# Your Comment on the Taranaki VTM Project

Please include all the contact details listed below with your comments.

1. Contact Details					
Please ensure that you have authority to comment on the application on behalf of those named on this form.					
Organisation name (if relevant)					
First name					
Last name					
Postal address					
Phone number				10	
Email (a valid email address enables us to communicate efficiently with you)					
We will email you draft conditions of consent for your comment					
	I can receive emails and my email address is correct	11301		I cannot receive emails and my postal address is correct	
Please select the effects (positive or negative) that your comments address:					
	Economic Effects			nentation and Optical Water Quality Effects	
	Effects on Coastal Processes		Benthic Ecology and Primary Productivity Effects		
$\boxtimes$	Fished Species		Seabirds		
	Marine Mammals		Noise Effects		
	Human Health Effects of the Marine Discharge Activities		Visual, Seascape and Natural Character Effects		
	Air Quality Effects		Effect	Effects on Existing Interests	
	Other Considerations (please specify):				

Please provide your comments below. You may include additional pages if needed. If you are emailing this form and attaching any supporting documents, please list the names of those files below to help us ensure all materials are received.

# Taranaki VTM Project

Submission from

#### **Background of submitter:**

A commercial fisherman for over 35 years and having an association with the industry that continues today as owner of both crayfish and wetfish (finfish and shark) fishing quota shares known as Individual Transferable Quota (ITQ).

Experience fishing in the South Taranaki Bight was mostly as a set-net fisherman targeting Rig, School Shark, Trevally, Blue Warehou and Snapper. Other methods used were longlining (targeting Blue Cod and Snapper) and potting for Crayfish.

#### Concerns:

The richness in commercial fish species in the proposed Seabed Mining area and surrounds is grossly understated in the Trans Tasman Resources (TTR) application.

#### Data manipulation

Summaries and conclusions drawn by NIWA and Fathom Consulting used by TTR to support their application rely heavily on the manipulation of unsuitable data to fit their required purpose. Data relating to fish landings use figures referenced from huge Ministry of Primary Industries Fisheries Statistical areas, not from the specific seabed mining site. For example, the statistical area for wetfish in which the subject area is located stretches from New Plymouth to Whanganui (General Statistical Area 040) whilst the statistical area for Rock Lobster extends from near New Plymouth to Foxton Beach (Rock Lobster Statistical Area 935) – see attached maps.

Fish are not distributed evenly throughout the statistical areas to which the catch data relates. Where NIWA have been able to reference catches identifiable by latitude and longitude, the data base is extremely small, not available for all fisheries and therefore not appropriate to use as a template to massage figures from the entire statistical area into fitting the subject site as has been done.

#### Out-of-date data

Much of the material referenced is old, for example trawl surveys that occurred between 1979 and 1997, a period when the Inshore Fishery was under heavy pressure with many species fished down below acceptable biomass, leading to the introduction of the Quota Management System in 1986.

Such old data understates the health of what is now a vastly recovered fishery with much higher biomass. Additionally, these early trawl surveys do not cover all species such as Rig and School Shark which are generally too fast for the trawl, so they indicate lower than true biomass for those species. The trawl surveys are only used on sandy bottom so do not adequately account for reef species in surrounding areas either.

#### Data interpretation

The methods used by NIWA to assess distribution and abundance of fish use models based on survey information conducted around other parts of New Zealand by the application of environmental predictor variables. It is apparent that inadequate location specific research has been undertaken. Data interpretation using models developed for other areas, purposes and environments is inappropriate.

## Adverse effects on spawning

The limitations of trawl surveys also influence conclusions about the importance of the area for spawning. NIWA report 4.3 Discussion outlines that "maps showing the location of catches running ripe mature fish and juveniles in the South Taranaki Bight should be interpreted cautiously as they indicate only where the trawls took place on trawlable ground".

Many areas were not sampled due to nature of the seabed or depth. The reports also acknowledge that "seasonal distribution biases could confound the predictions given that some species migrate".

I consider that the unknown effect of the seabed mining activity on fish aggregation, feeding and spawning has not been adequately investigated.

#### Value of area to Commercial Fishing industry underestimated

Conclusions resulting from analysis of data by NIWA and Fathom Consulting under-estimate the importance of the subject area to the commercial fishing industry. For reasons outlined above, catch data analysed is not specific to the subject area and its' surrounds. The South Taranaki Bight is a fishery rich in commercial species that are targeted by vessels operating from New Plymouth, Nelson, Wellington and Auckland with fish landed and processed in all these ports. A loss of this area to the commercial fishing industry will have repercussions well beyond the local operators.

The South Taranaki Bight is becoming of increasing importance to set-net fishermen due to displacement of fishermen from many traditional grounds because of regulatory closures put in place for the protection of Maui Dolphins as well as for the oil industry and marine reserves.

