Before the EPA
Trans-Tasman Resources Ltd Ironsands Extraction Project

In the matter of the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012

And

In the matter of a board appointed to consider a marine consent application made by Trans-Tasman Resources Ltd to undertake iron ore extraction and processing operations offshore in the South Taranaki Bight

-------------------

Statement of Evidence in Chief of Rob Greenaway on behalf of Trans-Tasman Resources Ltd

14 February 2014

-------------------
Executive Summary

1. This evidence considers the effects of the Trans-Tasman Resources Ltd (TTR) iron sand mining proposal on the recreation and tourism values of the South Taranaki Bight. The review is based on literature review, consultation outcomes, stakeholder interviews, site visits and the review of relevant technical reports prepared for TTR.

2. The key recreation and tourism activities potentially affected by the proposal are in offshore settings where there are likely to be changes to turbidity and water clarity levels and sediment deposition rates, resulting from the mining sediment plume. Inshore recreation settings are unlikely to be affected due to their distance from the mining site and naturally high background sediment levels. There are no effects on inshore surfing settings. Visual amenity effects from the shore are minimal.

3. There is some diversity in opinion about the quality of the fishing resource in the South Taranaki Bight, with some perceptions of past over-fishing by commercial operators, and others of a plentiful recreational resource protected by challenging access and weather conditions. It is a regionally important marine recreation setting.

4. Changes to marine ecology values are very limited and there is therefore unlikely to be any direct effects on the coastal fishing resource. The mining site is very infrequently visited by recreational anglers due to its distance offshore and the limited fishing resource in the mining site.

5. Water clarity effects have the potential to change the quality of the recreational diving resource at The Traps and on the Graham Banks. While the mining operation will not preclude any of the existing diving activity, it may, from time to time, and depending on the sedimentation effects from the mining operation, affect the quality of the experience for some divers, particularly when conditions are marginal or are extremely clear (when effects will be most notable).

6. Three tourism businesses have been identified as operating in the area potentially affected by the proposal. These are all fishing and diving businesses.
charters, one operating from Whanganui and two from Patea. Effects on these operators will mirror those for recreational users.

7. EPA reviews of the recreation and tourism AEE prepared for TTR have suggested the need for additional baseline data on the scale of recreation and tourism activity in the study area and regionally. What data available is presented in the recreation and tourism AEE report and is repeated in the evidence presented here, including some quantification (absolute and relative) of the scale of activity.

8. However, as there are very limited effects on the recreation and tourism resource, and the scale of tourism activity is so low, that any existing tourism baseline relying on data gathered at the regional and national levels will be meaningless. An example of the effects of the grounding of the Rena on these tourism data are given in this evidence to show how difficult it is to disentangle the many effects on tourism behaviour from one single event. These data also illustrates the potential effects on tourism of a marine disaster associated with the TTR activity.

9. In summary, the potential effects of the proposal are restricted to specific user groups; predominantly divers, but also fishers to a minor degree. I therefore consider it appropriate that the conditions require the establishment of a Project Consultative Group to include representatives of these user groups, as well as others as indicated in the evidence of Mr Garry Venus. This offers the potential to report on perceived effects of the activity, as well as to communicate and compare measured effects.

Introduction

10. My name is Robert James Greenaway.

11. I graduated from Lincoln University in 1987 with a three-year Diploma in Parks and Recreation Management with Distinction, and completed 18 months of postgraduate study in conservation management. I hold the status of an Accredited Recreation Professional with the NZ Recreation Association (NZRA) and until recently was the Chair of the NZRA Board of Accreditation for member accreditation to professional status. I am also a ‘core group’ member of the New Zealand...
Association for Impact Assessment. In 2011 year I was appointed as an inaugural Board member of the Sir Edmund Hillary Outdoor Recreation Council, to assist Sport New Zealand with the implementation of the National Outdoor Recreation Strategy, amongst other things.

12. I was awarded the Ian Galloway Memorial Cup in 2004 by the NZRA (of which I am a past Executive member) to recognise ‘excellence and outstanding personal contribution to the wider parks industry’. In 2013 I was awarded the status of Fellow with the NZRA.

13. Between 1990 and 1995 I worked with an international tourism and recreation development consultancy, Tourism Resource Consultants, on a range of large and small development and advisory projects. This work included ecotourism development planning in Samoa, for potential World Heritage Sites in the Solomon Islands for the Ministry of Foreign Affairs and Trade, event management (multisport and mountain biking), and domestic reserve, tourism and recreation management planning.


