

An analysis of the possible effects the Mimiwhangata marine reserve proposal may have on recreational and commercial fishing.



Photo credit: Roger Grace

Department of Conservation
Whangarei Area Office
WHANGAREI.

Report written by Alan Fleming (Marine Protection Ranger)

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Executive Summary

This report identifies and discusses possible effects that the Mimiwhangata marine reserve proposal may have on recreational and commercial fishing.

Statutory considerations, pursuant to the Marine Reserves Act 1971, are discussed. In particular, section 5(6) of the Act that identifies matters the Minister of Conservation would have regard for if he / she were considering a formal marine reserve application.

It is also noted that if the applicant(s) decide to proceed with a formal application, the Minister of Conservation shall have regard to all submissions made to that application on the possible effects that a marine reserve may have on commercial fishing, any existing usage of the area for recreational purposes, and the public's interest at Mimiwhangata.

The report identifies the consultation undertaken by the Department of Conservation (the Department) with recreational fishers (including local recreational fishing charter boat operators), recreational fishing interest organisations, local commercial fishers and commercial fishing representative companies.

It discusses, analyses and considers:

- Submissions received from 'recreational and commercial fishers' to the Discussion Document.
- Recent recreational fishing research data gathered by the Ministry of Fisheries (the Ministry).
- A recent visitor use survey of the Mimiwhangata Marine Park area.
- Information available to the public relating to recreational fishing opportunities in the general Mimiwhangata area.
- Wind rose data (a graph representative of wind speed / frequency and direction) in terms of whether the proposal would *"take away a safe and / or sheltered recreational fishing area"*.
- Positive effects on fishing and other recreational activities in the Mimiwhangata area.

The report also discusses the following objections made by recreational fishers:

- The marine reserve proposal is not part of an integrated plan for marine protected areas.
- Surface trolling would be disturbed (for both billfish and other species).
- The research and data used to justify the proposal is unacceptable.
- The area would make it difficult to enforce the Marine Reserves legislation.
- Commercial fishing, not recreational, is to blame for overfishing.

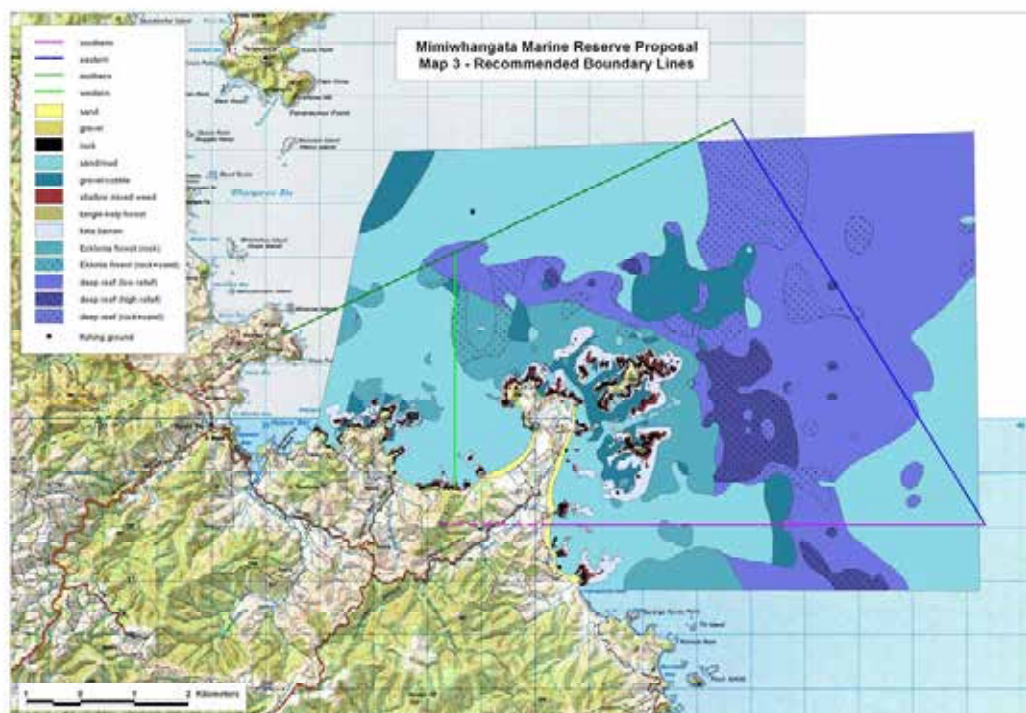
Report on the possible effects on recreational and commercial fishing at Mimiwhangata.

The Department has taken into account concerns and objections relating to recreational fishing activities / fishing grounds within the proposed marine reserve areas. If the applicant(s) decide to proceed with a formal marine reserve application, the Department recommends that the proposed boundaries should be amended (Department of Conservation 2005 B and map below). This would exclude the following fishing areas from any potential marine reserve:

- Te Ruatahi Island reef
- Fishing areas deeper than 75 metres
- A popular local tarakihi fishing ground (approx 500 metres due north of the north west corner of the proposed marine reserve)
- Some hapuka grounds (just inside the proposed eastern boundary – Option 2)
- Beach and rock fishing areas at both the western and southern ends of the Mimiwhangata Coastal Park

With regard to commercial fishing, the Department received submissions from both individual commercial fishers and commercial fishing representative companies. An analysis of both those submissions and of commercial catch and effort data provided by the Ministry of Fisheries, suggests there is a strong argument the marine reserve area(s) as proposed would not interfere unduly with commercial fishing.

The report concludes, that at this point in the marine reserve process, (see section 3.0), the information collected suggests that a strong case can be made in support of a marine reserve at Mimiwhangata.



Recommended boundary lines from the report entitled “Boundary options assessment report associated with the Mimiwhangata marine reserve proposal”

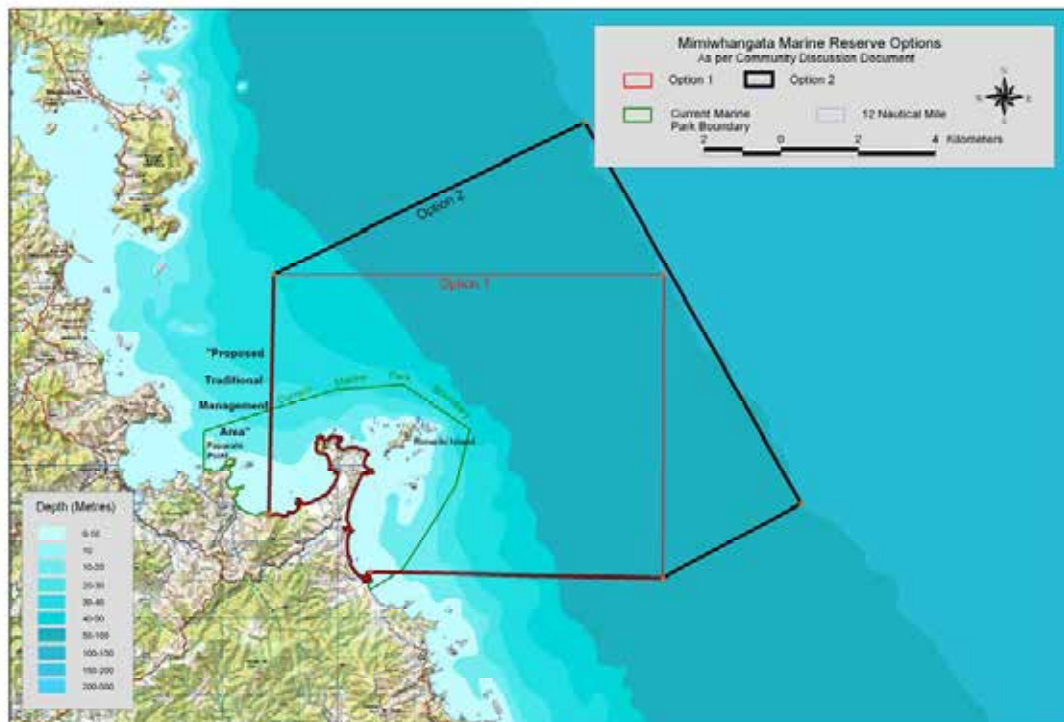
Report on the possible effects on recreational and commercial fishing at Mimiwhangata.

1.0 Introduction

In the 1970s, New Zealand Breweries commissioned scientific studies that revealed an exceptional diversity of Northland east coast near-shore habitats within the Mimiwhangata marine area. Concerns were expressed in the reports that fishing pressures were increasing and would continue to threaten the ecology of the area if special protection measures were not put in place. The Mimiwhangata Marine Park was established in 1984. There was a vision that the marine park would preserve and enhance one of New Zealand's special environments for people to visit and enjoy.

The current marine park regulations do allow for restricted recreational fishing but exclude all commercial fishing. Recent surveys of the marine park, carried out during the past five years, have shown that the marine park's environment has not recovered, and in some respects is in a worse state than in 1980. As the scientific investigation progressed, members of the Mimiwhangata community, including tangata whenua / moana, local landowners, visitors, fishers, divers, scientists, environmentalists and the Department of Conservation began to discuss "where to next" for the area (Department of Conservation 2004).

This led to the distribution of the *"Marine Reserve Proposal. Mimiwhangata: Community Discussion Document"* and the insert questionnaire entitled *"Mimiwhangata Have Your Say"* (the Discussion Document). The proposed marine reserve area(s) within the Discussion Document covered the majority of the marine park, and extended to include the deepwater reefs adjoining the marine park (**Map 1**)



Map 1 - Mimiwhangata marine park and 2 marine reserve proposal areas – Options 1 and 2

The Department of Conservation, (the Department), received 1109 submissions in response to the Discussion Document. Objections were primarily focused on the effects a reserve may have on recreational fishing. The Department also received some objections based on the effects the proposed reserve may have on commercial fishing. This report identifies and discusses the effects that the proposal may have on both recreational and commercial fishing.

2.0 The purpose of this report

The purpose of this report is to:

1. Identify and discuss statutory considerations with regard to the proposal and recreational and commercial fishing considerations.
2. Identify consultation that has occurred between the Department, recreational fishers and recreational fishing representative groups with regard to the proposal.
3. Discuss known information and research relating to recreational fishing within the Mimiwhangata area and the north east coast of Northland.
4. Identify and discuss the submissions received with regard to the potential impacts of the proposal on recreational fishing interests.

Report on the possible effects on recreational and commercial fishing at Mimiwhangata.

5. Identify consultation that has occurred between the Department, commercial fishers, commercial fishing representative companies and the Ministry of Fisheries (the Ministry) with regard to the proposal.
6. Analyse and discuss catch / effort data associated with commercial fishing in the marine reserve proposal areas and the north east coast of Northland.
7. To identify and discuss the submissions received with regard to the potential impacts of the proposal on commercial fishing interests.

3.0 Statutory considerations with regard to the proposal and recreational and commercial fishing

The process associated with proposing a marine reserve can be divided into two stages (Department of Conservation 2002). The first stage is non statutory (the informal stage); the second stage (known as 'the formal stage') follows the statutory process as identified in the Marine Reserves Act 1971 (the Act).

There is no statutory requirement pursuant to the Act, for a prospective applicant to carry out the informal stage. However, the Act states that public interest is an important consideration; and information on any potential impacts associated with a marine reserve proposal needs to be gathered. Experience has shown that undertaking the informal stage is an effective way of identifying the issues of concern and involving the community at an early stage.

This report relates to a marine reserve proposal (informal stage) as opposed to a marine reserve application (formal stage). However, it is appropriate to discuss statutory considerations during the informal stage.

The production and release of the Discussion Document was an important part of the informal stage. The Discussion Document and submissions received were for the purpose of consulting with the community and gathering information. All respondents to the Discussion Document were sent a letter informing them of where they could access a preliminary analysis of the submissions received (Department of Conservation 2005 A).

3.1 Section 5(6) of the Marine Reserves Act 1971

Section 5(6) of the Act states:

“Where any objection has been made in accordance with subsection (3) of this section, the Minister shall, before considering the application, decide whether or not the objection should be upheld and, in doing so, shall take into consideration any answer made to the objection by the applicant [and, if the applicant is the Director-General, any report on the objection and the application the Minister may have obtained from an independent source]. If the objection is upheld the area shall not be declared a marine reserve. In making any such decision, the Minister shall not be bound to follow any formal procedure, but shall have regard to all submissions made by or on behalf of the objector, and to any answer made by the applicant, and shall uphold the objection if he is satisfied that declaring the area a marine reserve would

- a) Interfere unduly with any estate or interest in land in or adjoining the proposed reserve:*
- b) Interfere unduly with any existing right of navigation:*
- c) Interfere unduly with commercial fishing:*
- d) Interfere unduly with or adversely affect any existing usage of the area for recreational purposes:*
- e) Otherwise be contrary to the public interest.”*

While the statutory procedures in section 5 of the Act do not call for the making of submissions in support, the Act does not preclude the making of such submissions. Any such submissions received in support of a formal application may be incorporated in an applicant’s answer to the objections. Such submissions in support may also be relevant to the public interest criterion referred to in section 5(6) e) of the Act.

It is important to note that *“interfere unduly”* has been defined by the courts to mean an effect that is unjustified or unwarranted in the circumstances. In determining whether an effect of the marine reserve is *“undue”*, the significance of the effect must be weighed against the benefits flowing from declaring the reserve.

In the CRA 3, (Crayfish 3), Industry Association Court of Appeal decision, Ellis J said:

“In reaching the decision whether or not to concur, the Minister must give consideration to the grounds of the objection and also the wider picture. In our opinion, this is the approach required by the test of the ‘undue’ interference imposed by s 5(6) (a) in particular. All the matters listed in s 5 (6) (c) through (e), including the public interest, comprise the wider picture. In our

view the Minister must take these factors (if they are relevant) into consideration when deciding whether or not to concur.”

And further on his decision, Ellis J states:

“the word ‘undue’ involves an assessment of all the factors, one of which is the undoubted impact on the CRA3 fishers. The question is not whether it is ‘significant’, but whether it is ‘undue’. While we may be disposed to agree that the creation of the reserve had a significant effect on some fishers, the test implied by the word ‘undue’ requires the balancing of the effect against the other values involved. ‘undue implies ‘without due cause or justification ... more than is warranted”.

With regard to section 5 (6) (d), this judgement indicates that submissions regarding the possible enhancement of other recreational uses are to be considered along the submissions regarding affects on recreational fishing.

3.2 Other matters

While there is provision under section 3(3) of the Act to allow for non-commercial fishing within a marine reserve by notice in the gazette, recently there has been a preference that marine reserves should be ‘no take’. This is on the basis:

- Experience internationally and in New Zealand has shown that ‘no take’ reserves provide significantly better protection for marine life and that no-take is important in achieving a natural state in those reserves.
- Marine reserves that allow some fishing are difficult to enforce, confusing for the public, attract fishers, and are more expensive to manage.
- Once established, no take marine reserves attract strong public support.

Please note that the current Marine Reserves Bill does allow both scientific research, and research that contributes to Maori knowledge (Te Ira Tangaroa). However, to monitor and manage potential effects, such research would require authorisation, e.g. if the research included sampling marine life.

4.0 Consultation with the Community

The Department has undertaken extensive consultation with the community in regards to the marine reserve proposal (**Appendix 1**).

5.0 RECREATIONAL FISHING

5.1 Consultation with recreational fishers and recreational fishing interest organisations

With regard to gathering information from specific recreational fishing clubs and interest organisations, the Discussion Document was posted to:

- local recreational fishing clubs
- local fishing charter operators
- Offices of the Ministry of Fisheries
- Local and regional boating clubs
- Scuba and free diving clubs and organisations

See **Appendix 2** for a full list of these clubs and organisations.

In addition:

- Shortly after the Discussion Document was posted, efforts were made to contact all local recreational fishing clubs by telephone. This led to further distribution of the Discussion Document, i.e. to other fishing club representatives.
- Option 4, a group of recreational fishing advocates who have formed a nationwide action group to respond to issues affecting recreational fishing, was contacted on several occasions to discuss the proposal.
- The Department sent a letter to the editor of New Zealand Fishing News (**Appendix 3**) in response to an article in that magazine, Sept 2004 edition (**Appendix 4**). This letter included information on how readers of the magazine could access the Discussion Document.
- A meeting was held between representatives of the Department and representatives from the Whangarei Deep Sea Anglers Club.

5.2 Submissions received from recreational fishers

357 respondents to the Discussion Document identified recreational fishing as an activity they were involved in within the marine reserve proposal areas (Table 1).

Activities within the proposal areas	
Activity	Number of respondents
Boating	387
Swimming	461
Recreational fishing	357
Commercial fishing	10
Diving	250
Snorkelling	385
Walking	427
Education or study	105
Other	

Table 1 – Recreational activities within the proposal areas

Table 2 identifies the number of ‘fishing respondents’, who made objections, qualified objections, submissions in support or qualified submissions in support¹.

Support/objection from recreational fishers	
Support or opposition	# of recreational fishing submissions
Not clear	5
Opposition	164
Qualified Opposition	2
Qualified Support	42
Support	144
TOTAL	357

Table 2 – Support/objection from recreational fishers

¹ A petition headed “*Petition Against the Proposal of changes (by D.O.C. – Dept. of Conservation) to the Marine Reserve and Area at Mimiwhangata*”, and the results of a survey conducted by Wilkinsons Sports in Whangarei were also presented to the Minister of Conservation by Phil Heatly MP and John Carter MP. There were 663 signatures opposed to the proposal in the petition and a total of 83 respondents to the survey (18 for, 65 against). The petition did not identify why signatories were opposed to the proposed marine reserve. The survey identified that 8 of the 65 persons against the reserve were opposed as it restricted their recreational fishing activities. The petition and survey are acknowledged but could not be included in the aforementioned analysis of submissions received.

Submissions were received from the following recreational fishing interest organisations (**Table 3**)

Name of recreational fishing organisations	Appendix #
NZ Big Game Fishing Council	Appendix 5
Northern Amateur Fishers Assn	Appendix 6
Mangawhai Boating and Fishing Club	Appendix 7

Table 3 - Submissions received from recreational fishing organisations

Submissions were also received from several charter operators. Some of these include recreational fishing at Mimiwhangata in their operations. Further discussion is given to their submissions in section 5.5 of this report.

5.3 Overview of the ‘recreational fishing’ objections

The main objections raised by recreational fishers were:

- a) Recreational fishers would no longer be able to fish in the proposed marine reserve area(s).
- b) A marine reserve would severely limit recreational fishing in safe and / or sheltered situations relatively close to shore.
- c) The application is not the result of an integrated plan for marine protected areas across the region.
- d) Surface trolling would be disturbed (for both billfish and other species).
- e) The research and data used to justify the proposal is unacceptable.
- f) The size and location of the proposed reserve means it would be difficult to enforce the Marine Reserves Act regulations.
- g) It is commercial fishing activity that is depleting fish stocks not recreational fishing.

In addition ‘fishing objectors’ raised issues / concerns associated with:

- Recreational fishing effort would be shifted to other areas resulting in over fishing of those areas.
- Introduce closed seasons for spawning fish.
- Marine Reserves are not fisheries management tools.

Recreational fishers also suggested a number of alternative fisheries management options. Some examples were:

- Ban all fishing in the main part of the spawning period (1 month).
- Ban charter and commercial fishing all year round within 12-mile limit.
- Change net mesh size
- Ban pair trawling.
- Keep the existing marine park and boundaries as are.
- Coastal management plan required from Cape Brett to Mimiwhangata.

Alternative boundary submissions, i.e. different to Options 1 and 2 in the Discussion Document, were suggested in a number of objections, qualified objections and qualified submissions in support. These alternative boundaries are considered in a separate report (Department of Conservation 2005 B).

5.4 Consideration of the main recreational fishing objections

When considering recreational fishing objections it is important to note section 5(6) d) of the Marine Reserves Act 1971 (see section 3.1 above), the interpretation of the word “undue” and the consideration of undue interference and adverse effects on existing recreational usage overall.

5.4(a) Recreational fishers would no longer be able to fish in a marine reserve

The bulk of fishing objections were based on not being able to fish within a marine reserve area.

While it is correct that if a marine reserve was established at Mimiwhangata recreational fishers would no longer be able to fish within the marine reserve area² it should be noted that there are numerous other recreational fishing areas and opportunities found:

- in the adjacent areas north, south and east of the proposed marine reserve areas (Bland Bay to Whananaki),
- along the northeast coast of the North Island (Bay of Islands to Bream Bay) and,
- on the west coast of Northland.

New Zealand Fishing News article

An article entitled “*Oakura – options galore!*” was published in the New Zealand Fishing News magazine – December 2003 (**Appendix 8**). This article identifies “*numerous fishing and diving opportunities based out of Oakura*”. It discusses both “*a truckload of deep and shallow foul*”

² Section 3(3) of the Marine Reserves Act does allow for non-commercial fishing by notice in the gazette

areas” in some detail, and maps fishing spots between Teal Bay in the south to Home Point in the north.

Tumonz Mapping System

Many of the sites identified in the aforementioned article are also shown on the Tumonz mapping system available for purchase from www.tumonz.co.nz

The Tumonz maps also show published and known recreational fishing spots in the adjacent areas north and south of the proposed marine reserve areas (Bland Bay to Whananaki), along the northeast coast of the North Island and on the west coast of Northland.

