

**BEFORE THE ENVIRONMENTAL PROTECTION AUTHORITY**

**IN THE MATTER** of the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2011 (EEZ Act)

**AND**

**IN THE MATTER** of an application for marine consent under section 38 of the EEZ Act by Trans-Tasman Resources Limited to undertake iron ore and processing operations offshore in the South Taranaki Bight

**BETWEEN** **Trans-Tasman Resources Limited**

Applicant

**AND** **Environmental Protection Authority**

EPA

**AND** **Fisheries Inshore New Zealand Limited, New Zealand Federation of Commercial Fishermen Inc, Talley's Group Limited, Southern Inshore Fisheries Management Company Limited, and Cloudy Bay Clams Limited**

Fisheries Submitters

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**PRIMARY NON-EXPERT EVIDENCE OF  
DOUGLAS SAUNDERS-LODER  
FOR THE FISHERIES SUBMITTERS**

**DATED: 24 January 2017**

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## TABLE OF CONTENTS

INTRODUCTION	3
Background and experience	3
Background to evidence preparation	4
CONCERNS WITH TTR'S PROPOSAL	5
TGL	5
Inshore Fishermen	9
CONSULTATION	12
CONCLUSION	13

## **INTRODUCTION**

1. My name is Douglas Saunders-Loder. I am currently employed as the Resource Manager of Talley's Group Ltd (**TGL**).
2. I am also the current President of the New Zealand Federation of Commercial Fishermen (Inc) (**the Federation**) and Chair of Southern Inshore Fisheries Management Company Limited (**SIFMC**).
3. In this Statement of Evidence, I will:
  - (a) provide an overview of the value of the Fisheries Management Area (**FMA**) 8 fishery (and adjacent areas) to TGL;
  - (b) identify the effect on TGL's business, should fishing effort be displaced by the proposed Trans-Tasman Resources Limited (**TTR**) mining; and
  - (c) identify impacts and financial implications on inshore fishermen from the effect of the mining as presented in the latest application by TTR to mine iron-ore in the South Taranaki Bight (**STB**).

## **Background and experience**

4. I have been employed by TGL for the past 30 years, and have been involved during that time in all aspects of the management and operation of fisheries, from the processing of fish and fish products on land, to the management and operation of vessels at sea and the collaborative management of fisheries, primarily throughout the South Island but also in certain areas around the North Island.
5. I have been actively involved in creating and running Commercial Stakeholder Organisations (**CSOs**) that are charged with the responsibility of representing the specific interests of quota-holders throughout the South Island. I have been Chairman of the Challenger Finfish Management Co. Ltd (a CSO representing the interests of certain fishstocks/quota-owners in FMAs 7 & 8) for 10 years.
6. I was a Director of the South East Finfish Management Co. Ltd (a CSO representing fish-stocks/quota-owners in FMAs 3 & 5) for 8 years.

7. There has been a subsequent rationalisation of these companies and SIFMC was incorporated on 5 March 2013. This company now assumes the role of representing quota-owners for similar fish-stocks and I am the current Chairman.
8. The NZ Federation of Commercial Fishermen Inc is an Incorporated Society that originated in the South Island in 1953 and is nationally recognised as the representative body for fishing vessel owner-operators. The Federation regularly interacts with Government on fisheries management issues, vessel and seafarer licencing and a wide range of other matters that impact its members. I have been an Executive member of the Federation for the past 15 years, and have been President for the past 13 years.
9. Through my involvement with TGL, regional CSOs such as SIFMC, and the Federation, paying particular focus on the small owner-operated inshore vessels, I have a comprehensive knowledge and understanding of the dynamics of the FMA 8 and adjacent FMAs.
10. Given that I am involved with a number of commercial fishing organisations, I have prepared this statement of evidence as their representative. In particular, I have been given a mandate to speak on behalf of the Federation, SIFMC, and TGL.

### **Background to evidence preparation**

11. I am familiar with the general site of the application and surrounding environment because of my long-standing relationship and continued discussions with fishermen, quota-owners, fish receivers and fisheries managers that operate within this region.
12. In preparing this evidence I have read the following documents:
  - (a) parts of TTR – South Taranaki Bight Offshore Iron Sand Extraction and Processing Project, Impact Assessment, dated August 2016;
  - (b) Corporate Evidence of Shawn Thompson on behalf of TTR, First Statement - Project Description, dated 16 December 2016;

- (c) Corporate Evidence of Shawn Thompson, Second Statement - Operational Description, dated 16 December 2016;
- (d) Expert Evidence of Alison MacDiarmid, Planning and Conditions, dated 15 December 2016;
- (e) Expert Evidence of Iain MacDonald, Existing environments, dated 17 December 2016;
- (f) Expert Evidence of Mark James, Overall ecological effects, dated 15 December 2016
- (g) Expert Evidence of Lawrence Cahoon, Primary productivity and optical effects, dated 19 December 2016;
- (h) Expert Evidence of Barrie Forrest, Biosecurity, dated 15 December 2016;
- (i) Expert Evidence of Simon Childerhouse, Marine mammals, dated 15 December 2016; and
- (j) Primary expert evidence of Andrew Smith on fisheries management for the Fisheries Submitters, dated 23 January 2017.