15. Since 1997 I have worked independently. The majority of my work is for private companies, local and central government, and environmental and community agencies. Over the past five years I have prepared assessments and evidence in relation to recreation and tourism for the Porter Heights Ski Area, Contact Energy (Clutha River), Meridian Energy (Project Hayes wind farm, Manapouri hydro, Central Wind, Mokihinui hydro, NBTC hydro, Hunter Downs hydro, Hurunui Wind, Waiau (Amuri) hydro), TrustPower (Wairau hydro, Arnold hydro, Patea hydro, Matahina hydro, Lake Kaniere hydro, Lake Coleridge irrigation and hydro), Genesis Energy (Castle Hill wind), Mighty River Power (Puketoi wind), King Country Energy (Mokau hydro), Marlborough District Council (King Salmon), Christchurch City Council (coastal pathway consultation and several user surveys of parks and other facilities), NZZone Skydive (airfield reconsenting), the New Zealand Recreational Sport Fishing Council (Snapper 1 quota review), the New Zealand Fish and Game Council (Hurunui River) and MainPower
(Mt Cass wind farm), amongst others. I have completed approximately 300 consultancy projects nationally since 1997.

16. In the Taranaki Region I have worked on the re-consenting of the Whareroa marine outfall for the South Taranaki District Council and Fonterra; and the re-consenting of the Patea hydro scheme (Lake Rotorangi) for TrustPower. The Whareroa marine outfall is within the study area for the iron sand mining proposal, and is a work-in-progress.

17. Recreationally, I am an experienced sailor and keen marine fisher, and own a 31ft keeler in Nelson, and have sailed through the South Taranaki Bight twice on boat deliveries. I gained a basic PADI dive qualification in approximately 1981 but have dived only a little this century.

18. I prepared for Trans-Tasman Resources Ltd (TTR) the following report:


19. The content of this report was included as part of the Impact Assessment for TTR’s mining proposal, and I confirm to the best of my knowledge the content of this report is correct.

20. I also provided further information to TTR (as set out in my email to TTR dated 14/01/2014 and included in TTR’s s42 response) in response to a request from the Environmental Protection Authority about the following:

(a) Information on the baseline of visitors / tourists and tourism activities which shows their relative size and importance and information on the extent to which recreational activities are affected by activity; and

(b) Clarity on the geographic scope between the assessment of effects on recreation and tourism, the visual effects assessment and the social impact assessment.
Code of Conduct

21. I confirm that I have read the ‘Code of Conduct for Expert Witnesses’ as contained in Schedule 4 of the Judicature Act 1908 and the Environment Court Consolidated Practice Note 2011. I agree to comply with these Codes of Conduct. In particular, unless I state otherwise, this evidence is within my sphere of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

Scope of Evidence

22. My evidence provides a response to issues raised in submissions and summarises the main findings of my effects assessment report (referenced in paragraph 18 above) in relation to:

(a) The identification of recreation and tourism activities undertaken in the study area (defined as the coastal and offshore area extending 25 nautical miles (nm) (46.4 km) out to sea from mean high water springs (MHWS), between Hawera and Whanganui – see Figure 1, Appendix A);

(b) The identification of issues of concern relating to the sea bed mining proposal expressed by the recreation and tourism community and identified through public meetings, direct interviews, and my own assessments;

(c) A review of relevant technical reports which describe and assess the scale of effects of interest to the recreation and tourism community; and

(d) A review of the scale of effect of the proposal on recreation and tourism.

Methodology and Limitations

23. To identify the recreation and tourism values of the study area, and the issues of concern to the recreation and tourism community, I relied on:
(a) Interviews with selected recreation group representatives and tourism operators, with respondents located from online resources (such as the South Taranaki District Council’s ‘Clubs and Organisations’ database which has over 300 listings), and recommendations from interviewees (a summary of interviewees is attached as Appendix B);

(b) Attendance at a public meeting in Hawera with recreational users of the study area (13 August 2012), and communication with TTR staff and other consultants who attended other public meetings;

(c) An extensive literature review, using online keyword searches, recommendations from interviewees, including DOC and the South Taranaki District Council, reference to online data held by relevant government agencies, particularly the Ministry for Primary Industries in relation to fisheries, and reference to popular recreational guide books, as well as the technical reports listed in paragraph 25 below;

(d) A low-level overflight of the study area (in addition to several over-flights I completed in much of the area for my study into the Whareroa marine outfall); and

(e) A site visit to most of the terrestrial coastal public access points in the study area (see Figure 2 in Appendix A).

24. There are likely to be some recreation pursuits carried out in the study area which I have not identified, but considering the scale of my assessment I have assumed that these will have very low participation levels and not be unique or significant to the study area.

25. To identify the scale of the potential effects of the proposal I reviewed the technical reports completed for TTR listed in Appendix D.