New Zealand Fishing News Annual Map Guide

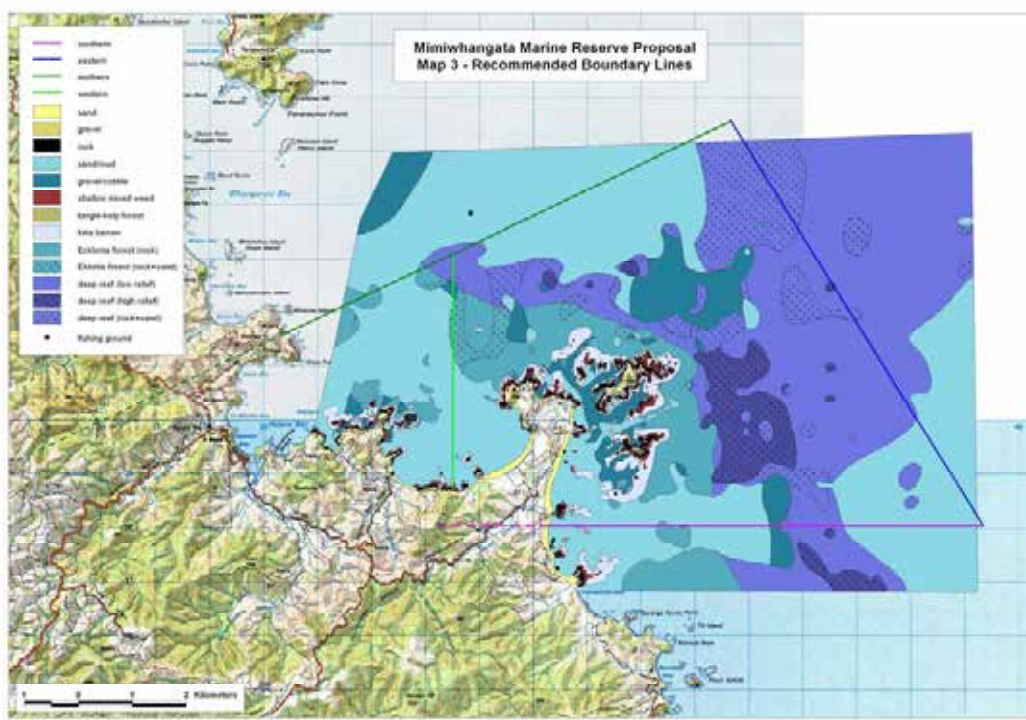
The majority of the Tumonz fishing spots are also shown in the New Zealand Fishing News Annual Map Guide (**Appendix 9**). Please note that these magazines were produced annually, i.e. up until 2004, but that no 2005 edition was released. NZ Fishing news is currently considering producing an updated version of the annual (NZ Fishing News, *pers comm*).

Taking account of local fishing areas

Notwithstanding that there are alternative fishing areas within the ‘Mimiwhangata area’, the Department has taken into account concerns raised by recreational fishers relating to fishing activities / fishing grounds within the proposed marine reserve areas. This includes:

- Fishing at Te Ruatahi Island reef
- Fishing areas deeper than 75 metres.
- A popular local tarakihi fishing ground.
- Some hapuka grounds
- Beach and rock fishing areas within both the western and southern ends of the Mimiwhangata coastal park boundaries.

This has resulted in the Department recommending, if the applicant(s) decide to proceed with a formal application, that the proposed boundaries should be amended to exclude the aforementioned fishing areas (Department of Conservation 2005 B). See map 2 overleaf.



Map 2 – Amended boundary lines

5.4(b) Take away a safe and / or sheltered recreational fishing area

Some recreational fishers stated a marine reserve would take away a safe and / or sheltered recreational fishing area.

As the Mimiwhangata peninsula and Rimariki Island extend out to sea in a northeast direction, this does create lee shores for anchoring and fishing in most wind directions. If a marine reserve were established at Mimiwhangata the number of sheltered fishing spots between Bland Bay and Whananaki would decrease. However, they would not be eliminated.

One local recreational fisher believed that the establishment of the reserve would remove a “significant area for local safe fishing area in very bad weather conditions such as big easterly storms”. He also noted that the eastern end of Mimiwhangata Bay was less exposed to an easterly swell when compared with the western side of Paparahi Point.

He went on to state that the “Limericks did provide a large local area for safe and comfortable fishing but there was a number of alternative fishing spots”. For example, he identified that in a south easterly, the area between Teal Bay and Ngahau Bay, including a near shore submerged pinnacle, provided an accessible lee shore to fish. It is worthy to note that part of this area, i.e. the Paparahi Point / Ngahau Bay area that is currently within the marine park, was excluded from

the marine reserve proposal areas identified in the Discussion Document. This was done partially on the basis that the area was identified by the community as an important recreational fishing area that was both sheltered and accessible.

Finally, he stated that Otara Point and Home Point provided lee shores in a southerly wind. He qualified this by noting that fishers leaving from south of Home Point, e.g. Oakura, needed to travel across more exposed waters to get to this destination.

'Wind rose' data, (a graph representative of wind speed / frequency and direction), is not available for the Mimiwhangata peninsula area. However, wind rose data is collected from sites at Onerahi in Whangarei harbour; Purerua Peninsula in the Bay of Islands; and at the Mokohinau Islands. Based on discussions with the Meteorological Service of New Zealand (Met Service Auckland, *pers. comm*) it was determined that the Mokohinau Islands data would be most representative of the Mimiwhangata peninsula area.

The wind rose data are measured hourly over the period November 1997 to November 2004. This graph (**Appendix 10**) indicates that the likely prevailing wind patterns at Mimiwhangata are south west and east south east. There are also smaller 'spikes' of wind from the north east and north west quarters, i.e. with a lower frequency.

As identified in section 5.4(a) above, there are a range of alternative fishing spots in the Whangaruru / Whananaki area. These spots provide a selection of fishing options dependent on the wind and sea conditions.

Travelling to other areas

As dinghies and small boats are transportable by car and trailer, people can also travel to other safe and sheltered areas to fish. Moreover, there is no restriction on dinghy and small boat owners continuing to launch their boats from nearby boat ramps and fish on the fringes of the proposed reserve areas. Examples include Paparahi Point or the southern headland of Pareparea Bay.

For recreational fishers based in Whangarei (approximately 50 minutes drive to Oakura) there are many proximate areas suitable for small boat fishing. This is also true for 'local recreational fishers', i.e. those residents between Ngunguru and Parua Bay, Bay of Islands³. Nearby areas include popular small boat fishing spots from Bream Bay to the Bay of Islands such as Ocean Beach and Bream Islands, Kauri Mountain, Taiharuru, Pataua, Ngunguru, Tutakaka, Matapouri, Woolley's Bay, Whananaki, Whangaruru, Bland Bay and the Bay of Islands. These fishing spots are within 30 – 90 minutes drive from

³ This definition of 'local' is the same as that used in the report entitled 'Mimiwhangata marine reserve proposal - submission analysis report'.

either Whangarei or local areas dependent on the fisher's departure point.

There are also a number of accessible west coast recreational fishing areas, which are a little over an hour's drive from Whangarei, e.g. Bayleys Beach.

A marine reserve at Mimiwhangata, based on Options 1 and 2, represents a small area in comparison to the wider East Northland region and the wider North region (**Appendix 11**).

Safe boating practise

Some respondents to the Discussion Document stated that their lives would be put in danger if a marine reserve were established at Mimiwhangata as they would be forced to fish in more exposed areas.

The Department notes that:

- It is a skipper's responsibility to ensure that his / her boat is operated in a safe manner in accordance with existing safety regulations and Maritime New Zealand safety guidelines, e.g. "Being a responsible skipper".
- It is the skipper's responsibility to consider weather and sea conditions and decide whether it is safe to operate his / her vessel in those conditions.
- A marine reserve does not prohibit any vessel from anchoring or sheltering in that marine reserve during adverse weather or sea conditions.

5.4(c) Not an integrated plan for marine protected areas

The New Zealand Big Game Fishing Council stated, "*This application is not the result of an integrated plan for marine protected areas across the region. It is merely another ad hoc proposal...*"

The New Zealand Biodiversity Strategy sets the indicative target of protecting 10% of New Zealand's marine environment by 2010 by establishing a network of representative protected marine areas. This target relates to our whole marine environment (including both the territorial sea and our Exclusive Economic Zone). The Strategy does not include a specific goal for the marine reserve portion of a protected area strategy, but it identifies marine reserves as the "primary biodiversity conservation mechanism" in the goal statement.

In order to achieve the goals set by the New Zealand Biodiversity Strategy, the Department and the Ministry are jointly developing, for public consultation, a Marine Protected Areas Strategy (MPA Strategy). The MPA Strategy aims to:

- establish a network of marine protected areas;
- ensure the relevant government agencies make marine protection work a priority; and
- ensure marine protected areas are established using a common multi-agency approach.

Government has decided that the network of marine protected areas will be made up of a combination of:

- sites protected as marine reserves; and
- other sites protected through other statutory tools.

While the policy framework necessary to achieve this objective is under development, it is the Department's view that if a marine reserve were established at Mimiwhangata, it would make a significant contribution to this network. The Discussion Document states, *"Mimiwhangata will add a valuable array of protected habitats to an emerging network of protected areas along the northeast coast of New Zealand"*.

5.4(d) Surface trolling would be disturbed (for both billfish and other species)

The New Zealand Big Game Fishing Council stated *"This proposal will unreasonably exclude our members who troll on the surface and have no effect whatever on the benthic community..."*

The Northern Amateur Fishers Association stated *"When DOC were asked what damage occurs to the sea bed when trolling lures for surface highly migratory species in waters of 50 metres of depth or deeper – no answer!"*

A member of the Whangarei Deep Sea Anglers Club stated, *"Game boats tend to pass through the Mimiwhangata area at around 70 metres water depth"*.

This concern has contributed to the Department's recommendation that if the applicant(s) decide to proceed with a formal marine reserve application, the outer boundary of the proposed marine reserve should follow a line proximate to the 75 metre depth contour. This would allow trolling outside of this line (Department of Conservation 2005 B).

5.4(e) *The research and data used to justify the proposal are unacceptable*

The New Zealand Big Game Fishing Council objected to various research studies and data being used to justify the proposal. It is the Department's view that the research and data are scientifically robust and the Department notes that several of the reports associated with the aforementioned research have been peer reviewed by the New Zealand marine scientific community. One key paper has also been published in a leading international scientific journal.

5.4(f) *Difficult to enforce the Marine Reserves Act regulations*

The New Zealand Big Game Fishing Council stated *"The size and location of the proposed reserve means that it will be unenforceable. DoC have no resources to patrol such an area, and a very poor history of managing other reserves"*.

A charter boat operator based at Tutukaka stated, *"...there is no effective enforcement at the Poor Knights marine reserve either, and there will be no difference in Mimiwhangata, particularly if the boundaries are set at either of the options offered in the Community Discussion Document. These will be unenforceable"*.

These claims are not supported by any evidence and as such should be regarded as opinion. If the applicant(s) make a decision to proceed with a formal application, the applicant would identify enforcement and compliance aspects associated with the management of a marine reserve at Mimiwhangata within that application.

The Department carries out regular surveillance at marine reserves throughout New Zealand and has enforced a number of successful prosecutions for infringements pursuant to the Marine Reserves Act / regulations

5.4(g) *Commercial fishing activity is too blame*

A concern expressed by many recreational fishers was that commercial fishing was to blame for overfishing. The Northern Amateur Fishers Association stated, *"Until there is a concentrated effort to reduce the bulk harvesters on the coastline... where is DOC policy to remove the non-selective commercial methods of mass catching, coastal gill netting, bottom trawling, purse seining, beach seining, Danish seining"*.

Such specific fishery management issues are the responsibility of the Ministry of Fisheries. However, this report does analyse commercial fishing data (catch and effort) provided by the Ministry (see section 6.5). In addition, it identifies and discusses some of the concerns raised by commercial fishers and commercial fishing interest groups with regard to the proposal.

5.5 Recreational fishing charter boat operators

Submissions were received from seven (7) charter boat operators, the Bay of Islands Charter Fishing Association Inc and the Whangarei Deepsea Anglers Club. Some of these charter operators include recreational fishing at Mimiwhangata in their operations.

Some comments from these charter boat operators included:

“Could live with the current reserve boundaries, i.e. the marine park boundaries, but was totally opposed to Option 1 or 2.

“With the seaward boundary of either option being some 10kms offshore, the practical difficulties for any fisher trying to stay outside the Reserve are significant”.

“Hopefully in time create greater numbers and biodiversity of organisms, increase its value as a boating, snorkelling, biological experience destination. Help demonstrate to clients that you don't need to fish to have a good time at sea”.

“Increase the biodiversity and therefore the quality of diving / snorkelling experience”. “A marine reserve will have a beneficial economic and social impact for the local community and businesses. A reserve will increase the educational value of the area, especially as it compliments the Regional Park and creates an unbroken corridor of protection between land and sea. This allows for the study of the natural relationship between the two, not possible in very many locations”.

“Would provide a useful area to take recreational divers and photographers where the marine life would be allowed to replenish...The greater the area in Reserve the more likelihood of an improvement in marine life and therefore eco-dive potential”.

“The Executive Committee on behalf of all of the members of the WDSA Club wish to express their opposition to the establishment of a Marine Reserve at Mimiwhangata as currently outlined by the Department of Conservation. The WDSA Club will make further detailed submissions if the Department of Conservation decide to proceed further.”

“Very positive, could be great for business.”

5.6 Positive effects on recreational fishing and other recreational activities

The statutory procedures of a formal marine reserve application in section 5 of the Act do not call for the making of submissions in support. However, the Act does not preclude the making of such submissions as they may be relevant to the public interest criterion referred to in section 5(6) (e) of the Act.

In addition, section 5(6) (d) of the Act indicates that consideration of the effects of a proposed marine reserve on existing recreational activities should consider undue interference and adverse effects on existing recreational usage overall. It means that enhancements of other existing recreational uses may be sufficient to outweigh adverse effects associated with recreational fishing.

In this context, of the 357 fishing respondents who had recreationally fished within the proposal areas, 46.5 % identified the proposal would / may have an adverse effect on that activity. The remaining 53.5% of fishing respondents either stated support or qualified support for the proposal (**Table 4**)

Support/objection by recreational use									
	Activity within the proposal areas								
Support or Opposition	Boating	Swimming	Rec fishing	Commercial fishing	Diving	Snorkelling	Walking	Education or Study	Other
Not clear	4	4	5	1	3	2	1	1	
Opposition	159	124	164	7	102	120	84	19	27
Qualified Opposition	2	1	2	1	1	2			
Qualified Support	29	32	42		25	27	33	5	15
Support	193	300	144	1	119	234	309	80	99
TOTAL	387	461	357	10	250	385	427	105	141

Table 4 – Support/objection by recreational use

Examples of statements of support from fishing respondents include:

“We wouldn’t be able to drag a lure - but the sacrifice would be well worth it”.

“Would provide another place to go and experience Marine Reserves. Would also mean we are less likely to give up diving in surrounding areas where we spearfish.”

“I strongly support the proposed Marine Reserve at Mimiwhangata”.

It is worthy to note that 14 of the 15 submissions received from individuals and organisations representing other, land or water based recreational activities undertaken at Mimiwhangata submitted that the establishment of a marine reserve would have a positive effect on their recreational activities. Examples include:

The Whangarei Tramping Club stated *“Makes area more interesting to visit i.e. more fish and marine life. Preserves it for future Club members....Club thinks we should conserve as large an area as possible...”*

The Bay of Islands Yacht Club stated *“Should one visit the Reserve in the future we would hope that the area was alive with active bird life and the ocean as it should be full of fish. Our Club is in support of Option 1...”*

The Department notes that sightseeing and boating (including sailing) may increase if the proposed area were to be declared a marine reserve. More people may be interested in visiting the area and their pleasure is likely to be enhanced knowing that the area has been set aside for preservation. Recreational diving and snorkeling may increase, although not throughout the reserve, but rather in selected spots. Other recreational activities known to be popular at Mimiwhangata such as surfing, kayaking, and windsurfing may also be enhanced.

5.7 Recreational fishing research within Northland

Research on Northland’s recreational fisheries began in 1990, during which a boat ramp survey was used to collect information on fishing effort, catch and catch rates (Sylvester 1993). Since then, further boat ramp surveys have been conducted in 1994 (Bradford 1996), 1996 (Hartill *et al.* 1998), 1998 (Hartill & Cryer 2001), and annually since 2001 (Hartill *et al.* 2005). Most of these surveys have been restricted to the first 4–5 months of the calendar year, and provide a picture of relative fishing effort by trailer boats.

More recently, the Ministry of Fisheries has contracted the National Institute of Water and Atmosphere (NIWA) to commence an extensive survey of the nature, magnitude and extent of New Zealand's largest recreational fisheries. This includes those operating on the north eastern coast of Northland.

This survey combines traditional boat ramp survey techniques with airborne counts of recreational fishing boats of all types, and will provide estimates of the recreational harvest of snapper, kahawai and kingfish (B. Hartill, NIWA Auckland, *pers. comm*). Because an airborne observer flies the entire east Northland coast, and notes the position of each boat thought to be involved in fishing, it is possible to generate a fine scale spatial picture of fishing effort, which can be linked to boat ramp information on the methods used and catch rates in a given area. Harvest estimates from this survey will be available in June 2006.

Morrison (2005) considers that the results from the earlier aforementioned surveys, where researchers had used various telephone / diary survey methodologies to estimate the recreational catch, i.e. 1994 (Bradford 1996), 1996 (Bradford *et al.* 1998), 1999 and 2000 (Boyd *et al.* 2001), are now considered unreliable, especially in relatively unpopulated areas such as the Far North.

An analysis of the current NIWA study (data for the period 5.12.04 to 23.4.05) indicates that use of the Tutukaka and Oakura areas for recreational fishing (**Appendix 12**) places them at 12 and 15th place respectively within a list of 26 areas (**Appendix 13**). Their respective totals of 231 and 272 boats observed fishing over this period is below the average of boats seen fishing within all 26 areas ($n = 26$, mean = 313, range = 20 to 905).

The Ministry is also conducting a research project on the selectivity of the recreational snapper catch. Enquiries include the size of fish caught, retained or discarded by fishers from trailer / charter boats, how the fish were hooked (lip, fowl or gut hooked), and the mortality of these fish. However, The Ministry has advised the Department that this project does not collect data by specific areas and that it would therefore not be useful to assess the effect of the proposed marine reserve on recreational fishing (*pers comm.* – Peter Todd).

5.8 Mimiwhangata visitor use survey

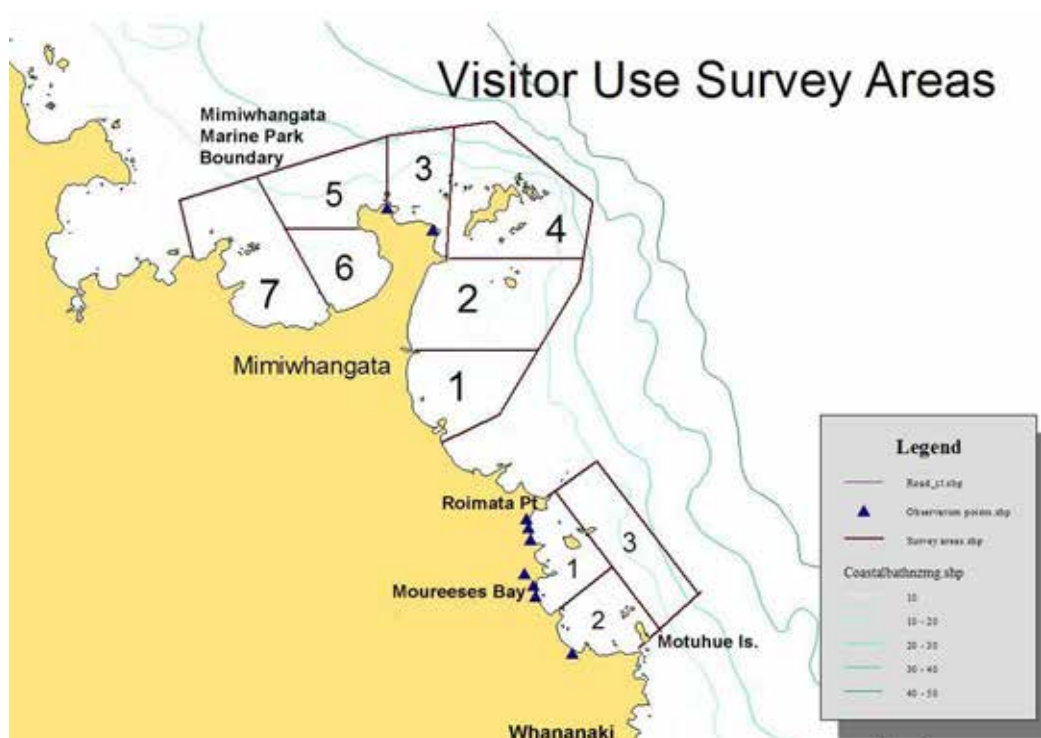
This report contains the results of a visitor use survey carried out at Mimiwhangata Marine Park, and a nearby area of similar coast near Whananaki outside the marine park (Kerr & Kerr 2003).

Most recreational fishers targeting the peninsula leave from either north of Mimiwhangata, e.g. Teal Bay and Oakura; or from the south, e.g. Tutukaka and Whananaki.