#### Fishermen cannot simply catch the fish somewhere else!

There are restrictions on where fishers can fish imposed by the Quota Management System. Also, fish aggregations need to be in commercial quantities to be economically viable to harvest. The location of these aggregations are directly linked to environmental conditions of which seabed features and water quality are extremely important.

The undulating nature of the seabed in this area is so unique that it has been plotted and named on the Admiralty Charts as 'The Rolling Ground'. This topography has long been recognised by fishermen as a special area to which fish are drawn. Habitat modification by the mining activity may well see the area never recover to the rich and diverse seabed that currently exists.

# Erosion of value of property rights

The business of commercial fishing is very complex and is subject to a multitude of regulatory, physical, economic and management influences which the TTR application does not properly acknowledge. One of these is erosion of value to property rights.

For quota to have value, the stock must be able to be harvested (see Fathom Consulting report 1.2.1 The spatial attributes of quota shares). If fishermen are displaced from yet another of the productive fisheries, value of quota shares and Annual Catch Entitlement (ACE) will be impacted. Regulatory closures to set-netting down the length of the West Coast of the North Island to protect Maui Dolphins have seen the value of Rig quota shares (SPO8) and associated ACE plummet because of the dramatic decline in the percentage of the SPO8 Total Allowable Commercial Catch (TACC) caught in recent years. Loss of the Rolling Ground could see the total demise of the commercial Area 8 Rig fishery with effects on other species caused by the resulting imbalance that non-harvest could cause. For example, because Rig are one of the Rock Lobster (Crayfish) main predators, increased pressure from an expanding Rig biomass on the high value CRA9 fishery could see catch rates decline. Fishermen, processors, exporters and investors have committed huge sums to own ITQ shares which has not been acknowledged or considered. Crayfish ITQ (CRA9) shares for example trade for \$1.2m per ton.

#### Sediment dispersal

The Rolling Ground area is well known for strong tidal flows. Sediment distribution occurring from the Seabed Mining activity is likely to travel significant distances and cause smothering of the many reef systems in the South Taranaki Bight. The NIWA and Fathom Consulting reports do touch on this possibility but have largely dismissed the issue by saying that large adult crayfish could

move away. However, by their own admission, they also recognise that juvenile rock lobster and puerulus will likely be smothered (Fathom Consulting 3.3.2).

### Adverse affects on spawning

Rock Lobsters have a long and complex life cycle. Larvae hatch and swim in the open for 18-24 months during which they undergo numerous moults and changes (phyllosoma stages) before the puerulus stage settles and moults into juvenile crayfish and ultimately grow to be adults.

According to NIWA (Report 10) and Fathom Consulting (Report 25), most of the larvae that repopulates the Taranaki fishery is thought to originate from South Westland and Fjordland while eggs released from crayfish in the Taranaki area eventually settle as far away as Northland. Much of the larvae and puerulus that settles in Taranaki waters then must pass through the South Taranaki Bight so actions here affecting water quality etc could affect fisheries much further afield than the immediate area.

Detriment resulting from disturbance to spawning and ultimately to larvae/juvenile fish development and distribution could well apply to many species that traditionally reproduce in and around the proposed seabed mining site. Since most fish species are migratory, the effects of interference in the South Taranaki Bight will be felt far and wide.

### Minimal attempt to update information

While there appears to have been some attempt to update parts of the TTR supporting information, a great deal of what relates to commercial fishing remains inaccurate. Total Allowable Commercial Catch (TACC) figures for many species are incorrect and values attributed to fish landings are well below current levels. Thus, the importance and value of the fishery is understated. Also understated is the value of ITQ shares associated with Quota Management Area 8 (QMA8). For example, reports in the application put a value on Snapper ITQ (SNA8) shares at \$49,000 per ton yet recent transfers of SNA8 shares were at \$105,000 per ton.

#### Summary

To summarise, the detrimental effects from the proposed seabed mining operation on commercial fishing in terms of all those employed in the many facets of the commercial fishing industry (fishermen, processors, provedores etc), catch and asset value, resident and migratory fish species, and long term damage to the (fishing) environment have been under-represented in the TTR application.

An approval of the Taranaki VTM Project could set a dangerous precedent opening up other tracts of the marine environment to such activities taking more and more areas away from the Fishing Industry, one of New Zealand's traditional, sustainable, valuable, well managed and world renowned industries.

My submission addresses issues associated with commercial fishing only as that is the field in which I am experienced. However, there are also multiple other concerns apparent to the layman which seem to have had inadequate research.

Put simply, there are too many unknowns associated with Seabed Mining to risk allowing it to proceed.

Attachments:

Fisheries General Statistical Area

Fisheries Crayfish Statistical Area

# MINISTRY OF AGRICULTURE AND FISHERIES TE MANATU AHUWHENUA AHUMOANA





# General Statistical Areas