Key Findings from Report

26. My report identified the recreation and tourism activities which occur in the area that is potentially affected by the iron sand mining operation, (the ‘study area’). Ohawe Beach has been defined as the northern-most extent of the study area for recreation and tourism purposes.
27. The regionally important coastal marine recreation settings in the study area are based at the main public access and activity points: Ohawe Beach, Waihi Beach, the mouths of the Tangahoe and Manawapou Rivers, Patea, Waipi, Wainu, Kai Iwi and Castlecliff, and the fishing and cray-fishing resource up to 20 km offshore, including The Traps (see Figure 2, Appendix A). The level of shellfish gathering along the coast is unclear but is a locally important activity.

28. The section of coast extending from Patea north to Cape Egmont is relatively lightly fished in comparison with the coast south of Patea and in North Taranaki. Very little recreational fishing occurs more than 20 km offshore along the entire west coast of the North Island.

29. Tourism activity in the study area is largely limited to six beach camp sites and three fishing charter operations – two operating from Patea and one from Whanganui.

30. Potential effects of the sand mining proposal of interest to the recreation and tourism community were identified from concerns expressed at public meetings and interviewees contacted for my report, and review of technical data prepared for TTR. These were:

(a) Turbidity effects (underwater visibility and smothering of biota) and the location of the sediment plume and sediment effects on onshore and offshore reef systems;

(b) Re-suspension of returned sand during storm events or other wave action and the potential for long-term turbidity issues;

(c) Re-colonisation rates for biota in the mined area;

(d) Toxicity of returned sand and effects on biota throughout the study area;

(e) Changes to coastal wave patterns affecting surfing opportunities;

(f) Sand budget effects on the replenishment of beaches and sand bars (also an issue for surfing);
(g) Exclusive use of the marine area in the mining area and interference with navigation routes for recreation craft; and

(h) Effects on the environmental (‘clean green’) reputation of NZ.

31. Review of relevant technical reports indicates the following potential scales of effect.

32. Potential adverse effect on recreation and tourism due to changes to water clarity are (references are given in my paragraph 25):

(a) Minor in the inshore marine setting where most recreational activity occurs due to the very low scale of effect on water clarity in the inshore environment and the high level of background suspended sediment (see Hadfield, 2013 and Gall et al, 2013);

(b) Minor in the important diving setting of the Traps due to a persistent but small scale change in water clarity, which will be most apparent only when the mining activity is occurring in the eastern part of the mining area (that is, not for the full period of mining activity) (see Hadfield, 2013 and Gall et al, 2013);

(c) Potentially a moderate scale of effect in water clarity at the Traps during the rare periods of extreme water clarity (>10 m horizontal visibility), which are likely to coincide with ideal settled diving conditions and are therefore likely to be experienced by divers seeking a scenic experience, and when water clarity is marginal (<5 m) for divers hunting crayfish. Similar effects are also likely at the less important diving setting on the Graham Bank (see Hadfield, 2013 and Gall et al, 2013); and

(d) Minor on the offshore surface recreation experience in the South Taranaki Bight (fishing, sailing and other boating) due to the large scale of the offshore setting, the relatively low level of activity in the plume area, and the transient characteristic of the experience (see also Boffa Miskell 2013).

33. Potential adverse effects on recreation and tourism due to changes to marine ecology are:
(a) Minor on recreation and tourism in the mining area due to very low levels of recreational use of the setting, the large scale and proximity of local and regional alternatives, and

(b) Minor for recreation and tourism activities outside the mining area due to the low scale of adverse effects on marine ecosystems.

34. Other potential adverse effect on recreation and tourism are:

(a) The potential for only minor, if any, effect on surfing and inshore recreation which relies on natural beach replenishment processes, due to the very low scale of potential adverse effect (‘insignificant’ changes to wave patterns and only a very weak potential link between the mining setting and inshore sediment levels) (See Hume 2103 and Mead 2013);

(b) The potential for only very minor effects on recreation and tourism in the South Taranaki Bight due to the proposed exclusive occupation of the marine environment due to the very small area occupied by the activity; and

(c) Very little potential for adverse effects on New Zealand’s tourism brand as the mining activity has limited adverse environmental effects and occurs well away from internationally and nationally important tourism settings.

35. Adverse effects of interest to recreation and tourism are therefore likely to be largely local to the mining activity, and will relate to exclusive use of the marine setting, local turbidity effects (up to 10 km from the site), and short-term effects on habitat in recently mined seafloor (although the latter effect is likely to be negligible for recreation and tourism). The main recreation effects of interest are on diving at the North and South Traps. Adverse turbidity events will be limited to the periods when mining occurs in the eastern part of the mining area and may influence recreation satisfaction when water clarity would normally be extreme and when diving is marginal for crayfishing, with 19 more days of visibility below 2 m in a year with proximate mining activity. Similar effects will occur at the less important diving setting on the Graham Bank.
Response to EPA Technical Review

36. m.e environment prepared for the EPA a Review of Technical Reports Pertaining to Recreation Submitted by Trans-Tasman Resource Ltd for A Marine Consent Application for Offshore Iron Sand Extraction dated 13 December 2013. This included a review of four documents prepared for TTR: my recreation and tourism report, the landscape assessment (Boffa Miskell 2013), the social impact assessment (Corydon Consultants, 2013) and the AEE.