The results from this survey show that boats did not use the waters surrounding Mimiwhangata to any great extent in periods of strong winds in excess of 15 knots. This was based on the boat use pattern at Mimiwhangata, in winds greater than 15 knots, being similar to that recorded at Whananaki; which lacks the extensive areas of sheltered waters that Mimiwhangata has. This suggests that even though Mimiwhangata may offer a sheltered position somewhere in most strong winds, boats are not generally keen to venture out far enough to get to Mimiwhangata in these conditions.

The exception to this is the anchorage at Whale Bay, which is extensively used during Christmas and holiday period if boats are able to get to Mimiwhangata. During this period, a higher number of larger boats use this anchorage area. In addition some boating activity was still present in south to southwest winds over 15 knots within Area 4, Rimariki Island (**Map 3**).

It is also worthy to note that over the survey period a total of 465 people were counted as engaged in shore based activities. A wide range of shore based activities were observed, e.g. hiking, swimming, and other nature-based recreational activities. Recreational fishing from the shore constituted 12% of total shore activity.



Map 3 – Mimiwhangata visitor survey areas

6.0 COMMERCIAL FISHING

6.1 Consultation with commercial fishers and commercial fishing interests

The Community Discussion Document was posted to offices of the Ministry of Fisheries and local commercial fishers and commercial fishing representative companies (**Appendix 14**). The Department also attempted to contact all local commercial fishermen by phone. This was to provide them with the opportunity to discuss the proposal directly and inform them that departmental staff were available to meet with them if they wished to do so.

The Department attempted to identify commercial fishers operating within the proposed marine reserve area by:

- talking with local MinFish officers at the Whangarei Area Office.
- identifying commercial boats operating out of Tutukaka marina.
- contacting commercial fishing representative companies, e.g. Northern Inshore Fisheries Company Incorporated.

6.2 Submissions received from commercial fishers

9 respondents to the Discussion Document questionnaire identified they undertook commercial fishing within the proposal area(s).

Submissions were also received from the following commercial fishing representative companies

Name of commercial fishing representative company	Appendix
Leigh Commercial Fishermen's Association Incorporated	15
Northern Inshore Fisheries Co Ltd	16
Pagrus Auratus Co Ltd	17

Table 5 – Submissions received from commercial fishing representative companies.

6.3 Overview of the 'objections' from commercial fishers

The main objection raised by local commercial fishers is summarised as follows:

“Limit my ability to earn a living from commercial fishing. It would also limit safe anchorage and limit my fishing in a west or south westerly wind with Poor Knights and proposed Great Barrier Reserve”.

The Leigh Commercial Fishermen's Association stated:

“Leigh Commercial Fisherman's Association Incorporated (LCFA) strongly opposes any proposed marine reserve put in place at Mimiwhangata

The LCFA represents 45 members, many who would be affected by the proposed marine reserve (both Option one and Option two)”.

Their reasons for objecting included:

- Deny access to their 'traditional' fishing grounds.
- This would cause hardship to the fishers and their families thus affecting small communities along the north-east coast of New Zealand.
- Concerns regarding the cumulative effect of closing marine areas to commercial fishing including placing extra fishing pressure on areas outside of closed areas.

Northern Inshore Fisheries Company Limited (NIFCL) raised the following concerns and objections:

- Failure to provide the necessary information or analysis to make an informed judgement on the merit and justification of the proposed reserve.
- How the benefits of having a marine reserve outweigh the costs, and how any costs on existing uses and values can be avoided, remediate and mitigated.
- Absence of a coherent problem definition for the proposed marine reserve area
- Absence of a clear and balanced evaluation of the management options to indicate that a marine reserve is the optimum tool.
- Failure to adequately demonstrate that the public interest can only be served by a marine reserve.
- Ecological values of the area are not properly addressed or described.
- Failure to present any analysis
 - of the impacts of fishing on the habitats in the proposed reserve
 - of the type of method deployed or species taken, including spatial and temporal patterns of fishing and different extractive groups (customary, recreational, and commercial).
- Does not fit with the biodiversity strategy and the MPA policy and processes.
- Absence of analysis to define boundaries based on ecological criteria
- Absence of a risk analysis on a spatial basis relating to levels of threat to ecological values at a regional scale.

- Failure to make reference to the purpose of a Marine Reserve Act, i.e. scientific study. No reference to Mimiwhangata containing marine life that is distinctive / typical / unique / beautiful etc

6.4 Consideration of objections from commercial fishers

The Department contacted NIFCL, Leigh Commercial Fishermen's Association Inc, Sanfords, Moana Pacific, Siminovich Fisheries and Te Ohu Kaimoana, to see if they were agreeable to meet to discuss their concerns and to identify what effects the proposed marine reserve may have on their commercial fishing activities (**Appendix 18**).

NIFLC and Sanfords advised the Department that *“consultation with DoC at this stage is premature until DoC produce a further public consultation document addressing earlier concerns fully, or an application which clearly sets out the justification for any marine reserve and boundaries for such an area. At that stage the commercial fishing sector will be able to engage constructively to consider how the proposed marine reserve may interfere with commercial fishing.”* (**Appendix 19**).

However, in response to some of the aforementioned issues raised by commercial fishing interests, it should be noted that:

- The Department has recommended revised boundaries for the marine reserve proposal (Department of Conservation 2005 B) that reduce the size of the proposed marine reserve areas.
- The Department has analysed catch effort data provided by the Ministry (see section 6.5) and that this analysis may have addressed some of the aforementioned concerns expressed by commercial fishers and the commercial fishing representative companies.

In response to some of the specific concerns raised by the Leigh Commercial Fishermen's Association and NIFCL:

1. *The cumulative effect of closing marine areas to commercial fishing including placing extra fishing pressure on areas outside of closed areas.*

Given the size of the Fisheries and Quota Management Areas in relation to existing marine reserves and the Mimiwhangata marine reserve proposal areas (leaving aside the Kermadecs and Auckland Islands marine reserves), it is hard to accept any significant real impacts within the current regime. Whether or not marine reserves have had these effects is highly debatable and are not borne out by any known independent study.

2. *Ecological values of the area are not properly addressed or described.*

The Discussion Document included reference to 9 reports and research studies relating to the ecology of the Mimiwhangata marine environment. The Discussion Document also stated *“Limited numbers of the CD-ROM version of the proposal, which includes photography and technical reports, are available from the Department Office on request.* The author of this report is unsure whether any of the commercial fishing representative companies have viewed the aforementioned reports / research study results or the CD-ROM.

3. *Fails to present any analysis of the impacts of fishing on the habitats in the proposed reserve and the type of method deployed or species taken, including spatial and temporal patterns of fishing and different extractive groups (customary, recreational, and commercial).*

A primary purpose of the consultative process was to gather this type of information. The Department has included an analysis of commercial fishing (catch and effort) data in this report.

4. *Does not fit in with Biodiversity Strategy and the MPA policy and processes*

See section 5.4(c) of this report.

5. *Fails to make reference to the purpose of a Marine Reserve Act, i.e. scientific study. No reference to Mimiwhangata containing marine life that is distinctive / typical / unique / beautiful etc*

The Discussion Document does state: *By contrast, Marine reserves are “no-take” zones, focused on preservation of marine habitats and life for scientific study.*

The Discussion Document, and photos within, describe the marine life found at Mimiwhangata. This includes the use of descriptors such as *“rare, abundant, commonly, and dominate”*.

6.5 An analysis of commercial fishing (catch and effort)

At this stage it is helpful to recall that the criterion in s 5(6)(c) of the Act (see section 3.1) is not restricted to commercial fishing in the area of the proposed marine reserve alone. In considering objections to a formal marine reserve application the Minister must examine the wider impacts a marine reserve would have on commercial fishing generally. In addition, s 5(6)(c) of the Act is qualified by the use of the word *“undue”*. This qualification makes it clear that the Act contemplates there may be some interference with commercial fishing which will not necessarily preclude the Minister from recommending an area be declared a marine reserve.

The purpose of this analysis is:

- To summarise and analyse the recorded commercial fishing catch and effort undertaken in the Statistical Areas (fisheries management areas) that encompass the proposed marine reserves areas and then, make some comparison to catch and effort in other nearby Statistical Areas.
- To summarise the recorded commercial fishing catch and effort undertaken within the proposed marine reserve areas and make some comparison to catch and effort within the Statistical Areas that encompass the proposed marine reserves areas.
- To summarise commercial fishing catch undertaken within Fisheries Management Area 1

Introduction

The Ministry of Fisheries is the government department responsible for the sustainable management of fisheries in New Zealand. The purpose of the Fisheries Act 1996 is to provide for the utilisation of fisheries resources while ensuring sustainability. The Quota Management System (QMS) is one of the tools used by the Ministry of Fisheries to ensure sustainable management of commercial fisheries. The QMS is used to control commercial fish catches, and to control access to commercial fisheries.

For management purposes, New Zealand's Exclusive Economic Zone (EEZ) has been divided into ten Fisheries Management Areas (FMAs). For each species in the Quota Management System, Quota Management Areas (QMAs) have also been established to provide effective sustainable management, with each QMA comprising one or more FMAs depending on the geographical distribution of each fish stock. In addition, for all species, the EEZ has been divided into a number of Statistical Areas.

All three types of management areas are used by the Ministry of Fisheries to record where fish were commercially caught and to administer the QMS. Statistical Areas are considerably smaller than both FMAs and QMAs. In some cases, Statistical Areas are species specific, e.g. rock lobster.

The proposed marine reserve areas fall into the following Statistical Areas (**Table 6**).

Statistical Area	Number
Inshore Statistical Area	003
Paua Statistical Area	111
Rock lobster Statistical Area	904
Scallop Statistical Areas	1O and 1P

Table 6 – Statistical Areas the proposed Mimiwhangata marine reserve areas fall into

The information in this analysis was provided by the Ministry of Fisheries in a summarised format⁴, as per the Marine Reserves Protocol agreement between the Ministry and the Department. The Ministry extracted this data from commercial catch effort return forms.

The data extracts included information on:

- Estimated catch (weight) by species⁵, method and Statistical Area.
- Number of clients by species, method and Statistical Area.
- Number of days fished by species, method and Statistical Area.
- Estimated catch (weight) by species, method and proposed marine reserve areas.
- Estimated weights of species caught within FMA 1.

The Ministry of Fisheries Catch Effort System

The Ministry's Catch Effort system stores catch, effort, landings, production and environmental information provided to the Ministry by commercial fishers.

- Catch data are rough estimates of the catch (kg of each species) made by fishers as they fish.
- Effort data summarise the amount of effort that a fisher / vessel put into catching fish; specifies what method the fisher was using; and what species they were targeting.
- Landings data summarise either the actual quantity of fish landed at a wharf or transferred to another vessel at sea. Landings data are considerably more accurate than estimated catch

The Trawl Catch Effort Processing Return (TCEPR) form (**Appendix 20**) records trawling data from vessels over 28m in length while the Catch Effort Landing Return (CELR) form (**Appendix 21**) records trawling for smaller vessels. Most of the other fishing methods e.g. Danish seining and Hand lining, use the CELR form to record data.

It is important to note that the provision of fishing start information (latitude and longitude) is optional on the CELR forms, with the provision of the Statistical Area where fishing started being the alternative option. The TCEPR form records both the start positions and the end positions of tows.

This means that some of the commercial fishers within the proposed marine reserve areas may be recording that they were fishing within Statistical Area 003 only.

⁴ The Ministry of Fisheries did not provide confidential information for each individual boat.

⁵ This data comes from the estimated section of the returns where greenweights are estimated and not necessarily weighed.

Please note that there were no “form restrictions” placed on the information provided by the Ministry, i.e. sometimes the Ministry qualifies data extracts by stating which type of commercial catch / effort forms were accessed to provide that information.

6.5(a) General Statistical Areas – all species

The general Statistical Area 003 area (all species) includes all the waters between Cavalli Island (34°59'S) and Needles Point (36°02'E), from the coast out to 175°24'E. The proposed marine reserve areas are within Statistical Area 003.

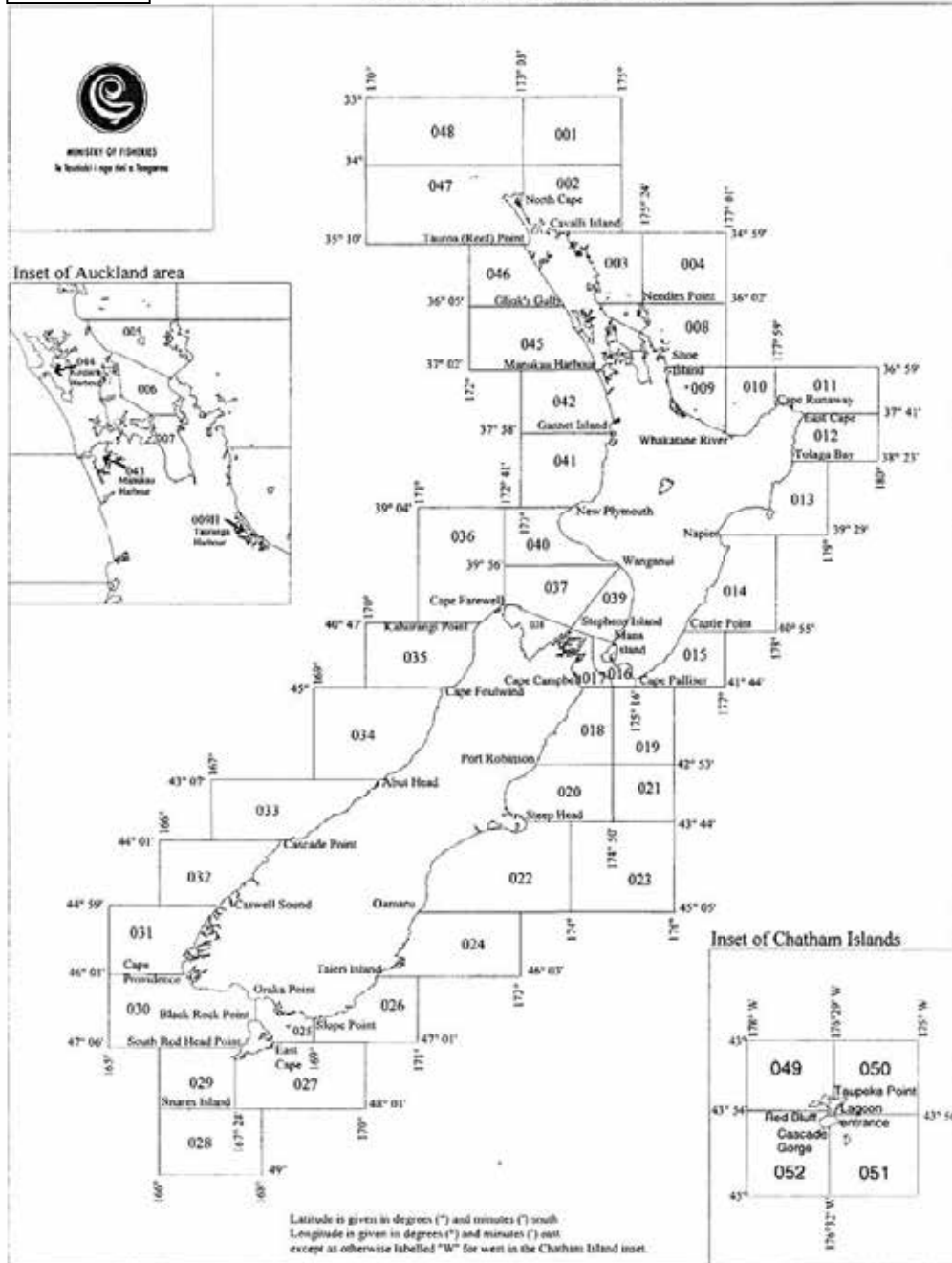
Other Statistical Areas in the upper eastern North Island include:

- Area 002 - the waters between 34°S and 34°59'S and between 173°03'E and 175°E
- Area 004 - the waters between 34°59'S and 36°02'S and between 175°24'E and 177°01'E,
- Area 008, - the waters between 36°02'S and 36°59'S and between 175°24'E and 177°01'E.
- Areas 005, 006 and 007 which are located in the inner Hauraki Gulf.

Map 4: General Statistical Areas below shows the location of these Statistical Areas.

Map 4

General Statistical Areas



February 2000

As shown in map 4, Statistical Area 003 covers a relatively large marine area that is commercially fished. The proposed marine reserve areas, excluding the area of overlap with the existing marine park, i.e.

Report on the possible effects on recreational and commercial fishing at Mimiwhangata.

where no commercial fishing is currently allowed, covers approximately 0.8% of Statistical Area 003 (Map 5).



Map 5 - Mimiwhangata marine park, Option 1 and 2 areas and Statistical Area 003

6.5(b) Estimated Catch

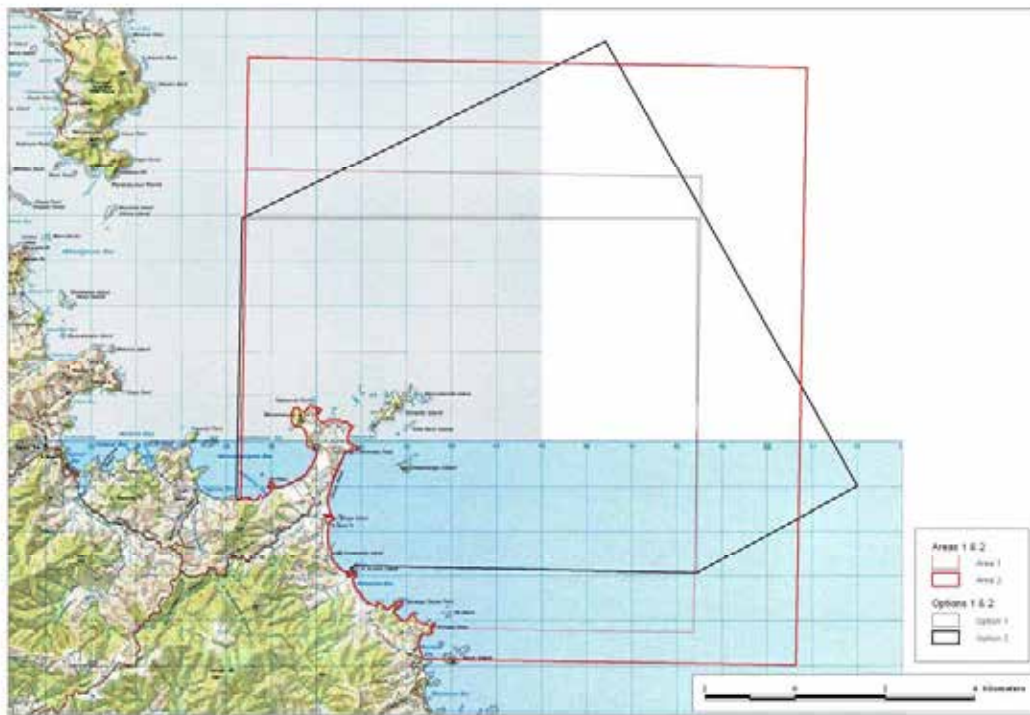
Ministry of Fisheries data shows that one hundred and thirty three (133) species have been commercially caught in Statistical Area 003 for the three fishing years starting October 2001 to September 2004⁶ (**Appendix 22**).

However, only nine (9) of these species are recorded as being commercially caught within the proposed marine reserve areas, i.e. as per the boundaries in Table 7 (**Appendix 23**).

Please note that the boundaries in Table 7 approximate to the proposed marine reserve areas Options 1 and 2. These boundaries were developed in discussion with the Ministry for the purposes of compatibility with the Ministry's Geographical Information System.

Map 6 overleaf shows the size and shape of Areas 1 and 2 in relationship to the marine reserve proposal areas Option 1 and 2.

⁶ Commercial fishing years run from 01 October of one year to 30 September of the following year.



Map 6 – Areas 1 and 2 in relation to marine reserve proposal areas Option 1 and 2

Table 8 lists the total recorded commercial catch (kg) for these 9 species in Statistical Area 003 and within adjacent / nearby Statistical Areas, i.e. numbered 002 to 008, over the same period.

Total catch (kg*) – 1 October 2001 to 30 September 2004							
Species	002	003	004	005	006	007	008
Snapper	1,024,501	1,464,843	15,314	1,828,827	2,188,844	1,175,985	1,407,570
Tarakihi	324,327	316,416	16,495	52,748	4,269	3,529	214,082
Gurnard	80,959	238,859	2,075	190,037	63,811	18,213	167,636
John Dory	20,824	185,240	655	160,790	179,191	14,164	98,973
Trevally	1,130,929	92,781	507	51,594	21,517	34,430	489,756
Frostfish	11,325	27,053	1,151	1,840	577	11	70,678
Arrow Squid	11,330	19,278	395	3,873	2,017	95	16,156
Kingfish	30,310	12,829	632	6,131	1,656	2,146	14,193
Porae	46,338	35,358	245	15,600	1,506	2,006	9,344
Grand Total	2,680,842	2,392,654	37,468	2,311,438	2,463,387	1,250,579	2,488,386

Table 8 – Total catch for nine species of fish in Statistical Areas 002 to 008

Table 9 lists the total recorded commercial catch (kg) for these nine species in Statistical Area 003, and Areas 1 and 2. Table 9 also shows the recorded commercial catch (kg) within Areas 1 and 2 as a percentage of the total weight of that species taken within Statistical Area 003

Total catch (kg) in Statistical Area 003 and Areas 1 and 2 1 October 2001 to 30 September 2004					
Species	003	Area 1		Area 2	
		Total weight	%	Total weight	%
Snapper	1464843	817	0.06%	1394	0.10%
Tarakihi	316416	461	0.15%	887	0.28%
Gurnard	238858	15	0.01%	268	0.11%
John Dory	185240	70	0.04%	193	0.10%
Trevally	92781	5		5	0.01%
Frostfish	27052			140	0.52%
Arrow Squid	19278			30	0.16%
Kingfish	12829			10	0.08%
Porae	35358	3		3	

Table 9 – Total catch for nine species of fish in Statistical Area 003 and Areas 1 and 2

Table 10 below shows the total recorded catch for the aforementioned nine species of fish within FMA 1.

