least allowing me to be here today, and I really appreciate all the time that you people have put in to listening to us, the people, and I don't really know how you can absorb it all and manage to sit there day after day very patiently. Thank you.

MR SHAW: Sometimes with strained patience, I've got to admit.

MS LOCKETT: Pardon?

MR SHAW: Sometimes with rather strained patience, I've got to admit, that that's inevitable with long days.

MS LOCKETT: Yes, I saw that.

MR SHAW: Thank you very much. We'll see if members have got any questions for you.

MS LOCKETT: Thank you.

MR SHAW: Mr Thompson?

MR THOMPSON: No questions thanks. Thanks for your entertaining presentation. I think you got your message across.

MR SHAW: Ms McGarry?

MS McGARRY: Yet again, another different perspective on things, and I thank you for your time, but I just want to reassure you there's only one person paying for this process, and that's TTRL, so it's not us as ratepayers or taxpayers or anybody else, so …

MS LOCKETT: Oh good. Oh good. But we still pay for the EPA.
MS McGARRY: We do as the watchdog in terms of the statutory law, but you're certainly not paying for this process.

MS LOCKETT: Well, that's really good. I'm pleased somebody --

5 MS McGARRY: Mr Eggers is no doubt very pleased I made that clear.

MS LOCKETT: Does that allow you to be totally unbiased?

10 MR SHAW: The procedure.

MS McGARRY: Well, yes, that's right, he doesn't pay us. The EPA does, but there's absolutely no connection there. We are independent of the EPA, so …

15 MS LOCKETT: Okay.

MS McGARRY: Thank you.

MR SHAW: Where Ms McGarry stops, I'm going to pick up because the thing I think that people don't understand in this whole area of consenting in New Zealand, that's exactly what happens. So, you want to build a deck, you go to your local council to get a consent to do it, you pay for the process, not the council.

20 MS LOCKETT: Right.

MR SHAW: And it's exactly the same principle at work here, so it's cost recovery.

MS LOCKETT: Right. But we're still paying your wages.

30 MR SHAW: No.

MS LOCKETT: No, they're paying your wages?

35 MR SHAW: Eventually.

MS LOCKETT: Well, that's fine.

MR SHAW: No, no, they pay the EPA after the event and the EPA pay us our wages, yes.

40 MS LOCKETT: Okay. Thank you.

MR SHAW: All right?

45 MS LOCKETT: That's enlightening.
MR SHAW: And so, what do you reckon? Are you going to go back and get more technical advice from your son?

MR COATES: I think --

MR SHAW: It was a question.

MS LOCKETT: It's a bit like asking your father to teach you to drive, isn't it? It's better not to do it.

MR SHAW: Or perhaps being a father and teaching your son to drive.

MR COATES: The collage was living proof that you didn't need PowerPoint.

MS LOCKETT: Thank you.

MR SHAW: Okay. Thank you all very much. I will just check with staff whether or not we've got any procedural issues that we have to deal with, Celia, that you're aware of? Jean? Josiah? No. Any procedural issues from you, Mr Holm?

MR HOLM: None, sir.

MR SHAW: Well, tomorrow is it for Taranaki for the time being. I must say that when we began here I was a little apprehensive about the chances of our being able to complete. It now looks rather more promising that we will be able to see those people who wanted to be seen in Taranaki. Thank you, people, who have travelled various distances to be here, and some of you I expect we may see tomorrow, otherwise safe journey home.

9.30 am tomorrow by way of a start. All right, thank you.

**MATTER ADJOURNED AT 4.29 PM UNTIL WEDNESDAY, 8 MARCH 2017**