37. Two items of interest raised by m.e environment were included in the EPA’s s42 request for additional information, relating to the geographic spread of the different study areas used in each report, and baseline data for regional tourism activity. Relevant information has been supplied in TTR’s s42 response.

38. The m.e environmental report suggests identifying a baseline of tourism activities against which the effects of the mining activity may be assessed (their paragraph 3.2). However, correlating any effects of the mining on changes in these regional baseline data (the Ministry of Business, Innovation & Employment (MBIE) Commercial Accommodation Monitor (CAM) for example), would be impossible due to the many confounding factors which influence tourism activity. The CAM, for example, includes business accommodation and is therefore likely to be positively influenced by the mining project. However, isolating this effect would require substantial additional research (intercept surveys with tourists at a regional level, for example).

39. The CAM data, and all other regional tourism data supplied by MBIE, apply to complete Regional Tourism Organisation areas. The Taranaki Regional Tourism Organisation area includes New Plymouth and all other townships in the region. Two commercial fishing charters in Taranaki visit settings which have effects from the proposal. There are no inshore effects of interest to tourism. While it is very easy to supply CAM data and other regional visitor information, there is no way to use this information to set a baseline for measuring effects from the iron sand mining proposal. Whanganui is a more geographically confined Regional Tourism Organisation area with one main city, but here one
charter operator visits the areas with effects from the proposal. The complete absence of this operator would not show in any regional-level data.

40. To illustrate the lack of relevance of these baseline data, we can refer to the Rena which struck Astrolabe reef in October 2011. The CAM data showed that the Bay of Plenty had a significant growth in domestic guest nights between October 2009 and January 2012, but a rapid slump over 2012. While this may have been influenced by local issues associated with the wreck, other regions showed similar volatility in domestic guest nights over the long term. For example, Bay of Plenty had 20.8% fewer domestic guest nights in September 2012 compared with September 2011, Hawke's Bay had a 19.5% decline for the same months, and Dunedin was down 16.2%. International and national trends will be influencing local tourism trends, as well as local issues, and it is difficult to disentangle each. (I consider the Rena later in my evidence in relation to international tourism.)

41. My assessment has therefore directly focused on the recreation and tourism activities which may be affected by the proposal. The Boffa Miskell landscape assessment indicates very little potential for any effects on visual amenity from terrestrial settings and the other relevant technical reports indicate very little potential for adverse near-shore effects on surf, marine ecology, sediment supply for beach replenishment and water clarity. The focus of my study on effects on tourism and recreation activities in off-shore settings is therefore appropriate. As these effects are specific to identified tourism operators and recreation groups, my assessment covers the key potential issues of interest. Any further assessment of potential down-stream effects on tourism (such as accommodation providers) becomes speculative and very difficult to quantify.

42. The m.e environment report states: We also note that a specific finding of “very little potential for adverse effects on NZ’s tourism brand as the mining activity has limited adverse environmental effects and occurs well away from internationally and nationally important tourism settings” (Document 3, page 13) does not have an adequate basis either in terms of effects on local tourism, or in regard to the wider international
perspective (for example, some potential visitors to New Zealand may perceive a mis-match between the “100% Pure” branding and the presence of seabed mining per se).}

43. The relationship between new developments in New Zealand and the “100% Pure” brand is often raised with proposals of this type. If the proposals were located in nationally important tourism destinations, these concerns might be relevant, but the offshore setting of the South Taranaki Bight is not nationally important for tourism – evidenced by the very low level of tourism services (three charter operators) and the tourism activity data I have supplied to the EPA (see my paragraph 10). The “100%” destination marketing term is applied in a range of manners, for example: ‘100% Middle Earth’, ‘100% Pure Relaxation’ and ‘100% Pure Adrenalin’.¹ These clearly do not apply on a universal basis. The 100% Pure brand probably does not apply well to urban Auckland, although this is one of our most important tourism destinations.

44. Considering: the location of the iron-sand mining proposal; its assessed scale of effect; the intent of the 100% Pure destination marketing campaign; and the relative level of tourism activity in the potentially affected area, it is, in my opinion, adequate to retain the statement quoted by m.e. environment in my paragraph 42 above.

45. To support this conclusion, Appendix E to my evidence includes a figure from the Ministry of Economic Development’s (as it was) Tourism Leading Indicator Monitor. This shows the key influences on international tourism trends over the past 60 years, illustrating steady growth with the occasional adverse influence of international economic and social events.