Total catch (kg) for nine species of fish caught within FMA 1 over the period 1 October 2001 to 30 September 2004	
Species	Total est. weight (kg)
Snapper	11986681
Tarakihi	2965755
Gurnard	1217551
John Dory	803850
Trevally	3034595
Frostfish	185900
Arrow Squid	64900
Kingfish	135658
Porae	125689
Grand Total	20520579

Table 10 – Total catch for nine species of fish in Fisheries Management Area 1

Snapper (*Pagrus Auratus*)

The inner Hauraki Gulf is the most productive area for snapper with Areas 005, 006 and 007 yielding a recorded catch of 5,193,656 kg in the three fishing years from October 2001. Similar amounts of snapper were caught in each of Areas 003 (1,464,843 kg) and 008 (1,407,570 kg) over the same period. A slightly lower tonnage of snapper was landed in area 002 (1,024,501 kg) while the waters of Area 004 yielded far less snapper (15,314 kg) than the adjacent Statistical Areas.

Recorded catch of snapper in Area 003 has remained relatively constant over the past three fishing years with 533,611 kg caught in the 2001/02 year, 450,646 kg caught in the 2002/03 year and 480,586 kg caught in the 2003/04 year.

Recorded catch for both Areas 1 and 2 (the proposed marine reserve areas) represent a very small percentage of the total recorded commercial catch for snapper in Area 003 (0.06% for Area 1 and 0.10% for Area 2).

Tarakihi (*Nemadactylus macropterus*)

A total of 316,416 kg of tarakihi was caught in Area 003 for the fishing period October 2001 to September 2004. A similar amount (324,327 kg) was landed in Area 002. A total catch of 214,082 kg was recorded in Area 008 with approximately a quarter of that figure (52,748 kg) being landed in Area 005. Area 004 yielded 16,495 kg while Areas 006 and 007's combined catch was 7,798 kg.

Recorded catch of tarakihi in Area 003 has decreased over the past three years, with 164,142 kg recorded caught in 2001/02, 77,723 kg in 2002/03 and 74,551 kg in 2003/04.

Recorded catch for both Areas 1 and 2 (the proposed marine reserve areas) represent a very small percentage of the total recorded commercial catch for tarakihi in Area 003 (0.15% for Area 1 and 0.28% for Area 2).

Gurnard (*Chelidonicthys kumu*)

A total of 238,859 kg of gurnard was caught in Area 003 for the fishing period October 2001 to September 2004. The inner Hauraki Gulf areas combined produced 272,061 kg, with Area 008 yielding 167,636 kg. Area 002's total catch was 80,959 kg with a small amount being landed in Area 004 (2,075 kg).

Recorded catch of gurnard in Area 003 has reduced over the past three fishing years. In the 2001/02 year a total of 101,586 kg was caught. In the 2002/03 year 61,167 kg was caught. In the 2003/04 year 76,106 kg was caught.

Recorded catch for both Areas 1 and 2 (the proposed marine reserve areas) represent a very small percentage of the total recorded commercial catch for tarakihi in Area 003 (0.01% for Area 1 and 0.11% for Area 2).

John Dory (*Zeus faber*)

A total of 185,240 kg of John Dory was caught in Area 003 for the fishing period October 2001 to September 2004. Similar amounts were landed in Area 006 (179,191 kg) and Area 005 (160,790 kg). 98,973 kg was landed in Area 008. Smaller amounts were landed in Area 002 (20,824 kg), 007 (14,164 kg) and 004 (655 kg).

Recorded catch for both Areas 1 and 2 (the proposed marine reserve areas) represent a very small percentage of the total recorded commercial catch for John Dory in Area 003 (0.04% for Area 1 and 0.10% for Area 2).

Trevally (*Pseudocaranx dentex*)

Statistical Areas 002 (1,130,929 kg) and 008 (489,756 kg) were the most productive areas for trevally in the three fishing years from October 2001. A total of 92,781 kg was recorded caught in Area 003. 51,594 kg was landed in Area 005. Area 007 yielded 34,430 kg, 007 (34,430 kg), and 006 (21,517 kg). Area 004 produced the smallest amount (507 kg).

Recorded catch for both Areas 1 and 2 (the proposed marine reserve areas) represent a very small percentage of the total recorded commercial catch for trevally in Area 003 (0.01% for Area 2).

Frostfish (*Lepidopus caudatus*)

A total of 27,053 kg of frost fish were recorded caught in Area 003 during the three fishing years from October 2001. A larger amount (70,678 kg) was landed from Area 008. 11,325 kg was landed in Area 002. Smaller amounts were landed in Area 004 (1,151 kg), 004 (655 kg) and 007 (11 kg).

Recorded catch for both Areas 1 and 2 (the proposed marine reserve areas) represent a very small percentage of the total recorded commercial catch for frostfish in Area 003 (0.52% for Area 2).

Arrow Squid (*Nototodarus sloanii* & *N gouldi*)

A total of 19,278 kg of arrow squid were recorded caught in Area 003 during the three fishing years from October 2001. A similar amount (16,156 kg) was landed in Area 008. 11,330 kg was landed in Area 002. The inner Hauraki Gulf areas combined produced 5,985 kg with Area 004 yielding the smallest amount (395 kg).

Recorded catch for both Areas 1 and 2 (the proposed marine reserve areas) represent a very small percentage of the total recorded commercial catch for Arrow Squid in Area 003 (0.16% for Area 2).

Kingfish (*Seriola lalandi*)

Area 002 yielded the highest catch of kingfish (30,310 kg) in the three fishing years from October 2001. Similar amounts of kingfish were caught in each of Areas 008 (14,193 kg), 003 (12,829 kg) and 008 (1,407,570 kg) over the same period. The inner Hauraki Gulf areas yielded a total of 9,933 kg. A smaller amount was landed from Area 004 (632 kg).

Recorded catch for both Areas 1 and 2 (the proposed marine reserve areas) represent a very small percentage of the total recorded commercial catch for kingfish in Area 003 (0.08% for Area 2).

Porae (*Nemadactylus douglasi*)

A total of 35,358 kg of Porae was recorded caught in Area 003 during the three fishing years from October 2001. A greater amount (46,338 kg) was landed in Area 002. 15,600 kg was landed in Area 005. Smaller amounts were landed in Areas 008 (9,344 kg), 007 (2,006 kg), 006 (1,506 kg) and 004 (245 kg).

Recorded catch for both Areas 1 and 2 (the proposed marine reserve areas) represent a very small percentage of the total recorded commercial catch for Porae in Area 003 (0.01% for Area 2).

6.5(c) Fishing method

Table 11 (**Appendix 24**) identifies the estimated green weights per fishing method for nine species of commercially caught fish in Statistical Area 003, i.e. the nine species of fish recorded as commercial catch in Areas 1 and 2.

This table contains data for the period 1 October 2001 to 30 September 2004. The methods identified were:

- Beach seine / drag nets
- Bottom longlining

- Bottom trawl_single
- Cod potting
- Danish seining_single
- Drop / dahn lines
- Hand gathering
- Hand lining
- Lampara
- Purse seining
- Ring net
- Rock lobster potting
- Set netting (including gill nets)

However, within Areas 1 and 2, only 3 of these methods were identified as being used to catch those nine species over the same period. These methods were:

- Bottom trawl_single
- Danish seining_single
- Hand lining

For the three fishing years beginning October 2001, the fishing methods used to catch the greatest quantities of fish in Areas 1 and 2 were bottom trawling (single), which netted around 1780 kg of fish. Danish seining collected around 1129 kg, while hand lining collected 21 kg.

Recorded catches for these 3 methods for both Areas 1 and 2 (the proposed marine reserve areas) represent a small percentage of the total recorded commercial catch per associated method in Statistical Area 003 (**Appendix 25**).

6.5(d) Effort in Statistical Area 003

In the 2001/02 fishing year, 408 vessels fished a total of 7455 days in Statistical Area 003. Corresponding figures for other years are 449 vessels fishing 6944 days for 2002/03 and 426 vessels fishing 6669 days for 2003/04 (**Appendix 26**).

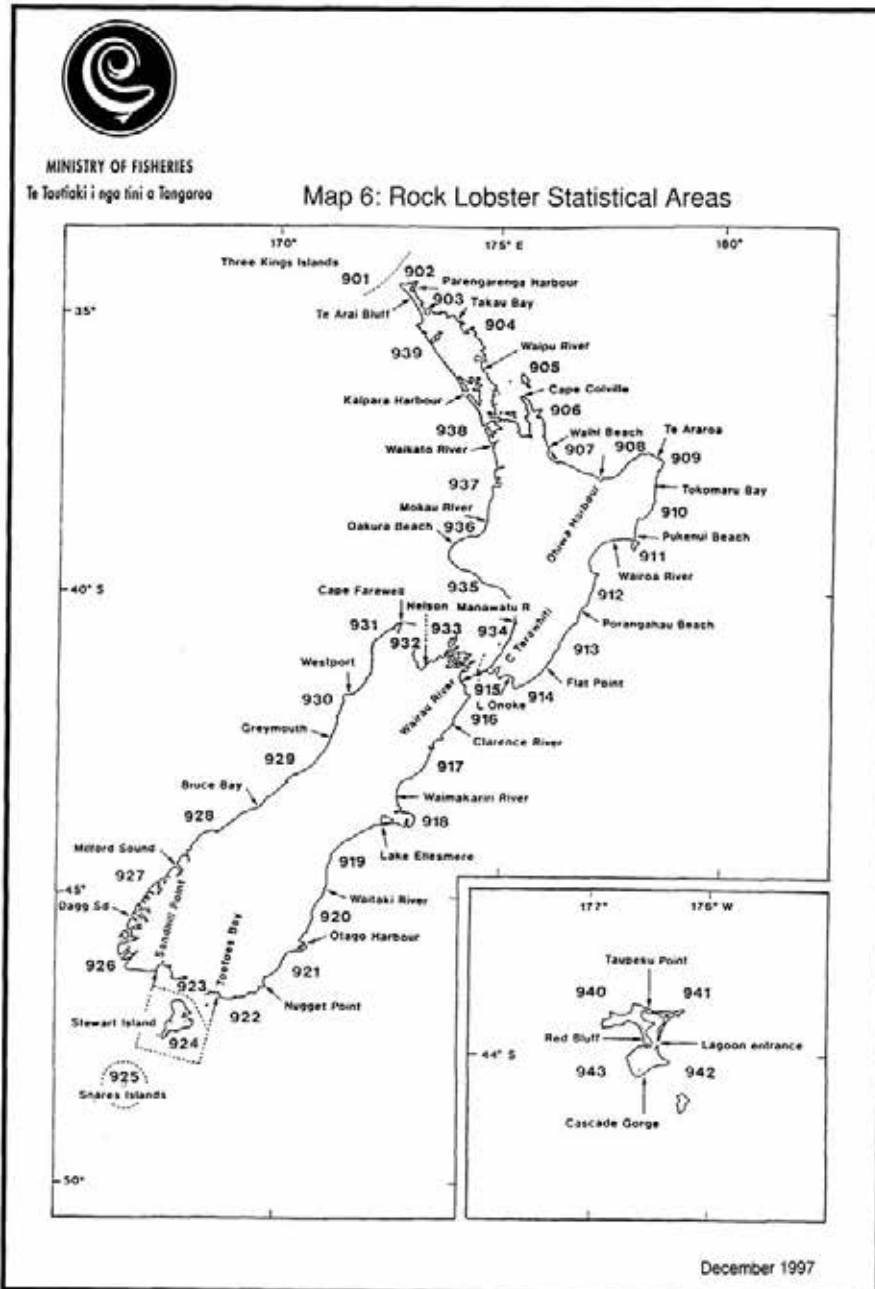
The Ministry did not provide the Department with the number of vessels or number of fishing days (effort) for Areas 1 and 2. This means that no comparison can be made for fishing effort between these areas and Statistical Area 003.

6.5(e) Rock Lobster Statistical Areas

The Rock Lobster Statistical Area 904 includes all the waters between Takou Bay and Waipu River as shown on *Map 7: Rock Lobster Statistical Areas* overleaf. The proposed marine reserve areas Options 1 and 2 make up a small part of Statistical Area 904.

Other rock lobster Statistical Areas in the upper western and eastern North Island are:

- Area 902, which covers all the waters between Te Arai Bluff and Takou Bay
- Area 903, which covers all the waters between Parengarenga Harbour and Takou Bay,
- Area 905, which covers all the waters between Waipu River and Cape Colville,
- Area 906, which covers all the waters between Cape Colville and Waihi Beach,



Map 7 - Rock Lobster Statistical Areas

6.5(f) Estimated Rock lobster Catch

For the period 1 October 2001 to 30 September 2004⁷ the following species were caught in Statistical Areas 902, 903, 904, 905, and 906 (Table 12).

Species	Total catch (kg)				
	902	903	904	905	906
Rock Lobster	100974	29888	36734	93187	209654
Packhorse Rock Lobster	14446	4414	2010	3578	3351
Blue Cod	34				
Green Lipped Mussell			80		
Moki					1
Octopus	5			446	6101
Other Sharks and Dogfish	638				
Parore			3		
Porae			10	10	
Red Cod	2				
Scallop					
School Shark					2
Snapper			29		135
Grand Total	116099	34302	38866	97221	219244

Table 12 – Species caught within Statistical Areas 902, 923, 904, 905 and 906

Rock lobster (*Jasus edwardsii*)

Areas 906, 902 and 905 are more productive than Area 904. However, recorded catch of rock lobster in Area 904 has gradually risen over the past three years, with 10,558 kg been caught in 2001/02, 12,477 kg in 2002/03 and 13,728 kg in 2003/04.

Packhorse crayfish (*Jasus verreauxi*)

Areas 902, 903, 905 and 906 are more productive than Area 904. However, recorded catch of packhorse crayfish has risen in Area 904 from 394 kg in 2001/02 year, 287 kg in 2002/03 and up to 1,380kg in 2003/04.

⁷ Rock lobster has a non-standard fishing year (01 April to 31 March). The data in this report is for the standard fishing year (01 October to 30 September).

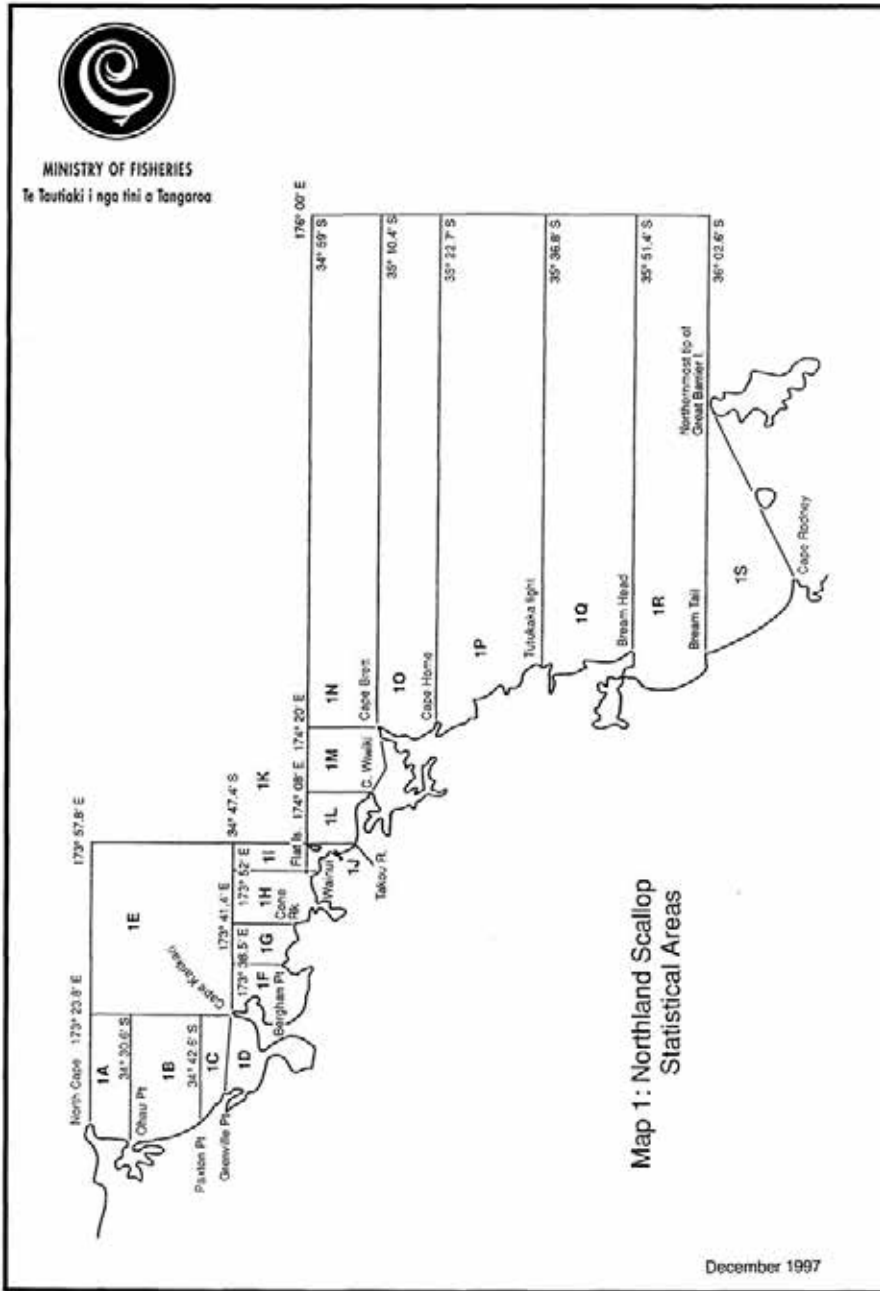
Comparison with Areas 1 and 2

The Ministry provided the Department with catch / effort data for Areas 1 and 2 which approximate to the proposed marine reserve areas Options 1 and 2. This data did not identify either rock lobster or packhorse crayfish as being landed in Areas 1 and 2 for the period October 2001 to September 2004.

6.5(g) Scallop Statistical Areas

The Scallop Statistical Area 1P includes all the waters between 35° 22.7" S in the north (Cape Home) to 35° 36.8" S in the south (Tutukaka light) out to 176° 00' E as shown on *Map 8: Northland Scallop Statistical Areas*. The proposed marine reserve areas Options 1 and 2 make up a small part of Statistical Area 1P.

Statistical Area 1O is immediately to the north of Statistical Area 1P and includes all the waters between 35° 10.4' S in the north (Cape Brett) to 35° 22.7" S in the south (Home Point) out to 176° 00' E. A small part at the northern end of the proposed reserve areas is within Statistical Area 1O.



Map 8 - Northland Scallop Statistical Areas

Report on the possible effects on recreational and commercial fishing at Mimiwhangata.

6.5(h) Estimated Scallop catch

For the period 1 October 2001 to 30 September 2004⁸ the following quantities of scallops were caught in Statistical Area 1P (**Table 13**).