## **CONCERNS WITH TTR'S PROPOSAL**

### **TGL**

13. TGL is the largest privately owned fishing company in New Zealand. It is a food producing company with an extensive seafood division, established in 1936. TGL operates three seafood processing factories on land, and a fleet of six deep-water fishing vessels, two large Tuna purse-seiners that operate in New Zealand and in the Pacific, and an auto-liner operating in the Southern Ocean.
14. The seafood division also owns significant fishing quota, mussel farms, and associated infrastructure. TGL either directly, or through the lease of quota (with Annual Catch Entitlement (**ACE**)), has a long established presence in FMA 8 which includes what is described as New Zealand fisheries statistical areas 037, 039 and 040.

15. TGL owns mussel farms in both the Tasman and Golden Bays and the Marlborough Sounds areas, and has a significant capital investment in the top of the south fishery.
16. TGL views the proposed application for mining in the STB with much concern, given the uncertain effects that the proposed mining may have on TGL's capital base and its ability to generate income from its assets in these areas going forward.
17. TGL is concerned about the potential impact on its aquaculture facilities in the top of the South Island noting that there is uncertainty in respect of any sediment plume created during the mining operation. We acknowledge that TTR has taken steps to try to reduce the impact of this operation by creating a so-called "*more environmentally viable solution*"<sup>1</sup> to extracting and returning sediment, however I am deeply concerned that sediment transfer at any level has the potential to impact negatively upon Marlborough Sounds marine farming operations (which include Green-lipped mussels and Salmon) and wild fisheries that include various finfish, Paua, Rock Lobster and also Scallops. TGL maintains the view that there is still a significant level of uncertainty in respect of any plume and the evidence presented does not provide sufficient comfort.
18. Dr MacDiarmid concludes at paragraph [93] of her evidence for TTR dated 15 December 2016 "*that mining derived sediments suspended in the water column or deposited on the seafloor are 'highly unlikely' to affect surf clams along the Manawatu coast or aquaculture areas in Marlborough Sounds*" (emphasis added). The model predicts a sizeable sediment plume that will reduce light in the water column by 10%-40% which certainly seems a lot to me. Dr MacDiarmid's 'highly unlikely' prediction does nothing to instil confidence.

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<sup>1</sup> Corporate evidence of Shawn Thompson, "Project description" dated 16 December 2016 at paragraph [15].

19. TGL has rights to the following species that occur in FMA8. The value of these species is also expressed for the 2016/2017 Year as:

Species/Area*	Tonnes Owned	% of TACC	Quota *Value \$ Per Tonne	Total
Blue Cod 8	6.992	20.5	5,000	34,960
Flatfish 2	39.400	5.4	3,500	137,900
Gurnard 8	202.400	37.2	4,000	809,600
Jack Mackerel 7	1,900.000	5.8	1,000	1,900,000
Leather Jacket 2	320.911	28.0	1,500	481,366
Red Cod 2	39.027	6.3	3,000	117,081
Rough Skate 8	3.029	14.4	2,500	8,000
Snapper 8	49.624	3.8	60,000	2,977,440
Terakihi 8	20.835	9.2	6,000	125,010
Trevally 7	117.200	5.4	5,000	586,000
<b>TOTAL</b>				<b><u>7,177,357</u></b>

\* Quota values taken from Fishserve records.

20. As I note above, TGL owns two tuna purse-seiners and has a vested interest in New Zealand's international allocation of Skipjack Tuna. Tuna are very sensitive to water colour, and sediment load in the water. The STB is accessed by TGL's purse-seiners to catch Skipjack Tuna. The Skipjack Tuna fishery is important, not just to TGL but to all participants within the New Zealand fishing industry. As Skipjack Tuna are highly migratory around the Pacific, the fishery is "open-access" and provides New Zealand companies with an investment opportunity outside the Quota Management System (QMS).
21. New Zealand plays a major part in the international management of Tuna stocks throughout the Pacific and into New Zealand waters through its membership of the Western and Central Pacific Fisheries Commission in establishing management measures for tuna stocks. Both the New Zealand government and fishing industry work closely with international partners to manage and develop the fisheries and are well respected in that context.