46. There have been three episodes of short periods of decline in visitor numbers over this period; coinciding with the Gulf War, the Asian financial crisis of 1997/98, and the latest recession and purported influenza epidemic. In 1990 we had almost 1 million international visitor arrivals. In 2013 we reached the annual figure of 2.7 million, up from just over 2.5 million in 2012. This growth has continued through, for

example, national debates about freshwater quality and dairying, and increasing carbon emissions. (The Ministry for the Environment, in its April 2010 ‘Environmental Snapshot’ report, *New Zealand’s Greenhouse Gas Inventory 1990-2008*, states that between 1990 and 2008 the national net emission of carbon dioxide went from 29.7 million tonnes equivalent to 48.5 million tonnes – an increase of 63.2%).

47. The Ministry of Economic Development’s Tourism Strategy Group stated, in reference to these long-term trends:

> Taking a long-term look at the New Zealand tourism sector allows growth trends and pattern shifts to be identified. In this examination, the picture is of sustained long-term growth, with disturbances caused by major economic or adverse events. Growth rates have slowed as the overall market volume has increased. The market mixes have changed considerably, but then have reverted back as the drivers of market performance have changed over time (e.g. economic conditions, aviation capacity and airfares, travel preference, exchange rates, competition from other markets, etc).

48. I am not suggesting that managing New Zealand’s international environmental record to sustain our tourism growth is not important, but that the focus on sustaining tourism growth is primarily on delivering quality experiences in our key international tourism destinations, and maintaining our competitive edge considering the ‘drivers of market performance’ identified in the MED quote above. Patea, Hawera and Whanganui are not comparable with the likes of Auckland, Christchurch, Rotorua, Queenstown, the Coromandel and the West Coast of the South Island in supporting national tourism activity. There is also no effect from the proposal on inshore recreation opportunities (notably surfing) from the proposal, and limited effects on the offshore fishing and diving settings of the Taranaki Bight. These settings are occasionally visited by three commercial fishing and diving charters, one of which is a dedicated operation (Fluffy Duck). To conflate the potential effects of the iron-sand mining proposal to a potential adverse effect on New Zealand’s international tourism brand is a step too far.

---

49. The m.e environment seeks additional data to quantify the scale of tourism and recreation activity in the study area (their paragraph 2.13). However, there are some very useful base data about recreational activity supplied in section 4 of my AEE, including:

(a) *Recreational harvest estimates for SNA 8 in 2006–07* (Hartill et al 2011). A substantial quantification and location of angling activity off the Taranaki Coast.


(c) *Netting Coastal Knowledge, a report into what is known about the South Taranaki-Whanganui marine area* (DOC 2006). This included a relative quantification of fishing activity off the Patea coast.

(d) *Biosecurity NZ – Mapping the Values of New Zealand’s Coastal Waters* (Allen et al 2009). This included a description of coastal marine recreation at the national level.

50. There are no data available to subdivide the activity descriptions by tourism and recreation.

51. Other reports analysing the significance of the Taranaki coastal setting for recreation and tourism are quoted in section 4 of my AEE report, along with primary interview data. These provide a strong description of the uses of the study area, with quantification and descriptions of relative values.

52. The m.e environment report stated: “The moderate scale effects identified due to changes in water clarity at “The Traps” and “Graham Bank” should be placed within their recreational/social context of how many divers would be affected; and whether alternative diving sites are available to the divers (e.g. how disruptive the mining would be on divers).”
53. This is the probably the most important issue of the assessment on recreation, as diving is the key activity which may be affected. While high water clarity may be desirable for fishing, the activity takes place in a wide variety of settings, from turbid estuaries to clear blue waters well offshore. The key issue is the presence of fish. However, diving can be markedly affected by changes in visibility and is unpleasant in very turbid water.

54. There are no data available to give an absolute count of diving activity at The Traps, although I present the number of diving club members in my AEE report and at paragraph 59 of my evidence. The three charter operators identified in my assessment also offer dive visits to The Traps.

55. In the South Taranaki Bight, there are several diving options, with inshore options very good north of Ohawe where water clarity improves. However, based on interviewee data, The Traps are a regionally significant site with no immediate offshore alternatives for locals to access without driving north to New Plymouth and south to the Kapiti area. This importance is reflected in the degree of focus I have applied to this setting.

56. The mining operation will not preclude any of this current diving activity, although it may, from time to time and depending on the sedimentation effects from the mining operation, affect the quality of the experience for some divers.

Responses to EPA Staff Report

57. The EPA Staff Report issued on 10 February 2014 identifies the following gaps in information provided by TTR:\(^4\)

(a) An adequate baseline on tourism in the area has not been provided which is needed to understand the scale and extent of effects in the context of the overall levels of activity. Baseline information on the numbers of people engaging in each of the recreational activities identified was not provided making it difficult

\(^4\) Para 180-181, page 42 of the EPA Staff Report
to assess the relative importance of each recreational activity and therefore draw conclusions on the effects on existing interests.