Year	Total catch (kg)
2001 / 02	8355
2002 / 03	2404
2003 /04	1600
Total	12359

Table 13 - Scallops caught in Statistical Area 1P

Comparison with Areas 1 and 2

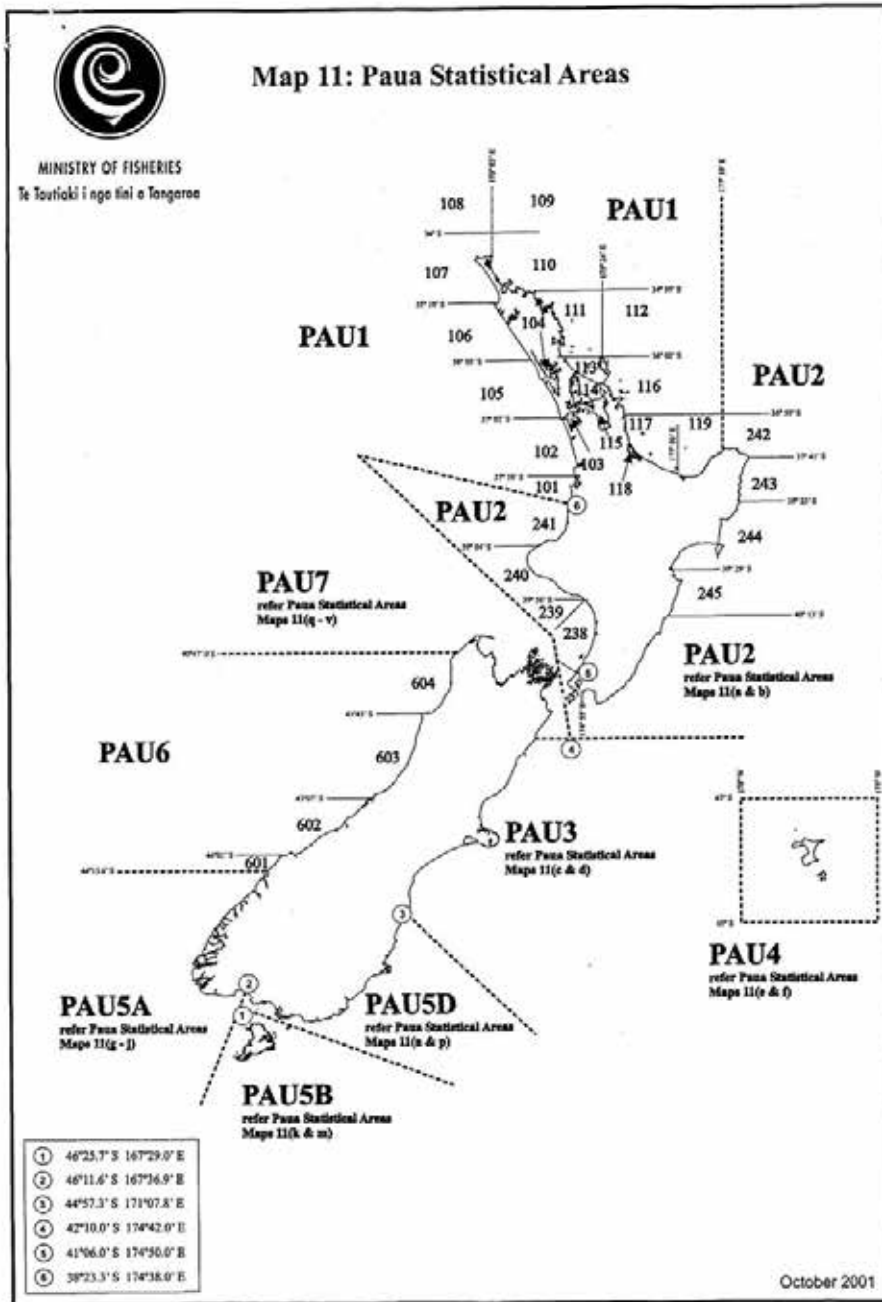
The Ministry provided the Department with catch / effort data for Areas 1 and 2 (approximate to the proposed marine reserve areas, Options 1 and 2). This did not identify scallops as being harvested in either of these areas for the period October 2001 to September 2004.

6.5(i) Paua Statistical Areas

The Paua Statistical Area 111 includes all the waters between 34°39'S and 34°02'S and out to 135°24'E, as shown on *Map 9: Paua Statistical Areas*. The proposed reserve areas, Options 1 and 2, make up a small part of Statistical Area 111.

The Ministry provided the Department with catch / effort data for Statistical Area 111. This data did not identify paua as a species that was harvested from this area for the period October 2001 to September 2004.

⁸ Scallops have a non-standard fishing year (01 April to 31 March). The data in this report are for the standard fishing year (01 October to 30 September).



Map 9 - Paua Statistical Areas

Report on the possible effects on recreational and commercial fishing at Mimiwhangata.

7.0 Marine Farms.

Section 4(1) of the Marine reserves act 1971 states:

“Subject to section 5 of this Act, the Governor-General may from time to time, by Order in Council, declare that any area described in the Order shall be a marine reserve subject to this Act... but no area in respect of which any lease or licence under the Marine Farming Act 1971 is for the time being in force shall be declared a marine reserve”.

There are currently no marine farms within the proposal areas. We have contacted the Northland Regional Council who advised us that there are no pending coastal permit applications for marine farms within the proposal areas.

8.0 Summary.

This report identifies and discusses possible effects the marine reserve proposal at Mimiwhangata may have on recreational and commercial fishing.

Recreational Fishing

The Mimiwhangata area is an important recreational fishing area and a significant number of respondents to the Discussion Document identified recreational fishing as an activity they undertook within the marine reserve proposal areas. Approximately half of these fishers (53.5%) supported the marine reserve proposal. The area is also important for other recreational purposes, e.g. snorkelling and walking.

Analysis of the current NIWA study (data for the period 5.12.04 to 23.4.05) indicates that use of the Tutukaka and Oakura areas for recreational fishing places them at 12 and 15 respectively within a total list of 26 areas. Their respective totals of 231 and 272 boats observed fishing over this period is below the average of boats seen fishing within all 26 areas ($n = 26$, mean = 313, range = 20 to 905).

It is noted that the area(s) proposed as a marine reserve are small in comparison to the local fishing area (Bream Head to Bay of Islands out to 12 nautical miles) and that the balance of this area would continue to offer a range of recreational fishing opportunities.

In addition:

- A number of alternative fishing spots in the immediate, local and regional areas that provide a selection of fishing options dependent on the wind and sea conditions were identified through

- Information available to the public relating to recreational fishing opportunities in the general Mimiwhangata area, and
- consideration of discussions with a local recreational fishing charter boat operator
- An analysis of a recent visitor use survey based at the Mimiwhangata marine park indicates that boats did not use the waters surrounding Mimiwhangata, to any great extent, in periods of winds in excess of 15 knots.

However, the Department has taken into account concerns and objections relating to fishing activities / fishing grounds within the proposed marine reserve areas, by recommending that if the applicant(s) decide to proceed with a formal marine reserve application, the proposed boundaries should be amended to exclude the following fishing areas (Department of Conservation 2005 B):

- Te Ruatahi Island reef
- Fishing areas deeper than 75 metres.
- A popular local tarakihi fishing ground.
- Some hapuka grounds.
- Beach and rock fishing areas at both the western and southern ends of the Mimiwhangata Coastal Park.

Other concerns and objections by recreational fishers included:

- The marine reserve proposal is not part of an integrated plan for marine protected areas.
- Surface trolling would be disturbed (for both billfish and other species).
- The research and data used to justify the proposal is unacceptable.
- The area would make it difficult to enforce the Marine Reserves Act regulations.
- Commercial fishing, not recreational is too blame for overfishing.

The Department response to these objections included:

- Mimiwhangata would add a valuable array of protected habitats to an emerging network of protected areas along the northeast coast of New Zealand
- One of the recommendations in the Boundary options assessment report (Department of Conservation 2005 B) is if the applicant(s) decide to proceed with a formal marine reserve application, the outer boundary of the proposed marine reserve should follow a line proximate with the 75 metre depth contour. This would allow trolling outside of this line.

At this point in the marine reserve process (see section 3.0), the information collected suggests that there is a strong argument the

marine reserve area(s) as proposed would not interfere unduly with or adversely affect any existing usage of the area for recreational purposes.

Commercial Fishing

The Department made a considerable effort to consult with commercial fishers and commercial fishing representative companies about the Mimiwhangata marine reserve proposal.

9 respondents to the Discussion Document questionnaire identified they undertook commercial fishing within the proposal area(s). Submissions were also received from Leigh Commercial Fishermen's Association Incorporated, Northern Inshore Fisheries Co Ltd and Pagrus Auratus Co Ltd.

This report identifies the written objections raised by the commercial fishers and commercial fishing representative companies and responds to some of the specific concerns raised by the Leigh Commercial Fishermen's Association and NIFCL.

Objections from Northern Inshore Fisheries Company Limited and Sanford's included lack of justification for any marine reserve and boundaries, which precluded them from engaging in the consultation process.

The Department notes that commercial fishing representative companies have chosen not to answer specific questions associated with catch effort in the proposed marine reserve area(s) at this stage, and that they may have further information / data that may add to this analysis at a later date.

It is worthy to note that:

- The Department has recommended revised boundaries for the marine reserve proposal (Department of Conservation 2005 B), which reduces the size of the proposed marine reserve area.
- The Department has analysed catch effort data provided by the Ministry (see section 6.5) and that this analysis may have addressed some of the concerns expressed by commercial fishers and the commercial fishing representative companies.

The Department notes the Information principles as stated in Part 2 – Purpose and Principles, section 10 of the Fisheries Act 1996, which states:

“All persons exercising or performing functions, duties, or powers under this Act, in relation to the utilisation of fisheries resources or ensuring sustainability, shall take into account the following information principles

a) Decisions should be based on the best available information

- b) Decision makers should consider any uncertainty in the information available in any case:*
- c) Decision makers should be cautious when information is uncertain, unreliable, or inadequate*
- d) The absence of, or any uncertainty in, any information should not be used as a reason for postponing or failing to take any measure to achieve the purpose of this Act.*

Information on commercial fishing catch effort was obtained from the Ministry of Fisheries and an analysis of that data undertaken. The purpose of the analysis was:

- To summarise and analysis the recorded commercial fishing catch and effort undertaken in the Statistical Areas (Fisheries Management Areas) that encompass the proposed marine reserves areas, and then make some comparison to catch and effort in other nearby Statistical Areas.
- To summarise the recorded commercial fishing catch and effort undertaken within the proposed marine reserve areas and make some comparison to catch and effort within the Statistical Areas that encompass the proposed marine reserves areas.
- To summarise commercial fishing catch undertaken within Fisheries Management Area 1

Ministry of Fisheries data showed that 133 species have been commercially caught in Statistical Area 003 for the three fishing years starting October 2001 to September 2004. However, only 9 of these species were recorded as being commercially caught within the proposed marine reserve areas. The analysis therefore focuses on these nine species including identification of quantities landed and fishing methods used.

In addition, an analysis of Crayfish (red and packhorse), Scallops and Paua caught within Statistical Areas along the northeast coast of the North Island was undertaken. Information provided by the Ministry identified that no Crayfish (red and packhorse), Scallops or Paua was harvested in the proposed marine reserve areas for the period October 2001 to September 2004.

The Northland Regional Council has advised the Department that are currently no marine farms, or pending coastal permit applications for marine farms within the proposed marine reserve areas.

The Department has endeavoured to follow the intent and guidelines of the Marine Reserves Protocol agreement between the Ministry and the Department in the writing of this report. At this point in the marine reserve process, the information collected and analysed suggests that there is a strong argument the marine reserve area(s) as proposed would not interfere unduly with commercial fishing.

9.0 References

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10.0 List of Appendices

Appendix	Description of Appendices
1	Précis of consultation associated with the Mimiwhangata marine reserve proposal.
2	Specific recreational fishing clubs and interest organisations the Discussion Document was posted to.
3	Letter to the editor of New Zealand Fishing News dated 22.9.04.
4	Article in the New Zealand Fishing News magazine Sept 2004.
5	Submission from New Zealand Big Game Fishing Council.
6	Submission from Northern Amateur Fishers Assn.
7	Submission from Mangawhai Boating and Fishing Club.
8	Article entitled "Oakura – options galore!" This was published in the New Zealand Fishing News magazine – December 2003
9	Cover and maps from New Zealand Fishing News Annual Map Guide 2002.
10	'Wind rose' data from Mokohinau Islands.
11	Percentages of proposal areas to 3 larger areas.
12	NIWA recreational fishing survey maps for Oakura and Tutukaka areas, i.e. the 'Mimiwhangata area'.
13	NIWA survey of recreational fishing areas (5.12.04 to 23.4.05).
14	Commercial fishers and commercial fishing representative companies who were sent a copy of the Discussion Document.
15	Submission from Leigh Commercial Fishermen's Association Incorporated.
16	Submission from Northern Inshore Fisheries Co Ltd.
17	Submission from Pagrus Auratus Co Ltd.
18	Letter to Northern Inshore Fisheries Company Limited identifying agenda for possible meeting dated 4.8.05.
19	Letter / e-mail from Northern Inshore and Sanfords declining to meet at this stage and their reasons why.
20	Ministry of Fisheries Trawl Catch Effort Processing Return (TCEPR) form.
21	Ministry of Fisheries Catch Effort Landing Return (CELR) form.
22	Species caught with Statistical Areas 002, 003, 004, 005, 006, 007 and 008 for the period October 2001 to September 2004.
23	Table 7 – Boundaries of 'Areas 1 and 2' which approximate to proposed marine reserve areas Options 1 and 2.
24	Table 11 – Estimated green weights per fishing method for nine species of commercial caught fish in Statistical Area 003.
25	Tables 14, 15 and 16 - Recorded commercial catches (kg) for 3 fishing methods used to catch nine species of fish within Statistical Area 003, and Areas 1 and 2 (approximate to the proposed marine reserve areas Option 1 and 2).
26	Table 17 – Number of vessels and fishing days for nine species of fish caught in Statistical Area 003.

Table 18 – List of Appendices

Appendix 1

Appendix 1 - Précis of consultation associated with the Mimiwhangata marine reserve proposal.

File note	Précis of consultation associated with the Mimiwhangata marine reserve proposal
From:	Alan Fleming
Date:	9.5.05

Approximately 4,200 Discussion Documents were distributed to approximately 270 organisations, groups, clubs and businesses, approximately 1650 individuals made up from lists of interested parties such as absentee landowners at Oakura, Teal Bay and Whananaki, persons on the Rural Delivery (RD) routes and Postal Delivery Centres (PDC's) along the Whananaki and Hikurangi coasts, and Mimiwhangata campers and persons staying at the Mimiwhangata accommodation. Letters informing people of where they could access the Discussion Document were also sent to all persons on the RD route and PDC along the Tutukaka coast.

The Department also:

- Continued dialogue with tangata whenua at a hapu, whanau and lwi level.
- Established the Mimiwhangata Call Centre and e-mail for the purposes of providing access to the Discussion Document, providing interested parties with the opportunity to speak with a departmental staff member and for submissions to be received.
- Held a media/press conference in Whangarei including widespread distribution of associated media release and Mimiwhangata information pack.
- Posted the Discussion Document and questionnaire on the Department of Conservation website. In addition Forest and Bird, World Wild Fund and Option 4 posted hyper links to the Discussion Document on their respective websites.
- Distributed the Discussion Document to several community distribution points in Whangarei and the Mimiwhangata Coast.
- Telephoned many recipients of the Discussion Document to ask whether they had any queries or wished to meet and/or discuss the proposal. This included several local commercial fishers and representatives from local recreational fishing clubs.
- Various presentations were given to interested groups and persons within the Whangarei and Northland region. This included Tangata whenua, the Northland Regional Council, Whangarei District Council, Russell Environmental Expo, the Northland Conservation Board and a local dive club.
- Held 7 Community meetings at Oakura, Whananaki, Whangarei, Matapouri, Ngunguru, Russell and Paihia.
- In addition articles and advertisements appeared in a number of newspapers, radio stations, and magazines including the NZ Herald,

Northern Advocate, the Oakura Pothole, Tutukaka Focus, Russell Lights, KCC FM, Newstalk ZB, NZ Fishing News, NZ Dive Log and Forest and Bird magazine. An article was also screened on the Maori Television (insert date).

- Informed all submitters to the Discussion Document where they could access the submission results and analysis.
- Responded to several requests for information under the Official Information Act and to direct enquiries to the Minister of Conservation regarding the proposal.
- Meet with interested parties including representatives from the Whangarei Deep Sea Anglers Club.

Appendix 2

Mimiwhangata Marine Reserve Proposal
Appendix 2 - Recreational fishing clubs and interest organisations the Discussion Document was posted to
1. Fishing interests - general
2. Recreational fishers
3. Fishing charter operators
4. Ministry of Fisheries
5. Dive Industry
6. Boat clubs
Organisation name
1. Fishing interests - general
NZ Fishing World
Fishing Coast to Coast magazine
Hooked On Marine
John Holdsworth
NZ Fishing News
Pete Saul
2. Recreational fishers
Bay of Islands Landbased Gamefishing Club
Bay of Islands local fishing writer
Bay of Islands local fishing writer
Whangarei local fishing writer
Hikurangi Fishing Club
Kensington Fishing Club
Fishing Coast to Coast magazine
New Zealand Angling and Casting Association
New Zealand Recreational Fishing Council
NZ Big Game Fishing Council
NZ Sportfishing Council
Ngunguru Fishing Club
option 4
Tikipunga Fishing Club
Warren Hay Marine / fish column writer
Whangarei Deep Sea Anglers Club
Whangarei Hunting and Fishing Club
Whangarei Line and Light Rod Fishing Club
3. Fishing charter operators
Bay of Islands Swordfish Club
BOI Charter & Fishing Association Inc
Delray Charters
Magic Charters
Oakura Bait and Tackle
Oakura Bay Cruises
Oakura Bay Fish Dive and Cruise
Sportfishing Charters
Tutukaka Gamefish Club

Recreational fishing clubs and interest organisations the Discussion Document was posted to
4. Ministry of Fisheries
Fishserve
MinFish in Whangarei
MinFish in Auckland
MinFish Head Office
5. Dive Industry
A to Z Diving
Bay Dive and Fishing Tackle
Diveboard
Dive Connection
Dive HQ
Dive HQ Dive Club
Dive NZ
Dive North
Dive Poor Knights Co Ltd
Dive Tutukaka
Greensea Eco Charters
Knight Diver Tours
Lady Jess Charters
NZ Under Water Association
Pacific Hideaway
Paihia Dive
Paradise Eco-Ventures
Rust Club
Terry Maas tour organiser
Yukon Charters
Whangarei Underwater Club
6. Boat clubs
Northland Yachting Association
Bay of Islands Yacht Club
Coastguard Boating Education
Kerikeri Cruising Club
Marsden Yacht club
Onerahi Yacht Club
Opua Cruising Club
Opua Marina
Outboard Boating club
Parua Bay Marina
Russell Boat Club
Tutukaka Coastguard Search and Rescue
Tutukaka Marina
Whangarei Volunteer Coastguard
Whangarei Cruising Club Inc
Whangarei Marine Management
Whangaruru Coastguard
Whangaruru Coastguard Incorp Society

Appendix 3

Appendix 3 – Letter to the editor of New Zealand Fishing News dated 22.9.04

To the Editor – NZ Fishing News

Sam Mossman's article, (NZ Fishing News - Sept 04), regarding the proposed marine reserve at Mimiwhangata contains several omissions and inaccuracies. I hope that this letter goes some way towards better informing your readers.

The first marine research studies undertaken at Mimiwhangata during the 1970's expressed concerns that fishing pressures were increasing at Mimiwhangata and that they would continue to threaten the ecology of the area unless special protection was not put in place. A primary goal of the 1984 marine park was to protect the Mimiwhangata marine environment.

Therefore contrary to Mr Mossman's statement that "DoC rather mischievously portrays Mimiwhangata as a **marine reserve** that is not working", we are actually saying that research over the last 3 years shows that the **marine park** (established under the Fisheries Act and Harbours Act) has not achieved its goal of protecting the Mimiwhangata marine environment.

This recent research measured changes over time in individual species, e.g. snapper, and in the Mimiwhangata marine habitat, e.g. increase in kina grazed areas. In turn these changes were compared with both 'fully fished' and marine reserves within the north-eastern marine area.

Mr Mossman's focus in his article attacks this research. However he does not substantiate his criticisms with any scientific rigour. The alternative views he expresses do not include reference to either scientific research or published research papers. He has not contacted the authors of the research reports and asked them to comment on the aspects of their research he has identified as "dodgy science" thus the readers of your magazine are not provided with a balanced informative article.

Mr Mossman also states that the research appears to be "jealously guarded". In the proposal document the department went to lengths to both fully reference the 22 technical reports associated with the proposal and inform readers that there are a limited number of CD-ROMs available upon request which contain technical reports referenced in the proposal document. Mr Mossman may not have read this as he has not approached the department to request a copy of this CD.

To respond to one example of where Mr Mossman's has failed to provide your readers with a true representation of the research, he implies that seasonal snapper movements have not been taken into account.

The research concerned compared relative fish densities, snapper in particular, within the Mimiwhangata marine park to other coastal and offshore sites in the region, i.e. just outside the marine park, at Cape Brett, the Mokohinau and at the Poor Knights marine reserve.

Densities of snapper within the Mimiwhangata Marine park were similar to 'fully fished' sites (just outside the park, Cape Brett and Mokohinaus) and far lower than the nearby fully protected marine reserve (Poor Knights).

This Poor Knights research noted the regular onshore/offshore seasonal migration of snapper, i.e. during autumn, snapper were twice as common at the Poor Knights when compared with spring; and to ensure that this trend was incorporated into the data analysis, comparisons of fish densities were made at similar times of the year.

It is important for persons to appreciate that marine reserves are primarily intended as a conservation not fisheries management tool. However it is notably there is some scientific evidence that marine reserves do help in enhancing fishing yields in adjacent areas through spillover of individual fishes and export of larvae and juveniles.

Marine reserves have many benefits. These include allowing marine communities to recover to a more natural state with more natural ecological processes, eg a species population size and age structure, predator-prey relationships and food chains. Marine reserves throughout New Zealand and the world also show a consistent trend in producing higher densities, sizes, biomass and diversity of fishes.

I encourage your readers to consider the proposal and base their opinion on the value of having representative marine areas protected in their restored natural state, and the value these areas would have as "yardsticks" from which we can measure what we do with the marine ecosystem outside of a marine reserve.

Readers can access an electronic copy of the proposal document and questionnaire on the DOC website www.doc.govt.nz

Submissions to the proposal document are due by the 12th of October 2004 and can be sent to either mimiwhangata@doc.govt.nz or posted to

Mimiwhangata Discussion Document
Department of Conservation
Northland Conservancy
PO Box 842
WHANGAREI

Thank you

John Gardiner
WHANGAREI AREA MANAGER

Appendix 4

marine reserves

BY SAM MOSSMAN

DoC makes grab for Mimiwhangata

As mentioned in last month's edition, the Department of Conservation is at it again.

This time it is making a grab for the marine park at Mimiwhangata, just north of Whangarei, with plans to greatly enlarge the area from the current 20 square kilometres to either 72 or 110 square kilometres (two 'options') — right out to the 100-metre line.