22. For New Zealand to permit an activity that might threaten the stock whilst in New Zealand waters would be contrary to what New Zealand seeks to achieve in this international forum. Catches of Skipjack Tuna in New Zealand waters over the past two years amount to 12,411 tonnes and 4,959 tonnes respectively across all of the vessels in the Skipjack Tuna fishery in New Zealand. The export receipts generated for this species amount to approximately \$23.5m and \$9.4m respectively. I have read the evidence of Andrew Smith and would suggest that given the catch track of the TGL vessel in FMA 8, it is highly probable that the Skipjack Tuna schools migrate through the proposed mining site and plume area.
23. TGL also deploys a deep-sea stern trawler to target Jack Mackerel and Blue Mackerel in FMA 8. These species typically migrate through the STB in December to May each year. TGL has only been actively involved in this fishery over the past few years and continues to develop its knowledge and expertise in that respect.
24. The Jack Mackerel (**JMA**) and Blue Mackerel fisheries adjacent to the proposed application site have seen the following catch levels over the most recent years.

Year	JMA 7*			EMA 7*		
	Caught (tonnes)	Quota (tonnes)	Caught (%)	Caught (tonnes)	Quota (tonnes)	Caught (%)
2014/15	33,970	32,537	104	892	3,350	27
2015/16	30,874	32,537	95	761	3,350	23

\*JMA 7 and EMA 7 overlaps FMA 8

25. Export receipts for these stocks amounted to \$53.5m for 2014/15 and \$33.2m for 2015/16.
26. I have seen no analysis of how these highly migratory pelagic stocks may be affected by the increased noise and light, increased salinity and toxic load in the water, and the effect of sediment on the migration and spawning patterns on these fast moving fish from the proposed mining operation.

27. Dr MacDiarmid states in paragraph [36] of her evidence for TTR dated 15 December 2016 that “[t]he species diversity of demersal and pelagic fish in the STB is moderate on a national scale and broadly similar to assemblages along the whole of the west coast of the North Island.” The inference here, particularly in respect of pelagic fish for example JMA and migratory tuna is that they can be caught anywhere along the west coast. That is not the case. The migratory stocks of Skipjack and Albacore Tuna vary hugely in terms of volume and location and cannot be guaranteed to be found in any particular area. It is conceivable, if conditions are favourable, that Skipjack Tuna could be caught anywhere along that coast and the presence of the mining operation with its increased sediment loads in this area could be detrimental to them.
28. As I have highlighted within my table above, TGL has a significant existing interest in the STB and the possible negative economic implications for TGL are much more than ‘moderate’; both in terms of JMA and migratory stocks and none migratory stocks held by TGL.

### **Inshore Fishermen**

29. Of interest to the inshore fishermen, and particularly the members of the Federation operating from Golden Bay/Motueka, Port Nelson, Picton, Wellington, Wanganui and New Plymouth is the fishing area known as the “Rolling Grounds” (an area of high ridges and dunes). The Rolling Grounds covers all of TTR’s proposed site and surrounding areas both north and south and on an easterly part. They have the equivalent of undersea sand dunes but not to the height of the proposed mounds. Part of the Rolling Grounds whilst inaccessible to inshore trawlers because of the rocky/undulating surface (foul ground) is regarded as a “nursery ground” and therefore avoided. This is not an uncommon voluntary approach adopted by fishermen throughout various New Zealand fisheries to protect fish spawning areas.
30. I have heard from fishermen who regularly fish in the Rolling Grounds that this area can be subject to storm events which cause discolouration of the water. At these times, the higher value species (Snapper, and Trevally) disappear. Andrew Smith touches on this in his evidence for the Fisheries Submitters. Given that these anecdotal reports are based on existing natural events and

personal observations, it is entirely probable that the TTR application and the proposal to return 45,000,000 tonnes of sediment annually is going to result in the displacement of fish.