(b) Data was not provided on the relative contribution of tourism and recreation to the local economy. Therefore it is not clear as to the extent that the area relies on tourism activity and how the TTR application may affect this and the local economy.

58. My discussion in response to the m.e. environment report in my paragraphs 36 to 55 respond to these issues in part, but I will expand on specific issues below.

59. There is no quantification of absolute numbers of recreational users of the South Taranaki Bight available, but I provide recreational club memberships in section 4.1 of my AEE report. For example, for diving:

(a) The Mako Sub Aqua Club based in New Plymouth has had up to 50 or 60 members but is currently having a quiet patch with approximately a dozen members.

(b) The South Taranaki Underwater Club has 40 members, many of whom are also members of the Patea and District Boating Club. Ninety percent of members would use the coastal area north of Patea.

(c) The Opunake Boat and Underwater Club has 120 to 130 members and is growing. Of those, 40 to 45 are divers (although only about 15 to 25 are active) and the remainder are fishers. Most members are from Taranaki, but include people from throughout the central North Island.

60. In respect of data on the relative contribution of tourism and recreation to the local economy, this would require generating a regional tourism economic profile at quite a local, but detailed, scale. This would need to quantify total economic activity dependent on tourism and recreation, subdivided by activity, with those dependent on diving and fishing isolated, followed by a survey of perceived displacement effects of the iron-sand mining proposal on those user groups, with all the bias (including strategic responses) associated with that type of research.
This would be a substantial study and would inevitably include degrees of error that would cloud any ability to isolate the potential effects of the proposal (either predicated or monitored over time). If an economic profile was generated at the regional level, all tourism and recreation activity at a location like Patea would be subsumed by that of New Plymouth. Data have been generated by Sport NZ and MBIE on the national contribution of recreation and tourism to the economy, but these data cannot be applied at a local level, even on a per-population basis due to regional variations (Queenstown cannot be compared with Hawera, for example).

61. It is also noted in the EPA Staff Report that: “Although raised as a specific concern, detailed information has not been provided on the effects to recreation and tourism in the event of an accident such as an oil spill.”

62. The likely location of an oil spill is set out in the evidence of Dr Brett Beamsley. This confirms the location is within the geographical scope of my original study area. Potential adverse effects on ecosystems of accidents are considered in the evidence of Dr Dan McClary. In terms of recreation and tourism, the macro and local effects of a marine disaster are best exemplified by the wrecking of the Rena. The immediate effects of the disaster (October 2011) are well-documented with the temporary closure of beaches, dispersed oil and debris effects, temporary loss of public and commercial access to the Astrolabe Reef, and bad publicity for the Bay of Plenty (BOP) as a domestic and international tourism destination.

63. Appendix C to my evidence shows the annual international and domestic guest nights for the BOP from 2008 to 2013 (year ended December for all years apart from 2013 with data available up to November only, all MBIE CAM data). This shows at the macro level that the BOP outperformed national trends for international tourism during the period described, and showed a relative loss of domestic activity in 2012 (which compared with other regions as stated in paragraph 40 of my evidence), but performed at a comparable level to the nation once all tourism activity is accounted for. This shows the
difficulty in disentangling baseline date when specific effects are considered. International tourism in the BOP may have bolstered by wreck recovery activity; and the BOP may have suffered a similar decline in domestic activity, as did neighbouring regions, without the wreck – although there were clearly significant temporary adverse effects on the recreation and tourism setting and the BOP tourism brand. Notably, in my assessment of the preferred options for the treatment of the wreck of the Rena, I identified 21 charter operators who used the Astrolabe Reef as part of their product prior to the October 2011. This commercial activity was displaced for the wreck-recovery period, but this effect does not show in the international tourism data.

64. Considering the scale of the Rena disaster, the tourism data do not show a change in net activity that was out of line with national or regional trends – notwithstanding the significant regional adverse effects on the recreation setting, and one of much higher levels of activity (recreation and tourism) when compared with the South Taranaki Bight.

Response to Issues in Submissions

65. I am aware a number of submitters have raised concerns about effects on recreation and tourism which I have addressed generally in my evidence. I would like to respond to the following key submissions of:

- Patea Boating Club
- Hannah Mueller
- Gavin Cummerfield
- Roger Malthus
- Stephen Corrigan
- Christine Corrigan
- Karen Pratt
- Ministry for Primary Industries

5 Para 174, page 41 of the EPA Staff Report
- Fluffy Duck Charters
- Taranaki Regional Council

66. Rather than respond to each submission point, I have identified the main issues raised. The submissions focus almost entirely on the fishing and diving resources which may be affected by the proposal, and this is, in my opinion, the correct focus. There is some little discussion of potential effects on terrestrial and inshore activities, but as I have reviewed these previously in my evidence and see no issues of concern, I will not include additional responses in this section of my evidence.