Since 1984, the area has been managed as a coastal farm park, with an adjoining marine park that only permits unweighted single-hook lines, trolling, spearing and hand picking for a limited range of transient fish species, some shellfish, and crayfish.

However, in their just-released glossy colour proposal, DoC rather mischievously portrays Mimiwhangata as a marine reserve that is not working so needs to be made bigger and have a total closure. This is NOT what a marine park is about. It is supposed to be a recreational venue where the public can enjoy themselves while catching a feed if they so wish. DoC now apparently wants to put a stop to this and usurp control of a great public asset.

It appears that local Iwi Ngatiwai are supporting the proposal. While I am not about to suggest that DoC has conned them, Ngatiwai seem to be expecting only a 20-25 year span for a marine reserve. Yeah, right.

Dodgy science

Even though I disagree with the basic concept that Mimiwhangata is a non-functioning marine reserve rather than the marine park it actually is, I decided to treat the proposal on its merits or otherwise.

Once you get past all the pretty pictures (very few of which seem to have actually been taken at Mimiwhangata) and all the fcl-good eco-babble, I found an appalling amount of misrepresentation, questionable research techniques, and very dodgy so-called science.

DoC started their offensive to take Mimiwhangata in early July, with mainstream media releases saying that there had been 'no recovery of fish stock numbers', citing 'recent research'.

This is pretty questionable, as they are only talking about snapper numbers, and the technique they used to measure snap-

per numbers is a dubious system called the 'baited underwater video', or BUV. Now a basic principle of accurate measurement requires the item not be altered as it is measured, so attracting fish by effectively berleying them in and feeding them means you get (to be generous) exaggerated results, especially if the fish get used to being fed at a particular station and continually return there.

This technique is a good example of dodgy science, as anyone with a bit of on-the-water practical knowledge of snapper will understand. Seasonal snapper movements make a huge difference to the average size and preferred habitat of snapper at any given time of the year, so EXACTLY where and when the 'survey' is done makes a huge difference, too.

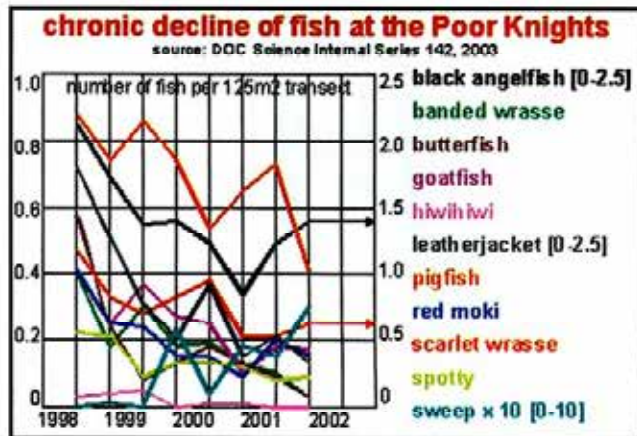
This system is used to try and convince the reader that there are vastly more snapper in marine reserves than outside in adjacent areas. When I checked back into the original research (and this was pretty hard, as DoC were not exactly putting these reports out to the public), I found that DoC had chosen only one small piece of data (that supported their case the best) for the graph they used.

Even so, this is the result you would expect if you grabbed the best bit of structure in the area for the reserve (and this is what usually happens) and measured it against a relatively featureless zone outside. OF COURSE you are going to get more snapper inside — that is why most popular fishing spots are at risk of being grabbed for marine reserves.

Todd Sylvester, a fisheries analyst with the Ministry of Fisheries, says since their 1980s low, snapper stocks in the Hauraki Gulf have recovered well with the quota management system.

"You don't need marine reserves to sustainably manage a snapper fishery. If you want to manage sustainability you figure out the sustainable yield and make sure you don't exceed it."

But even this is irrelevant when you consider that the current marine park at Mimiwhangata is not about rebuilding the snapper in the area to some semi-mythical 'good old days' status, but about managing



the pressures on the species in this area so that everyone can enjoy catching some. And let's face it, this must be working or people would not go there to fish in the numbers DoC claim.

It is the same with DoC's other publicised benchmark for this proposal, the crayfish. They show a representation of crayfish numbers in the Leigh reserve (albeit with a misleading timeline along the bottom axis), but attempt to gloss over the massive collapse of cray numbers inside the reserve in 1998. Marine scientist, Dr Floor Anthoni, who has studied the area for many years, is convinced that prolonged storms and mud flows into the reserve caused a mass migration of crayfish out of the area. Environmental degradation, the REAL problem that DoC should be tackling, takes no notice of these people drawing a line on a chart and calling it a 'Marine Reserve'.

Dr Anthoni correctly argues that marine reserves do not protect or improve the fishery outside, or prevent it from collapsing, or protect against the more serious risks of mass mortalities, poisonous plankton/algae blooms, oil spills, global climate change, ozone holes, hurricanes, invasions of introduced species, degradation by mud, sewage and so on, because these play havoc equally inside and outside marine reserves. (For Dr Anthoni's full rebuttal of the Mimiwhangata proposal, see <http://www.seafriends.org.nz/issues/war/mimiprop.htm>)

What they don't tell you

I dug deeper into the 'research' used to justify this proposal. One of the key pieces of work quoted was a 'Fish survey of the Mimiwhangata Marine Park, Northland', by Denny and Babcock, presented as a report to DoC. This appears to be jealously guarded, but I did find a summary on the web, and hello, more selective science. Far from the impression DoC has been trying to give about the state of fish stocks being poor at Mimiwhangata, even the summary of the report stated that pigfish, *Bodianus unimaculatus*, leatherjackets, *Parika scaber*, and trevally, *Pseudocaranx dentex*, were significantly more common in the marine park than in the adjacent control areas. Trevally are popular with fishermen, yet they are apparently in better numbers inside the park. This makes you wonder about the accuracy of their snapper figures.

Another bit of research that DoC has kept very, very quiet about is in their internal series of reports, number 142. DoC trumpets the increase in snapper numbers at their flagship Poor Knights Reserve, and you might well expect this, as nobody is fishing for them. What they DO NOT want to tell you about is the spectacular crash in

reef fish numbers inside the reserve over the last few years. This would seem to be the opposite to everything DoC has claimed for marine reserves. (See graph hereabouts).

Another line that DoC follows is that tired (and largely discredited) story about 'kina barrens'. The theory they keep dragging up is that if there are no crayfish and big snapper in an area, kina numbers get away and eat the kelp beds, forming 'kina barrens', as they are emotionally titled by those promoting the concept. There is little evidence for this connection, and much against it. Even a glance at the habitat map in the proposal shows huge areas of healthy kelp (ecklonia) forest inside the park, with only tiny areas labelled as 'kina barrens'. Blind Freddy can see that these 'barrens' are quite nicely arrayed in the shallows, mostly the east to north-east sides of the shallow areas. Now what direction is most exposed to storms on the north-east coast? That's right, the dreaded nor'easter storms have damaged these small areas of kelp, not kina.

It goes on — DoC prattles on about rare birds and bottom organisms found in the area, but none of these things are targeted by fishermen, or hurt by fishing under the present regime.

Don't be intimidated

When presented with so-called 'scientific evidence', don't be intimidated. Just remember that science is sometimes little more than opinion backed by hand-picked and sorted data that appears to support the conclusion desired. Even if the researchers have letters after their names, they are not necessarily any cleverer or more knowledgeable about the subject than an observant layman who has put in sufficient time on the water.

Also remember that many researchers are dependant on DoC for research grants, so are unlikely to 'bite the hand that feeds' by not toeing the ideological line that the department has drawn.

I urge you to get stuck into this shoddy proposal to take Mimiwhangata from the fishing public (and also the massive sea-grab that DoC are attempting, despite overwhelming opposition, at Great Barrier — see elsewhere in this issue). You CAN have an effect. It is no accident that DoC has omitted from their little flow chart on page 19 of the Mimiwhangata proposal, the directive at step four saying 'overwhelming adverse public reaction, or no support, ABANDON PROJECT'. Really, did they think we wouldn't notice?

Ask for a copy of the proposal from: Mimiwhangata Consultation, Northland Conservancy, PO Box 842, Whangarei, or on-line from: www.doc.govt.nz/regional-info/001-Northland/004-Conservation/index.asp

hohepa's maori fishing calendar

BY BILL HOHEPA

SEPTEMBER 2004

1 Bad 2.04	2 Bad 2.49	3 Fair 3.34	4 Bad 4.18	5 Bad 5.04	6 Bad 5.52	7 Bad 6.11
8 Good 7.03	9 Good 7.55	10 Good 8.47	11 Good 9.38	12 Good 10.27	13 Good 11.14	14 Good 12.00
15 Fair 12.44	16 Good 1.29	17 Good 2.16	18 Good 3.04	19 Good 3.56	20 Bad 4.50	21 Fair 5.50
22 Fair 6.18	23 Fair 7.23	24 Bad 8.25	25 Bad 9.24	26 Bad 10.18	27 Fair 11.08	28 Bad 11.55
29 Good 12.40	30 Bad 1.26		Bite times based on daytime hours	Good: up to 2 hours of good fishing from bite time	Fair: 30 minutes or more of good fishing from bite time	Bad: up to 15 minutes of reasonable fishing from bite time

Appendix 5

NEW ZEALAND BIG GAME FISHING COUNCIL

(Incorporated)

Patron: R C Dinsdale
President: J A Romeril
Secretary: R T Nelson (Mrs)



Secretary:
Telephone: 09 433 9648
Fax: 09 433 9640
E-mail: nzbgfc@ihug.co.nz
Website: www.nzbgfc.org.nz

PO Box 93
WHANGAREI

00574

11 October 2004

RECEIVED
DEPT OF CONSERVATION

15 OCT 2004

Department of Conservation
Northland Conservancy
PO Box 842
WHANGAREI

NORTHLAND CONSERVANCY OFFICE

Dear Sirs

Please accept this submission from the New Zealand Big Game Fishing Council on the proposed marine reserve at Mimiwhangata.

Introduction

The NZBGFC represents more than 32,000 current financial members from 60 clubs spread throughout New Zealand. The NZBGFC has long been active in the conservation and sustainable management of the species for which its members fish, as well as with the conservation of important food species for those fish. In recent years the NZBGFC has been very actively involved with fisheries management processes in New Zealand, making detailed submissions, attending numerous meetings with Industry and Government agencies, as well as international forums. We are well informed on fisheries management, research and conservation issues.

Our policy on marine reserves, as previously stated, is that marine reserve status is only justified where an area has been clearly identified as being so special or unique that its preservation is clearly in the national interest. There are many other management options which are perfectly adequate in most cases, and far more flexible than a total non-extraction marine reserve.

We oppose the proposal for a marine reserve at Mimiwhangata.

We have serious concerns about this application, including the following.

This application is not the result of an integrated plan for marine protected areas across the region. It is merely another ad hoc proposal which DoC seeks to justify under the guise of "protecting biodiversity", mainly because it is adjacent to DoC-managed land. The NZBGFC asks yet again why there is no publicly scrutinized, national plan for marine protected areas that might alleviate the need for continued dispute and expense over this topic.

process has been completed contravenes the Marine Reserves Protocol agreed by DoC and the Ministry of Fisheries in 2003.

Most of the species for which our members fish are currently managed by one of the best fisheries management systems in the world; one that has achieved international recognition. Our organization has invested considerable effort in participating in this system. We strongly disagree with the continual statements from DoC to the effect that existing management frameworks are inadequate, thus justifying the use of marine reserves as management tools. Marine reserves are not fisheries management tools and should not be promoted as such, either by direct statement or implication, in order to sway public opinion.

The entire marine environment in territorial waters is already managed to some degree, through fisheries legislation (QMS, method restriction); transport legislation (shipping lanes, cable zones); defense legislation (defense areas), mining legislation etc. Very large applications such as this do not integrate well with existing rights and management.

The size and location of the proposed reserve means that it will be unenforceable. DoC has no resources to patrol such an area., and a very poor history of managing other marine reserves.

We will make further submissions in the event that the Department of Conservation decides to proceed with this application and seeks concurrence from the Minister of Fisheries.

Yours sincerely,



Jeff Romeril
PRESIDENT

Appendix 6

Northern Amateur Fishers Association
 C/o PO Box 7164
 Tikipunga
 Whangarei
 11-10-2004

Mimiwhangata Discussion Document
 Department of Conservation
 Northland Conservancy
 PO Box 842
 Whangarei.

Dear Sir,

Thank you for this opportunity to submit on the above proposal.

As frequent users of this stretch of the Northland Coast we have learned a lot of its nature, the intricacies these water have and the complex way we as users interact in these waters.

We am not apposed to conservation and marine reserves, though we are not in support of these proposals in any way, the status quo must remain with no deviation.

In the proposal document there was two possible new variations to the existing reserve, we oppose both of them.

From attending several of the community meetings where we were only given little time to voice our concerns and ask questions that were not answered in any way, my objections are as follows in no set order of merit;

- ⇒ When asked what damage occurs to the sea bed when trolling lures for surface highly migratory species in waters of 50 meters of depth and deeper -- no answer!
- ⇒ If the concern is for the deep reefs, sponges, corals and such structure, the why allow anchoring, does not an anchor dropped to the bottom and used to moor a vessel for any period of time do damage to the bottom structure?
- ⇒ DOC has not showed any interest in the TAC/TACC of QMS species up until July 2004, at a recent conference when ask why there was no objection from DOC in the Kahawai process, we learned you had no knowledge of the interaction between coastal seabirds and Kahawai.
- ⇒ In the summary of submissions on other TAC/TACC annual allocations I have not read any input from DOC – why the sudden interest unless you are empire building!
- ⇒ What is the hurry, how will this be affected when Oceans Policy is released, what about the sea bed and foreshore issue.
- ⇒ It is interesting to note that the proposed coastal boundary change fits in with an IWI mussel farm proposal – quite convenient isn't it?
- ⇒ The quoted drop in crayfish and snapper is not outside what has been encountered on the rest of the coast in QMA1.

- ⇒ There has been no consideration to coastal runoff or the fact that the spill out effect from the Whangaruru Harbour flows right thru the proposed area, all that coastal farmland and its associated fertiliser, (did not DOC apply some 80 ton to their land reserve?) what about all those septic tanks, beach roads, beach traffic, and forestry runoff?
- ⇒ The area concerned out to the 100 meter mark is a coastal highway that is fished, travelled by many users, Labour weekend there is a very big yacht race that passes right thru this area, most serious racing vessels do not have holding tanks, as most recreational boats do not as well, how are you going to monitor this. Least not forget the Volvo, Whitbread, multihull races that use these waters as well.
- ⇒ Why is there no consultation with locals, user groups, Iwi before there are lines drawn on a map or chart?
- ⇒ Overseas marine reserves have not proved to be the great saving answer that they were put there to be.
- ⇒ Until there is a concentrated effort to reduce the bulk harvesters on the coast line, the commercial harvesters who supply the export market, where is DOC policy to remove the non selective commercial methods of mass catching, coastal gill netting, bottom trawling, purse seining, beach seining, Danish seining.
- ⇒ With reference to the fish stocks that have been monitored in this area, colleagues have asked for a copy of this information and it has only just been promised and is yet to arrive giving us little time to read, evaluate and make comment on in our submission. Some of the species that have been recorded in decline are not targeted by recreational users, yet we are supposed to stop our fishing in these areas
- ⇒ An example is the decline of some of the demoiselles in the Poor Knights reserve, have can Recreational fishers have contributed this as it has occurred after the reserve was put in place, we suspect the larger snapper have had a roll in this happening.
- ⇒ There is a statement used by DOC "Marine Reserves Benefit all New Zealanders" this fascinates me as I can't see this at all. This marine reserve will force us to travel out further, away from the shelter, out into the open waters, forcing us out into deeper waters just so we can catch some fish to feed the Whanau. We sustenance anglers are the ones who are suffering.
- ⇒ There is no evidence that the little good this marine reserve will do to the coastline will have any long term effect for the area if there is no reduction in the TACC, and land run off.

Thank you for receiving this,

On behalf of;
Northern Amateur Fishers Association.

Paul Batten.

Appendix 7

President
Mangawhai Boating & Fishing Club
PO Box 162
Mangawhai

11-10-2004

Mimiwhangata Discussion Document
Department of Conservation
Northland Conservancy
PO Box 842
Whangarei.

Dear Sir,

Thank you for this opportunity to submit on the above proposal. The Mangawhai Boating & Fishing Club has been around for 39 years and as at our last AGM we had 250 members, mostly Families. This submission is on their behalf;

As a frequent user of this stretch of the Northland Coast, we have learned a lot of its nature, the intricacies these water have and the complex way we as users interact in these waters.

We are not apposed to conservation and marine reserves, though we are not in support of these proposals in any way, the status quo must remain with no deviation.

In the proposal document there was two possible new variations to the existing reserve, We oppose both of them.

From attending several of the community meetings where we were only given little time to voice our concerns and ask questions that were not answered in any way, my objections are as follows in no set order of merit;

- ⇒ When asked what damage occurs to the sea bed when trolling lures for surface highly migratory species in waters of 50 meters of depth and deeper – no answer!
- ⇒ If the concern is for the deep reefs, sponges, corals and such structure, the why allow anchoring, does not an anchor dropped to the bottom and used to moor a vessel for any period of time do damage to the bottom structure?
- ⇒ DOC has not showed any interest in the TAC/TACC of QMS species up until July 2004, at a recent conference when ask why there was no objection from DOC in the Kahawai process, we learned you had no knowledge of the interaction between coastal seabirds and Kahawai.
- ⇒ In the summary of submissions on other TAC/TACC annual allocations I have not read any input from DOC – why the sudden interest unless you are empire building!
- ⇒ What is the hurry, how will this be affected when Oceans Policy is released, what about the sea bed and foreshore issue.
- ⇒ It is interesting to note that the proposed coastal boundary change fits in with an IWI mussel farm proposal – quite convenient isn't it?

- ⇒ The quoted drop in crayfish and snapper is not outside what has been encountered on the rest of the coast in QMA1.
- ⇒ There has been no consideration to coastal runoff or the fact that the spill out effect from the Whangaruru Harbour flows right thru the proposed area, all that coastal farmland and its associated fertiliser, (did not DOC apply some 80 ton to their land reserve?) what about all those septic tanks, beach roads, beach traffic, and forestry runoff?
- ⇒ The area concerned out to the 100 meter mark is a coastal highway that is fished, travelled by many users, Labour weekend there is a very big yacht race that passes right thru this area, most serious racing vessels do not have holding tanks, as most recreational boats do not as well, how are you going to monitor this. Least not forget the Volvo, Whitbread, multihull races that use these waters as well.
- ⇒ Why is there no consultation with locals, user groups, Iwi before there are lines drawn on a map or chart?
- ⇒ Overseas marine reserves have not proved to be the great saving answer that they were put there to be.
- ⇒ Until there is a concentrated effort to reduce the bulk harvesters on the coast line, the commercial harvesters who supply the export market, where is DOC policy to remove the non selective commercial methods of mass catching, coastal gill netting, bottom trawling, purse seining, beach seining, Danish seining.
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- ⇒ An example is the decline of some of the demoiselles in the Poor Knights reserve, have can Recreational fishers have contributed this as it has occurred after the reserve was put in place, we suspect the larger snapper have had a roll in this happening.
- ⇒ There is a statement used by DOC "Marine Reserves Benefit all New Zealanders" this fascinates me as I can't see this at all. This marine reserve will force us to travel out further, away from the shelter, out into the open waters, forcing us out into deeper waters just so we can catch some fish to feed the Whanau. We sustenance anglers are the ones who are suffering.
- ⇒ There is no evidence that the little good this marine reserve will do to the coastline will have any long term effect for the area if there is no reduction in the TACC, and land run off.

Thank you for receiving this,
 Regards
 President Mangawhai Boating & Fishing Club.

Paul Batten.

Appendix 8

destinations

BY GRANT DIXON



The crew aboard Tara Sea try their luck off the Whangaruru coast.

Oakura — options galore!

The more time you spend around the Oakura coastline, the more you appreciate the fishing and diving opportunities.

My first introduction to Oakura came when promoting the annual Lions Easter Fishing Tournament, which I attended for several seasons, and then returned to the local camping ground for the Christmas holidays with family and friends.

The fishing and diving based out of Oakura is superb, and I rate it among some of the best in the country. Regardless of what species you like to target, you will find it in the region.

Right beside the boat launching area is a rocky outcrop, and I have caught a number of reasonable snapper off there while 'fishing my feet first' at dusk and dawn.

Up and down the coast is superb trophy snapper country. You only have to look at past results of the former Whangaruru

Lions and current Bland Bay events. If it is not 12 kilos, don't bother weighing it in if you are after first prize!

There is a truckload of deep and shallow water foul areas over which you can try your luck, and similarly there are several kingfish hot spots, too, such as Danger Rock (Mahinapau) and the Limericks. The deeper offshore reefs produce plenty of tarakihi, snapper, john dory and the like.

The rugged coastline ensures plenty of em-fish diving opportunities. One of my favourite haunts is in the Mimiwhangata Marine Park (yes, you can take most of the common fish species and crayfish here), which has huge areas of foul and is great crayfish territory. Perhaps the most productive has been the dropoffs on the northern face of the Limericks, where the sand and rocks meet.

Those who like flounder can find them in the upper reaches of the Whangaruru Harbour, where there are also some small scallop beds (to make their location known in a national publication would be tantamount to signing my death warrant as far as the locals are concerned!). They are not in deep water so it would be well worth blowing off a bottle of air to check out some of the more obvious places.