31. Additionally, I have a significant concern, and this has been voiced to me by members of the Federation, that should effort be displaced from FMA 8 to other FMAs, that this quota (and its associated lease revenue, ACE) will be devalued. This would cause a direct reduction in the return on TGL's asset and will also result in a drop in revenue for the inshore fishermen.
32. By way of explanation, inshore fishermen that are contracted to harvest fish for TGL lease the right to catch that quota for a particular time in a particular area. These fish are generally landed to TGL's processing facilities through ports in Nelson, Motueka, Golden Bay or Picton to service TGL's local and international markets. It is important to TGL to have a regular and consistent supply of high-quality fish to service its market. Any significant variation in supply caused by the relocation of effort through the sediment plume, noting that relocation provides no guarantee of catching the same fish, will cause a significant reduction in revenue for both TGL and all associated fishers.
33. For example, if one tonne of Snapper was displaced from FMA8, this could result in a loss to TGL of \$60,000. If TGL were unable to catch any of its Snapper in FMA 8 the corresponding loss would amount to \$3m annually. That is the capital cost of the property right and gives no consideration to what the loss might be in respect of sales. As a direct consequence, an inshore fishing operator could lose \$5,000-\$10,000 per year of revenue in this area for this species that would have to be replaced by securing access to similar (or other) fish stocks in different FMAs, with the corresponding increase in cost to access these areas (noting again that relocation provides no guarantee of catching the same fish or associated income or value).
34. That calculation relates specifically to a tonne of Snapper but the reality is that any fisherman is going to have a far more diverse and balanced package than that which will consist of many of the stocks I have referred to previously. They run the risk of losing all income if fish are displaced from FMA 8.
35. I attach a typical catch-plan as **annexure "One"** for an inshore fisher (name redacted) which shows the stocks and the value thereof landed for a particular

vessel operating in FMA 8. Should the fisher be unable to access the following fish species from FMA 8 (which overlaps FMA2 in respect of Flatfish and John Dory): Flatfish, Ghost Shark; Gurnard; John Dory; Rough Skate; School Shark; Snapper; Terakihi: this will result in a potential 33% reduction in income for this fisher.

36. Accordingly, any fish that this fisherman is unable to catch, through relocation, fish mortality or habitat degradation has a direct impact on income. The worst part of this proposition is that this fisherman just cannot move to another FMA and assume that the fish and subsequent income will be replaced. It is lost outright. Fisheries dynamics are such that a fish species that may be targeted commercially in one area may not necessarily aggregate in another.
37. The quota shares that are owned and the ACE that is spawned from the quota annually is a 'capital asset' or property right that allows the activity of fishing. When the fish is caught and discharged by the inshore operator, the fishermen are paid by the quota-owner for that fish based on market demand.
38. This is a long-standing model that provides fishermen with the comfort that they have access to certain capacity which in turn generates income, provided to them in the form of 'guaranteed minimums' and also allows the quota-owner to manage all quota flexibly enough that they can accommodate any shortfall in catch, weather variables, changes in catch-plan, rationalisation etc. This practice should be well known to TTR's fisheries advisors, yet little or no analysis of the potential displacement of effort on inshore fishermen seems to have been done.
39. Mark James refers in his evidence for TTR dated 15 December 2016 to the 'entrainment' of fish. Dr James plays down any significant impact at paragraph [35]: *"...it is possible that because of the intake water velocity occasional entrainment of smaller fish near the suction point may occur, but this is unlikely to be significant."* There is no indication of the likely volume of fish that will be entrained or why he suggests that only smaller fish will be entrained. The fishing industry is subject to stringent rules and regulations in respect of the harvesting of fish. The strength of the QMS is that every fish is recorded. In some instances it is illegal not to do so. I am concerned at the level of uncertainty as to the actual volume of fish that will be entrained by

TTR's operation, as well as the uncertainty as to the size and species entrained and indeed, how TTR might record and report this. Fishermen, in the event they catch a species they cannot obtain ACE for, are required to pay the Government a 'deemed value'. Has TTR considered the implications of this and how does it propose to address this?

## CONSULTATION

40. TGL understands that in terms of the effects on marine farms at the top of the South Island, some other marine farm interests had discussions about any effects and have developed conditions with TTR that appease their concerns. Furthermore we understand that agreement has been reached in respect of 'Conditions' regarding biosecurity fears. Not all Marlborough Sound marine farm interests, including TGL, were invited to review, or were engaged in developing, these conditions.
41. This raises further concerns about the level of consultation TTR has had with the entities that I represent or more appropriately who they have had that consultation with. In Shawn Thompson's project description evidence –for TTR, dated 16 December 2016 at paragraph [86], he states that TTR strongly refutes the suggestion that its consultation has been inadequate. At paragraph [87] of his evidence, Mr Thompson refers specifically to my statement that TTR would 'have' to consult with commercial fishing interests through Fisheries Inshore New Zealand Limited (**FINZ**) after March 2015. That statement is correct and is consistent with the industry view that matters of a generic nature would be best addressed by the Sector Representative Entity (**SRE**) which is FINZ. This did not mean, however, that TTR should stop consultation with us altogether as the proposed mining activity will have specific impacts on TGL, and the members of the entities that I represent.
42. At paragraph [88] Mr Thompson states that Sanford made all efforts to include other commercial fishing interests in their engagement with TTR. Whilst it is true that efforts were made, he makes no mention of the fact that requests by fisheries submitters to Sanford in respect of obtaining specific information from meetings held between Sanford and TTR were ignored. TTR has taken its intimacy with Sanford, who opposed TTR's previous application, and FINZ's presence at some meetings to mean that the wider industry decided

that they would not review the TTR sediment model and that we would accept the Environmental Protection Authority's independent peer review of the TTR sedimentation modelling results.