**Importance of fishing resource and the use of existing data to describe this**

67. There is some doubt expressed by some submitters that the data upon which I have relied is adequate to describe and locate the fishing and diving resources in the study area. While it is possible to identify weaknesses in all the studies I reference in my report (as it is with any study of outdoor recreation settings with their variable use patterns, multiple entry and exit points, and wide dispersal of activity), the number of studies available, as well as the stakeholder interviews I completed, afford a very good indication of the dispersal of fishing and diving activities in the study area. Karen Pratt suggests reviewing Coast Guard ‘unofficial’ records to help identify boating locations. I suspect that this would be a useful additional area of research, although I am doubtful that it would change the findings made possible by the other data available.

68. Several submitters are concerned that the Graham Bank is not identified as a dive and fishing site. This location is identified in Figure 2 of my original AEE report, which is also appended. I note that the Graham Banks has been identified as a diving setting, but one that is not as important as The Traps.
Not all concerns to recreation groups assessed in the recreation report

69. Karen Pratt identifies that the effects of accidents at sea and the importance of monitoring effects are not covered in the recreation assessment. This work is included in the evidence of Dr Dan McClary and Mr Garry Venus, respectively and I discuss the potential effects of an oil spill on recreation in paragraphs 61 and 64 above.

Underwater visibility at the Graham Banks

70. The Patea Boating Club suggests that visibility at the Graham Banks will be reduced from 8-10 metres to 1 metre. I am not sure from where this finding is taken, but the Optical Effects Report (Gall et al 2013) includes a figure (3-15, p61) showing median horizontal visibility distance under mining and natural conditions with a logarithmic scale. This shows the Graham Banks area with a natural mean horizontal visibility of, roughly, between 1 and 5 metres, and with mining of between 1 and 2 metres, when mining occurs in the northern-most part of the mining area.

Ecological effects on fish from sedimentation and increased turbidity

71. This is a critical issue to anglers and divers. This information is presented in the evidence of Dr McClary, and I refer to his findings in my assessment. The Ministry of Primary Industries’ submission states that the impact of the proposed mining on recreational fishing activity is likely to be negligible to non-existent.

Recommended Conditions

72. I have identified the potential for adverse effects resulting from changes to underwater clarity to the south-east of the mining site. However, these have been limited as much as possible by the applicant and are subject to limits and monitoring as set down in the proposed consent conditions.
73. The potential effects are restricted to specific user groups; predominantly divers but also fishers. I therefore consider it appropriate that the conditions require the establishment of a Project Consultative Group to include representatives of these user groups, as well as others as indicated in the evidence of Mr Garry Venus. This offers the potential to report on perceived effects of the activity, as well as to communicate and compare measured effects.

Conclusion

74. The submissions and m.e environment review of my AEE report have not led me to change my original opinions. It may have been useful to m.e environment and the Taranaki Regional Council to have included a more detailed description of the tourism setting in South Taranaki and Whanganui, as I have prepared for other proposals in areas with a more developed tourism product. However, in this case, the development is well-removed from any tourism setting of significance, and such additional analysis is simply not required. My main focus on identifying the tourism businesses operating in the potentially affected area – three thereof – provides a far more targeted and useful analysis.

______________________________

Rob Greenaway

14 February 2014
Appendix A: Figures

Figure 1: Study area
Figure 2: Coastal recreation activities identified in the study area – Ohawe to Whanganui

- Picnicking, beach activities
- Surfing
- Swimming
- Shellfish gathering
- Boating
- Surfcasting
- Camping
- Diving
- Fishing
- Walking
- Diving
- Surfing

Throughout marine area mostly within 21km offshore

Ototoka

Patea

Waipipi

Waiinu

Ototoka

Kai Iwi

Castlecliff / Whanganui

Graham Bank

Waitotara

Waverley

Waihi Beach

16089628_1
Statement of Evidence in Chief of Rob Greenaway on behalf of Trans-Tasman Resources Ltd
Appendix B: Interviewees

Interviews with relevant club and activity representatives were completed to provide locally relevant data. The interviewees are identified below and their comments collated by topic in my AEE report. Dr Shaw Mead of eCoast Marine Consulting and Research carried out a separate assessment of effects on surf breaks in the South Taranaki area for NIWA as part of the TTR sand mining investigations, and his research included interviews with regional surfing representatives. Only a limited review of this activity has been carried out in this study to avoid duplication.

Neil Ward – Mako Sub Aqua Club

The Mako Sub Aqua Club is based in New Plymouth, owns its own clubrooms, and was formed in 1957. It has had up to 50 or 60 members but is currently having a quiet patch with approximately a dozen members.