And for the gamefisher there are plenty of marlin caught offshore within 10 miles of Oakura. To the north, Whangaruru Harbour is a regular overnighting spot for the larger gamefishing boats who want to stay in shelter but close to the action.

The beauty of Oakura is you don't need a big boat to get to some of the better spots. Henry Island, a short distance from the Oakura ramp, produces excellent fishing. It is the sort of place that fires at the change of light, and there are some big cracks that hold reasonable amounts of crayfish. Try the reefy area at the southern end for starters — for both species —

and plenty of berley and unweighted big baits (such as butterflied koheru) are the go.

If you don't have access to a boat or want an idea on how to get started, there are two charter boats operating in the area. Mike and Barbara Austin operate *Ruawaka*, a big catamaran that's suitable for taking larger parties. He has been fishing the region for many years and his clients regularly come home with good bags of fish.

The second operator is Justin Smith, who skips *Tovoa*, a Runcos 680 Sportsman. Justin specialises in teaching people to fish, a throwback from the days he spent at the head of a classroom. Justin has a reputation for catching big snapper and kingfish, and occasionally shares his techniques and Spot X's as a contributor to this magazine. Justin also offers accommodation as part of his charter operation, and has several smaller craft for hire.

There are a number of accommodation options in the region, including several camping grounds, motels, bed and breakfasts, and private beaches for rent.

The shop is a true general store, offering everything from fuel to an off-licence, and there are also takeaways available if you have not been able to catch your own fish. Bait and tackle can be purchased at reasonable prices at Oakura Bait and Tackle. They can also provide up to date information regarding the fishing.

Want to know more about the area? Check out the 2004 edition of the *NZ Fishing News Map Guide*, out now and available in all good tackle stores and stations.

Where to fish

To get to Whangaruru and Oakura, travel North from Whangarei on State Highway One. Turn right onto the road to Oakura at Whakapara 22 km from Whangarei. Oakura and Whangaruru Bay are at the end of 27 km

of winding sealed road.

The Northern headland and Bays access is from the Whangaruru North Rd. Continue past Oakura Bay turnoff until you reach Bland Bay intersection, turn right onto Whangaruru North Rd.

1. Motukowhai

Snapper and kahawai from boat or shore floating lines, use skipjack, mullet, pilchards or piper.

2. Tokaturua Reef

35-19.116 S 174-21.180 E

Be very careful - you can just see rock on low tide and it breaks in a swell. Plenty of school fish with kahawai, trevally and blue maomao all year round. A place to get excited about for monster snapper and kingfish. For a feed, head north towards Cape Brett on the edge of the foul 30 metres - plenty of school size snapper and tarakihi.

3. Karakahuia

This area of steep cliffs can fish well especially from the rocks. Access is by a long walk from Bland Bay. Cliffs can be difficult to climb. Use floating lines and skipjack, pilchard, piper, or mullet baits. You'll catch trevally, kahawai, kingies and big snapper. This area can also be fished by boat. A good current flow attracts kingfish.

4. Home Point

35-18.992 S 174-22.714 E

This is a spot for big kingfish, as there are usually large schools of kahawai, maomao and trevally here. Bridle-rig your livers and slow troll them for best results. Baits to use are koheru and kahawai, which can be caught on the edge of the wash.

Don't anchor too close to the rocks when a swell is running or when it's windy, as this point can be quite rough and large unexpected waves often occur.

5. Cone Rock and Motukauri

Keen walkers can rock fish here. There are big snapper, kahawai and blue maomao. Use floating lines and big baits of skipjack, mullet, pilchard, or piper. Light gear and small cut baits for maomao.

6.

Drifting a bait near the bottom offshore will often result in a good snapper over the foul.

7. Motukokowhai

Boat fishing for good snapper, kahawai, kingies and blue maomao.

8. Waione

Rock fishing for pan sized snapper. Use smaller cut baits and floating lines. A good spot in rough northerly weather and in evenings.

9. Bland Bay Islands

Two reefs here are visible in a swell. Snapper and kahawai with floating lines, pilchards and cut baits.

10. Moana-run

Floating lines for snapper - use skipjack, mullet, pilchards or piper baits.

11. Danger Rock (Mahinapau)

35-20.519 S 174-23.759 E or 35-20.650 S 174-23.583 E



It took fish like this fine specimen to win the annual Lions Easter Tournament.

Want to CATCH FISH?

GUARANTEED!

oOAKURA BAY FISH, DIVE & CRUISE & OAKURA HOLIDAY HOME

- ✓ all rods, bait, tackle etc. supplied
- ✓ individual tuition provided
- ✓ free photo with your catch
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Launching is done on hard sand at the northern end of Oakura beach. While a tractor is handy, it is not necessary.

These are the two main spots. First the northern edge: use a sinker to get a livebait to the bottom. The second, the southern edge: keep a live under a balloon. A word of warning, when fishing this area, use a 200-300lb trace, as 3-4 marlin are hooked here each season. Also very good spot to catch a feed of table fish with big schools of trevally, kahawai and maomao on the surface with snapper generally underneath.

12. Rocket Point (Okoako)

Close to deep water, will produce stunner and kingfish all year round. Good current flow and berley are a must. Also great spot for a feed of crayfish.

13. North Head and Cape Home

Rock fishing for snapper, kahawai and small kingfish. Floating lines and usual baits. Access is by boat or walking from Puriri Bay.

14. Henry Island (Motu Tara)

This spot is underrated. It consistently produces big snapper, trevally, tarakihi and the odd kingfish during or after easterly or northerly winds. Fish big baits - evening fishing can be very good.

15. Manaia's Dogs

A good area of foul. Rockfishing for big snapper, use large oily baits or whole pilchards - early morning or evening is best.

16. Black Rocks (Tokorarangl Reef)

Boat or shore fishing with floating lines for snapper, trevally, and kingies around the green navigational marker.

17. Puriri Bay - Picnic Bay - Rocky Bay.

Fish from the rocks on an outgoing tide for pan sized snapper with cut baits and floating lines. You may need to use sinkers with strong tidal flows. A good place to net piper.

18. Motukauri Island

Fish the last two hours of outgoing tide, use cut baits, expect pan-sized snapper and occasional kahawai - pipis available here at low tide.

19. Pumaruku

Mullet and flounder on the mudflats. Can be good fishing here after a fresh in Pumaruku stream.

20. Omanu - Motukowahi

Can fish well, as it is sheltered in stormy

weather, use cut baits for snapper - Tide flow is good around the red navigation marker.

21. Whitiakau

Can be fished from very small dinghies - good night fishing for jack mackerel live baits and pan sized snapper. Floating lines and small cut baits. A good area of current flow.

22. Rugged Point (Motu Kioere)

You'll get wet feet above half tide, but an easy place to fish for those rockhoppers who are less than fit. Occasional pan sized snapper, kahawai, Floating lines and cut baits. Best in evenings with an incoming tide.

23. Omahu

Can be fished from boat or shore. An area of shallow foul, use floating lines, pilchard or cut baits - night fishing is best. Some big snapper have been taken here. Can be good after rain at creek mouth.

24. Flat rock at Mokau.

Some very big snapper have been caught in this area both from boat or shore. Floating lines, usual baits. A good area for rock fishing. Access from the end of Rapata Rd.

25. Motukehua Islands

Boat fishing, floating lines, skipjack, mullet or pilchard baits. Can be dangerous if a swell is running as large waves often occur. Good piper fishing.

26. Wahitapu

This whole area can produce big snapper from boat or shore, floating baits of skipjack, mullet or pilchard. Rat kings are also often caught.

27. Tarakihi Bed

35-18-209S 174-24.174 E

Good spot to catch a feed of tankihi over winter. Use a Black Magic Tarakihi Terror laced with pipi for best results. Also good catches of snapper in winter and summer as well as the odd small hapuku.


28. Bland Bay Reefs

35-20.255S 174-22.577 E

Best fished after a storm. Use plenty of berley and fresh baits. Incoming tide, stray-line back into reef. Use no sinkers and anchor in 15 metres but you will be fishing in 5-10 metres.



Whangaruru - Oakura area map.



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Category	Line	Weight	Angler	Location
Snapper (Male)	80g	13.25kg	John Korman	Whangaruru NZ 35/04/00
	84g	3.02kg	Garry Mackay	Whangaruru NZ 14/11/01
	10kg	6.36kg	Phil Duff	Whangaruru NZ 14/11/01
Snapper (Female)	Line	Weight	Angler	Location
	10kg	9.52kg	Gaetano Li Day	Whangaruru NZ 23/04/99
Kahawai (Male)	Line	Weight	Angler	Location
	8kg	4.20kg	Steve Starling	Jerrie Bay Aust 01/06/91
Kahawai (Female)	Line	Weight	Angler	Location
	2kg	1.12kg	Louise Dryden	Cape Horn NZ 27/04/00
	3kg	1.96kg	John Pyler	Bay of Islands NZ 27/04/00
	4kg	2.19kg	Loren Gollins	Bay of Islands NZ 13/04/02
	8kg	2.18kg	Elizabeth Scott	Bay of Islands NZ 13/04/02
New Zealand & Event Records	Line	Weight	Angler	Location
	1kg	1.025kg	Maria Bodwin	Cape Horn NZ 12/04/02 EV
	2kg	2.325kg	Peter Jervis	Cape Horn NZ 07/04/00 EV
	3kg	2.430kg	Ted Hesselgrave	Cape Horn NZ 20/04/01 EV
	4kg	2.190kg	Bernett Medley	Cape Horn NZ 18/04/01 EV
	8kg	2.885kg	Graham Pyatt	Cape Horn NZ 20/04/01 NZ
Junior New Zealand Records	Line	Weight	Angler	Location
	8kg	1.205kg	Rudolf Turner	Cape Horn NZ 12/04/02 NZ
	Category	Line	Weight	Angler
Boths (Pacifier)	11kg	3.05kg	Sheryl Shepley	Cape Horn NZ 20/04/01
	Category	Line	Weight	Angler
Kingfish (Southern Yellowtail)	Line	Weight	Angler	Location
	10kg	2.14kg	Gavin Platt	Cape Horn NZ 20/04/01 EV
Other Species - New Zealand & Event Records	Line	Weight	Angler	Location
	3kg	790g	Ray Kramer	Cape Horn NZ 13/04/02 EV
	Trevally	Line	Weight	Angler
3kg	1.30kg	Tom Piper	Cape Horn NZ 13/04/01 NZ & EV	
8kg	1.73kg	John Pyler	Cape Horn NZ 20/04/01 NZ & EV	

* Record list compiled by John Gazon, New Zealand Angling Limited

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Appendix 9

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New Zealand
fishing News

Map Guide

2002 ANNUAL

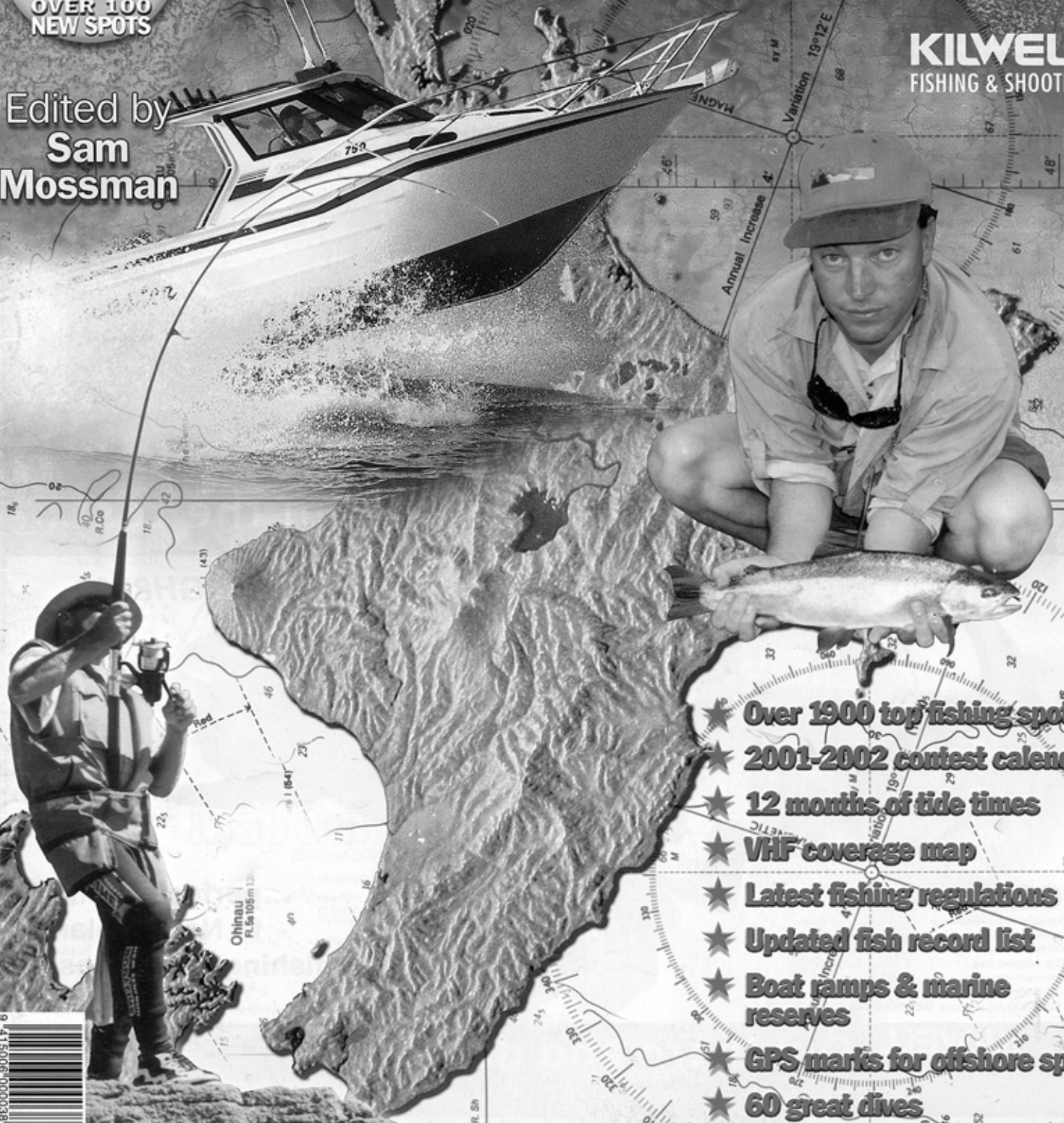
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8th
OVER 100
NEW SPOTS

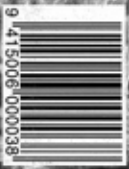
Covering the North Island & Nelson-Marlborough
Including trout, surf & boat fishing

Edited by
Sam Mossman

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- ★ 2001-2002 contest calendar
- ★ 12 months of tide times
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- ★ Updated fish record list
- ★ Boat ramps & marine reserves
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- ★ 60 great dives



Whangaruru - Oakura

To get to Whangaruru and Oakura, travel North from Whangarei on State Highway One. Turn right onto the road to Oakura at Whakapara 22 km from Whangarei. Oakura and Whangaruru Bay are at the end of 27 km of windy, mostly sealed road. Petrol, oil, basic fishing gear available at Oakura Store. The store owners will also give advice on land access (for rock fishers) and general fishing information.

There are public toilets, three camping areas and motels available. This area is very busy in summer. Small to medium boat launching off the beaches, Oakura beach can be soft after rain. The concrete ramp is often slippery at low tide and can be subject to swells at times.

The Northern headland and Bays access is from the Whangaruru North Rd. Continue past Oakura Bay turnoff until you reach Bland Bay intersection, turn right onto Whangaruru North Rd. This road is windy with a metal surface, there is camping at Bland and Puriri Bays and small boat launching on both sides of Bland Bay.

This whole area fishes well especially after a northerly or easterly blow. Evening and night fishing can be very productive, burley will improve your chances. Heavy gear is often necessary to land big snapper and kingis in shallow foul areas. Many snapper in excess of 10 kg are taken every year.

1. Motukowhai

Snapper and kahawai from boat or shore floating lines, use skipjack, mullet, pilchards or piper.

2.

Snapper, kahawai, tarakihi and kingis here. Can be dangerous at low tide with a swell running as big waves often occur. A boat was wrecked while fishing here in 1990. Use floating lines with usual baits for snapper and kahawai. Piper, poppers or live baits for kingfish. Pipi baits on a dropper rig for tarakihi.

3.

This area of steep cliffs can fish well especially from the rocks. Access is by a long walk from Bland Bay. Cliffs can be difficult to climb. Use floating lines and skipjack, pilchard, piper, or mullet baits. You'll catch trevally, kahawai, kingis and big snapper. This area can also be fished by boat.

4. Home Point

A good spot for big snapper, kahawai, and kingis. Access is by boat only. Use large floating baits. For kingies, add popper lures and live baits. Don't anchor too close to the rocks when a swell is running or when it's windy as this point can be quite rough and large unexpected waves often occur.

5. Cone Rock and Motukowhai

Keen walkers can rock fish here. There are big snapper, kahawai and blue maomao. Use floating lines and big baits of skipjack, mullet, pilchard, or piper. Light gear and small cut baits for maomao.

6.

Drifting a bait near the bottom offshore will often result in a good snapper.

7. Motukokowhai

Boat fishing for good snapper, kahawai, kingis and blue maomao.

8. Waione

Rock fishing for pan sized snapper. Use smaller cut baits and floating lines. A good spot in rough northerly weather and in evenings.

9. Bland Bay Islands

Snapper and kahawai with floating lines, pilchards and cut baits.

10. Moana-rua

Floating lines for snapper - use skipjack, mullet, pilchards or piper baits.

11. Danger Rock

A very popular spot and a good place to live bait for big kingfish. Marlin have been hooked here. Schools of trevally, kahawai and maomao frequent the area. Fish floating lines with cut or whole baits. You'll catch snapper, kahawai, trevally, and maomao.

12.

Boat fishing for big snapper. Use big baits and floating lines.

13. North Head and Cape Home

Rock fishing for snapper, kahawai and small kingfish. Floating lines and usual baits. Access is by boat or walking from Puriri Bay.

14. Henry Island

A good spot for big snapper during or after easterly or northerly winds. Fish big baits - evening fishing can be very good.

15. Pingao

Rockfishing for big snapper, use large oily baits or whole pilchards - early morning or evening is best.

16. Black Rocks

Boat or shore fishing with floating lines for snapper, trevally, small kingis.

17. Puriri Bay - Picnic Bay - Rocky Bay.

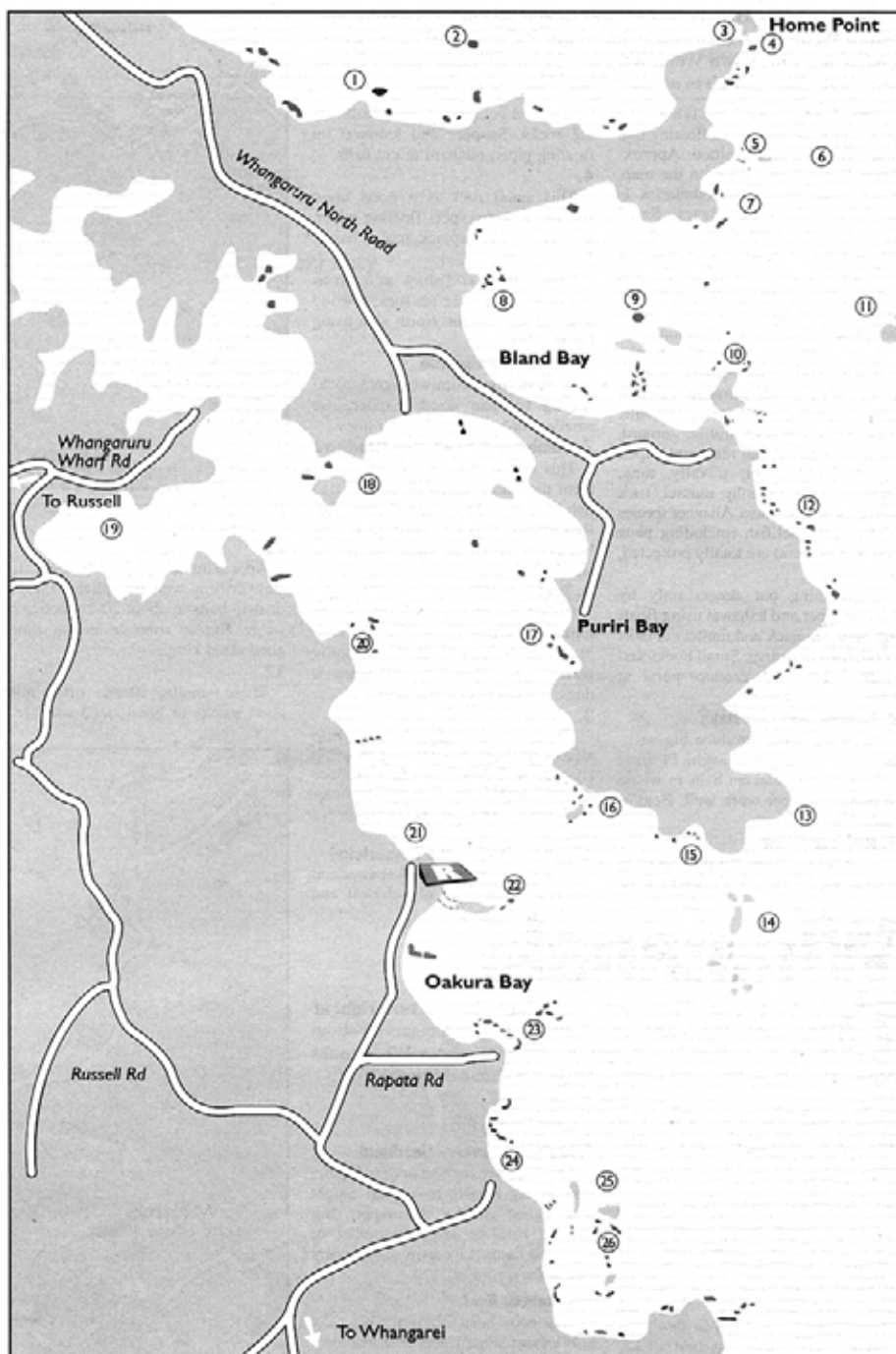
Fish from the rocks on an outgoing tide for pan sized snapper with cut baits and floating lines. You may need to use sinkers with strong tidal flows.