43. Sanford does not represent the fishing industry and has no place confirming conditions on behalf of the industry or presenting an industry-wide view particularly when, in some cases, Sanford has ignored requests from us for certain information.

## **CONCLUSION**

44. I have read parts of the TTR Impact Assessment supporting its current application and extracts from the expert summaries covering the sediment plume and the effects on fish. Given the size and technical nature of the application, Impact Assessment and supporting evidence, TGL, SIFMC and the Federation along with other Fisheries Submitters supported the appointment of Jacobs New Zealand Limited (**Jacobs**) to conduct an analysis of the current application by TTR and to provide advice on where this differed from the previous application.
45. Jacobs has provided the Fisheries Submitters with advice that there are gaps in the Impact Assessment and the supporting evidence that presents significant uncertainty in regards to the effects of the proposed mining operation on the fishing industry.
46. I am concerned that the effects of the mining (noise, turbidity, light, increased vessel activity, visible plume/invisible toxic elements) will have a much larger footprint and impact than is expressed by TTR and its experts, and may alter fish aggregation and abundance both in FMA 8 and adjacent areas with consequent negative effects upon TGL, SIFMIC and the Federation.
47. At paragraph [74] of Dr Greg Barbara's evidence for the Fisheries Submitters, he points out that the TTR reports do not directly overlap the catch, effort maps with the plume modelling or the proposed project area so it is difficult to determine the actual overlap. It is his view that this uncertainty combined with the amount of high productivity fishing area to be impacted should be more clearly depicted and discussed.

48. These issues, of course, present a significant concern to quota-owners and fishermen alike. Any disturbance to the natural environment that is likely to affect fish-stocks at any level has the potential to significantly undermine the existing property rights and capital value of ALL quota-owners but also the livelihoods of ALL fishermen that fish in the area. Given the magnitude of the proposed operation, this is likely to be significant.
49. New Zealand's fish stocks are not segregated and are part of a larger interrelated ecosystem that relies on many elements to remain healthy and abundant. This is recognised through the complex fisheries management regime currently in place. It seems to me that the introduction into this complex and sensitive environment, of an enterprise of the size and scale of the proposed mining operation needs to provide absolute comfort to all existing users that the operation is not going to be detrimental. TTR has not, in my view, yet considered the full potential impact on the fisheries sector either in terms of flow-on effects or financially.
50. For us, removing the uncertainty from the concerns that the Fisheries Submitters have is imperative. Addressing these concerns and then ensuring that the required conditions including baseline monitoring and compliance parameters are enforceable will be paramount.

**Dated this 24<sup>th</sup> day of January 2017**



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**Douglas Saunders-Loder**

# Annexure One

## PROPOSED FISH PLAN 1ST OCTOBER 2016 TO 30TH SEPTEMBER 2017

SPECIES	AREA	TONNAGE	\$ Landed Value
Flat Fish	2	10.000	29,010
Frost Fish	7	2.000	850
Ghost Shark	8	1.000	480
Gurnard	7	10.000	23,000
Gurnard	8	15.000	24,500
Groper	7	3.000	14,500
Groper	8	0.500	2,200
John Dory	2	3.000	21,272
Leather Jackets	2	5.000	2,750
Blue Moki	1	1.000	1,050
Red Cod	2	5.000	3,000
Rough Skate	7	5.000	3,780
Rough Skate	8	0.500	400
School Shark	8	3.000	7,350
Snapper	8	6.000	30,000
Spiny Dogfish	7	25.000	21,729
Dogfish	8	5.000	17,430
Squid	1T	5.000	7,500
Smooth Skate	7	3.000	2,200
Stargazer	7	22.000	23,700
Tarakihi	7	10.000	2,500
Tarakihi	8	4.000	10,000
Trevally	7	10.000	8,000
Blue Warehou	7	30.000	45,000

\$ 286,411

Doug & Dion  
Quota Management

less \$ 127,482

potential 44.5% reduction  
in income.

\$ 158,929