Brian Smith – Fluffy Duck Charters Ltd

Fluffy Duck Charters operates a 53ft vessel out of Whanganui, taking up to 13 guests. Brian Smith – and ex commercial fisher with 40 years of experience – operates up to 12 nm off the coast, almost entirely north of Whanganui and up to Ohawe.

Peter Robins – South Taranaki Fishing Charters

Peter launches from Patea and fishes in the Tangahoe area, normally a short distance off the coast, but when there’s a northerly will come in within ½ a mile of the beach. He relies mostly on charter work, but also commercial cod-potting in summer, some netting and line fishing.

Eddy Jenkins - HyJinks Fishing Charters

HyJinks Fishing Charters operates out of Patea with a 6.5m McLay boat, and fishes up to Manutahi in the north. The charter offers diving and fishing, with the Traps a popular spot for cray fishing, scenic dives and spear fishing (free diving), particularly for kingfish.

The business runs all year but is usually very quiet over winter – and Eddy has other work to do. His boat can exit the Whanganui River in pretty much any conditions, but clients don’t like the sea when it’s blowing more than 25 knots. Clients are drawn from throughout the North Island.

Carl Triggs – South Taranaki Underwater Club

The club has 40 members, many of whom are also members of the Patea and District Boating Club. The club has a compressor and offers well-priced tank refills, which is an important benefit of membership. Ninety percent of members would use the coastal area north of Patea. Crayfish and fishing are the main activities.

Geoff Campbell – Opunake Boat and Underwater Club

The Opunake Boat and Underwater Club has 120 to 130 members and is growing. Of those, 40 to 45 are divers (although only about 15 to 25 are active) and the remainder are fishers. Most members are from Taranaki, but include people from throughout the central North Island.

Boats launch through the surf at Opunake, which is a very exposed piece of coast, meaning that access to the sea is quite limited – most likely less-easy than the Patea bar which is usable only about 80 days a year. Forty days a year might be the figure.
Most boats are relatively small and therefore have a limited range for fishing and diving, with Manaia the furthest south that most would venture – well north of the mining site.

**Glynn Herbert** – Ohawe Boating and Angling Club

The club has approximately 60 members with 45 boats registered. Club members often have dual membership with the Cape Egmont and Patea and Districts Boat Clubs so they have access to other launching options. Members rely on the club tractor to launch boats, and due to the weather only one in five days is suitable for boating and fishing activity.

**Harley Ogle, Phil Morgan** – Patea and District Boating Club

The club has 150 members and 132 boats, and maintains a clubrooms, parking area, jetty and webcam for members. Members are from Patea, Waverley, Stratford and the wider district.

**Paddy Walsh** – Opunake Surfcasting and Angling Club

The Opunake Surfcasting and Angling Club has approximately 70 members, 45 or 47 of which are family memberships and the remainder individuals. The club focuses on shore-based angling – surfcasting – although motorised kontikis can take lines 1200 to 1500 metres offshore.

The club supports ‘take a kid fishing’ activities (marine and river), issues a monthly newsletter during the season, runs two fishing days per month, offers a buddy system for new members and runs competitions with trophies. While the club has no special formal arrangements to allow access for members to the coast over private land, there are verbal agreements and club membership will enhance the opportunity to arrange access. Access immediately north of Patea is very difficult with steep coastal cliffs up to and north of Hawera.

**Harry James** – Opunake Boardriders Club

The Opunake Boardriders Club is one of five incorporated surfing clubs of Taranaki which make up Surfing Taranaki, a regional sports organisation which represents approximately 1,500 surfers throughout the region.
Appendix C: Bay of Plenty regional tourism pre- and post-Rena:

All figures show total annual guest nights for New Zealand (left axis) and the BOP regional tourism organisation area (Tauranga City and Western BOP District) (right axis) (year ended December, apart from 2013 with year ended November. Source MBIE CAM data
Statement of Evidence in Chief of Rob Greenaway on behalf of Trans-Tasman Resources Ltd
Appendix D: Technical reports referred to:

- Boffa, F. 2013. *Seascape and Natural Character and Visual Effects Assessment.* Boffa Miskell Client report for TTL
- Gall, M, Pinkerton, M. Hadfield, M. 2013. *Optical effects of an iron-sand mining sediment plume in the South Taranaki Bight region.* NIWA client report for TTR
- Vopel K, Robertson J and Wilson P.S. 2013. *Iron sand extraction in South Taranaki Bight: effects on seawater trace metal concentrations.* AUT Client report for TTR
- The analysis of marine ecology effects by Dr McClary of Gardline Marine Sciences PTY Limited as detailed in the EIA (no stand-alone report has been published).
Figure 1: Long-term Perspective of Inbound Travel, 1950-2016

- Visitors
- Annual growth rate
- Visitors

Figure from Ministry of Economic Development's Tourism Strategy Group: Tourism Leading Indicators Monitor, July 2010.