18. Motukauri Island

Fish the last two hours of outgoing tide, use cut baits, expect pan sized snapper and occasional kahawai - pipis available here at low tide.

19. Punaruku

Mullet and flounder.



20. Omanu - Motukowahi

Can fish well in stormy weather, use cut baits for snapper - incoming tide is best.

21.

Can be fished from very small dinghies - good night fishing for jack mackerel live baits and pan sized snapper. Floating lines and small cut baits.

22. Rugged Point

You'll get wet feet above half tide, but an easy place to fish for those less than fit. Occasional pan sized snapper,

kahawai. Floating lines and cut baits. Best in evenings with an incoming tide.

23. Omahu

Can be fished from boat or shore. An area of shallow foul, use floating lines, pilchard or cut baits - night fishing is best. Some big snapper have been taken here.

24. Flat rock at Mokau.

A NZ landbased 10 kg line class record snapper of 13.4 kg was caught here in 1990. Some very big snapper have been caught in this area both from boat or shore. Floating lines, usual baits.

25. Motukehua Islands

Boat fishing, floating lines, skipjack, mullet or pilchard baits. Can be dangerous if a swell is running as large waves often occur.

26. Wahitapu

This whole area can produce big snapper from boat or shore, floating baits of skipjack, mullet or pilchard. Rat kingis are also often caught.

NIWA Sea Surface Temperature Services
High Resolution, Cloud-cleared SST Data - updated daily
and available on the Internet: <http://www.sst.niwa.cri.nz>

NIWA

Taihoro Nukurangi

Mimiwhangata

Travel North from Whangarei on state highway one for 22 km - turn right onto the Oakura road, and follow this until you get to the Helena Bay turnoff (about 20 km). Turn right and follow Webb Road then onto Mimiwhangata Road and follow to the end. A few kms down Webb Rd you will have passed Footes Rd on your left, this road gives access to spot No.3 on the map.

The Mimiwhangata area is a marine park. Only fishing with a floating line and one hook is permitted. Approximate bounds are shown on the map. More information on boundaries is available at Mimiwhangata. Small boats can be launched on the beach, but as there is no vehicle access you will need to carry your boat the last few hundred metres. Nearest shop and fuel is at Oakura. Bigger boats launched at Oakura or Whananaki.

It is permitted to take only the following species of fish and shellfish from inside the park: barracouta, all billfish, blue maomao, flounder and sole, grey and yellow-eye mullet, gurnard, kahawai, kingfish, all mackerel, piper, all sharks, snapper, trevally, tuna, common kina, greenlip mussel, rock lobster, scallops, tuatua. All other species of fish and shellfish (including paua and rock oysters) are totally protected.

1. Rockfishing but access only by boat, snapper and kahawai using floating lines, skipjack and mullet cut baits or pilchard and piper. Small hooks and shellfish baits will produce porae at times.

2. Helena and Teal Bays
These bays can produce big snapper, kahawai are often caught. Floating lines with the usual cut baits or whole pilchards or piper work well. Boat or rock fishing.

3. Reserve Point
Access off Footes Rd then walking across reserve land. This point can be

jack mackerel, poppers and piper for those big kingies.

4. This small rock is a good night fishing snapper spot, floating piper, pilchard or cut skipjack, mullet baits.

5. This rock should show as a lift as the swells pass over the rock. A good snapper spot on the North side using big floating baits.

6. Point at Waikahoa
Walk in from Mimiwhangata, rock-fishing for pan sized snapper, use smaller cut baits and floating lines.

7. Mimiwhangata Reserve Headland
This whole headland is best fished from the rocks, although boats can fish here also. Medium to large baits. Remember floating lines and one hook only in this reserve. Expect good sized snapper and kahawai.

8. Taukawa Point
Rock fishermen use big skipjack or mullet floating baits, or whole pilchards or piper. This spot only fishes well sometimes but when it does, it produces big snapper.

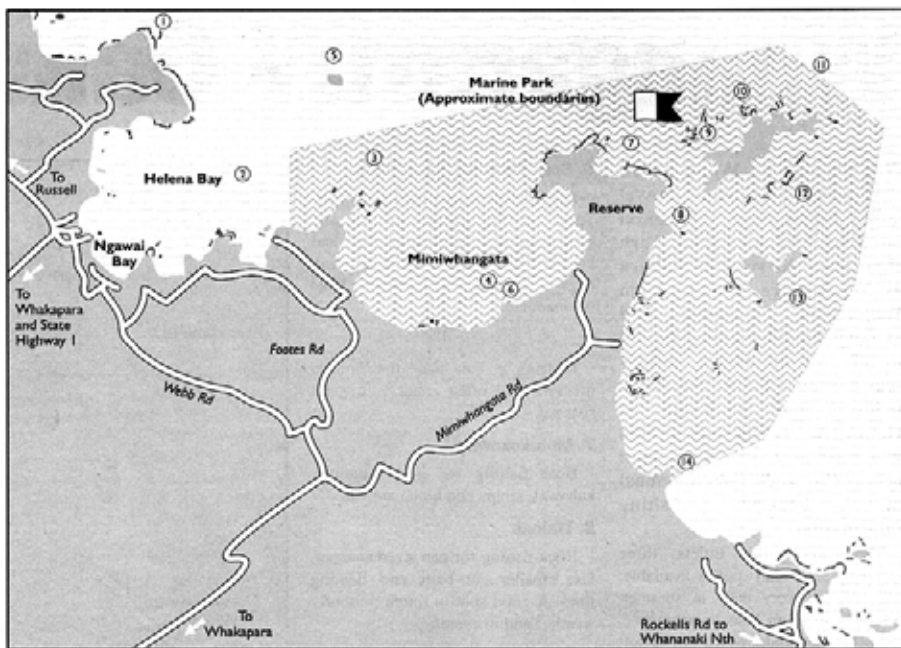
9. There is a lot of rocks and kelp areas here, this general area is a top snapper spot which can also produce kahawai and kingies - usual baits, floating lines. Live baits and poppers for kingies.

10. Rimariki Islands (Limericks)
Very good for snapper, kahawai and kingfish. Live baits of kahawai and

the usual floating baits.

11. Approximately 500 metres out, try slow drifting weighted pilchard, piper or strip baits in about 20-28 metres of water. Expect snapper and at times good sized kingies.

12. These smaller islands often hold good stocks of good sized snapper -



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Mimiwhangata Peninsula.
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Whananaki

Drive North from Whangarei on state highway one, turn right at Whananaki North Rd turn-off, 20 km from Whangarei. Follow this road (which is half seal and half metal) to Whananaki North (there is limited access and fishing at Whananaki South).

Petrol, oil, bait, basic fishing gear and fishing advice is available at the local store. Note also that much of the rockfishing is done through private land so you MUST have permission. See the store owners for help in this regard.

The Whananaki bar requires caution in a big swell but is usually very safe, although a little shallow at low tide. Southwest winds result in calm seas and clear conditions, ideal for divers and there are plenty of crays in this area. Fishing is generally at its best after a good northerly or easterly blow. For boats, burley is very important. Some monster snapper are caught here every year. Several years ago a huge fish of 17.9 kg was taken in close. Sprats, mullet and flounder are in the river.

1. Four Islets
Boat or shore fishing. Good snapper, kahawai using floating lines with skipjack, mullet, pilchards and piper. Using small boats to land on the islets can result in good catches.

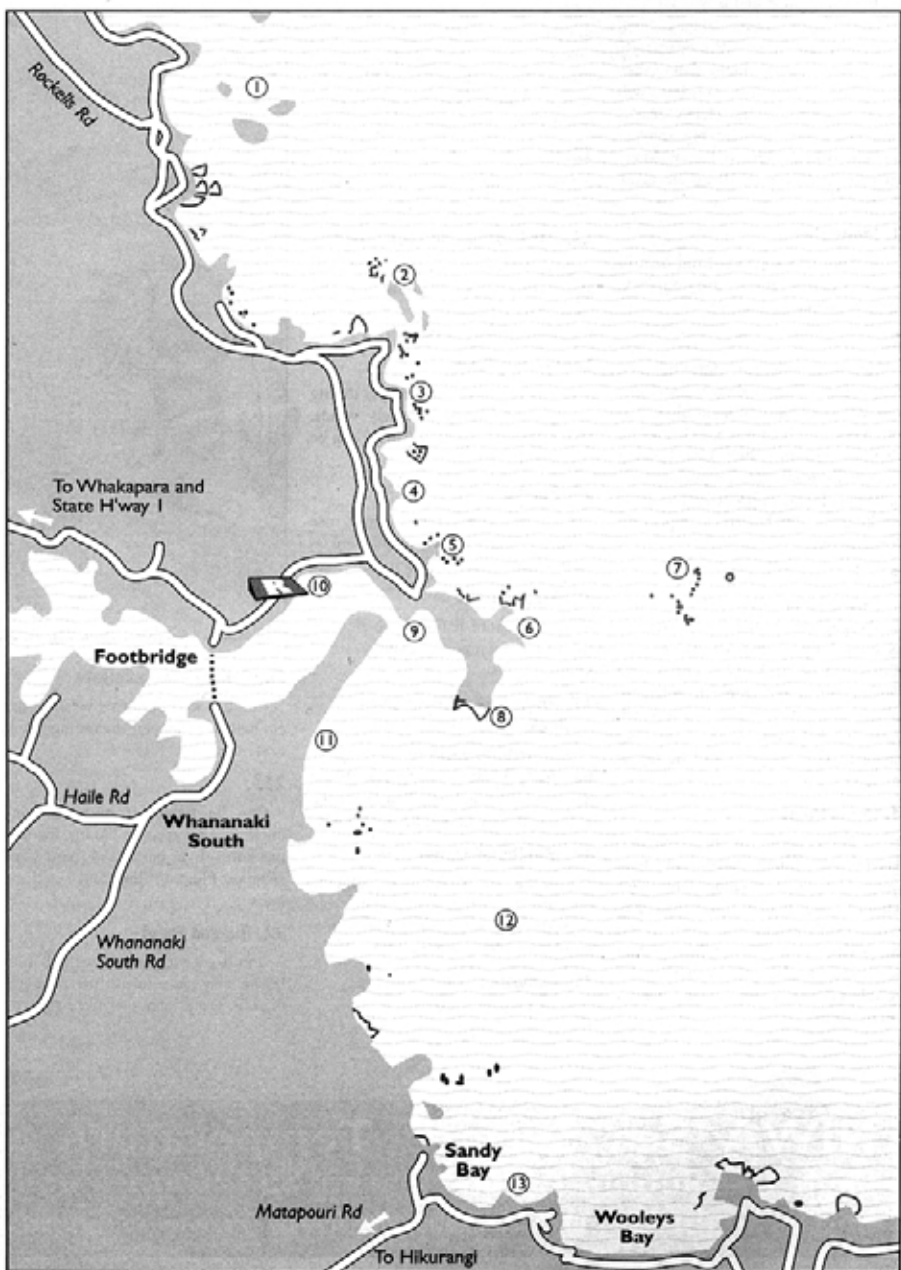
2. Motutohe Island
Fishes well after a blow, snapper and kahawai and occasionally kingies take floating lines with usual baits.

3. Access for rockfishing through private land, enquire at shop for permission. Use usual floating lines and baits. Expect pan sized snapper and kahawai. This area can also be fished by boat.

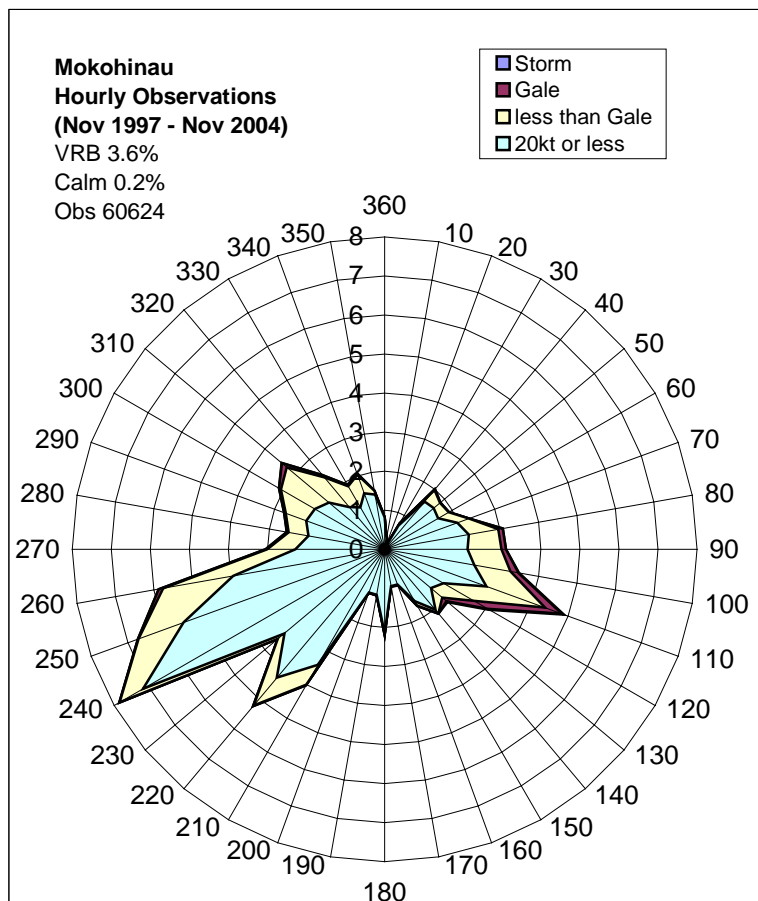
4. Access with permission through camping ground. Snapper and kahawai on the usual floating baits - some big snapper have been caught off the beach at night.

5. Good for crayfish.

6. Motutara reserve Headland
Another place for boat or rock fishing. Lots of big kingies have been caught here - good also for big snapper. Big floating baits of skipjack, mullet or piper, pilchards. Live baits and poppers for kingies.



Appendix 10



Gale is 34 knots or more, Storm is 47 knots or more.
Percentage frequency of winds by wind speed range and direction (degrees True).
The wind direction is the direction that the wind is blowing from.

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Direction	Frequency (all speeds)	20kt or less	less than Gale	Gale	Storm
360	0.82	0.82	0.00	0.00	0.00
10	0.27	0.26	0.00	0.00	0.01
20	0.09	0.09	0.00	0.00	0.00
30	0.77	0.70	0.07	0.00	0.00
40	2.01	1.60	0.39	0.02	0.00
50	1.86	1.64	0.21	0.01	0.00
60	1.90	1.58	0.31	0.01	0.00
70	2.31	1.98	0.32	0.01	0.00
80	3.07	2.19	0.77	0.12	0.00
90	3.11	2.12	0.87	0.11	0.00
100	3.49	2.33	0.95	0.20	0.02
110	4.88	2.77	1.60	0.46	0.05
120	3.09	1.73	0.91	0.41	0.04
130	2.09	1.55	0.38	0.14	0.03
140	2.15	2.02	0.12	0.01	0.00
150	1.67	1.54	0.13	0.00	0.00
160	0.97	0.96	0.02	0.00	0.00
170	0.96	0.96	0.00	0.00	0.00
180	2.19	2.15	0.05	0.00	0.00
190	1.20	1.18	0.02	0.00	0.00
200	1.19	1.18	0.01	0.00	0.00
210	4.02	3.42	0.59	0.01	0.00
220	5.24	4.29	0.93	0.02	0.00
230	3.57	3.35	0.22	0.00	0.00
240	7.85	7.15	0.69	0.01	0.00
250	6.73	5.48	1.23	0.02	0.00
260	5.88	3.93	1.83	0.11	0.00
270	3.05	2.28	0.72	0.04	0.00
280	2.55	1.98	0.51	0.05	0.00
290	2.74	2.14	0.56	0.04	0.00
300	3.12	2.07	1.00	0.06	0.00
310	3.44	1.86	1.41	0.17	0.00
320	2.48	1.41	1.00	0.07	0.00
330	1.91	1.24	0.63	0.04	0.00
340	2.07	1.52	0.51	0.03	0.00
350	1.53	1.43	0.09	0.01	0.00
VRB	3.56				
Calm	0.18				

Appendix 11

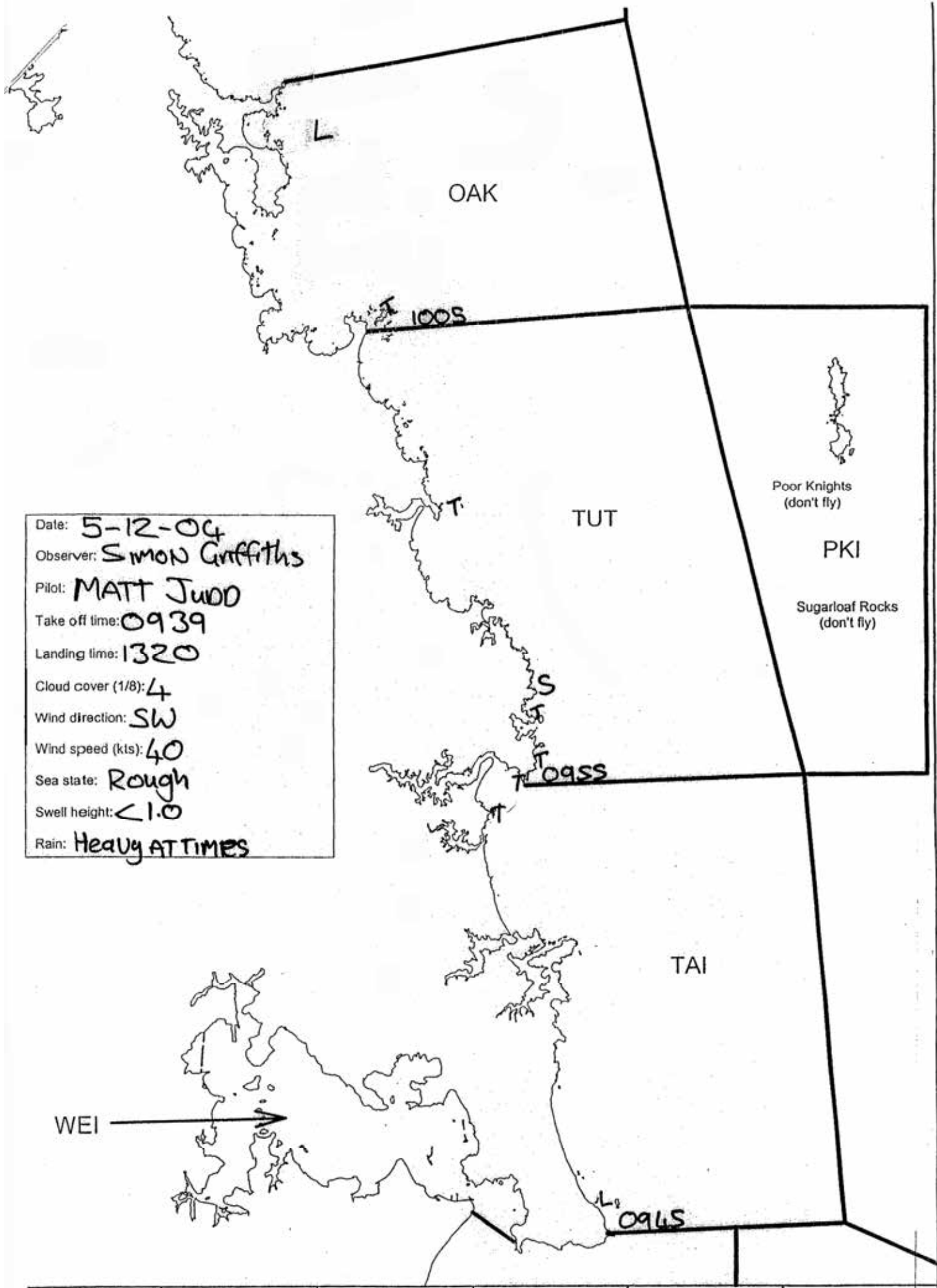
Mimiwhangata marine reserve proposal

Appendix 11 - The % of marine area covered by Options 1 and 2 in relation to 3 larger areas (out to 12 nautical miles).

	Hectares	% Option 1	% Option 2
Cape Brett to Bream Head	375,717	1.93%	2.99%
North Cape to Cape Rodney	1,330,000	0.55%	0.84%
NZ territorial waters	16,400,000	0.04%	0.07%
Mimiwhangata Option 1	7,250		
Mimiwhangata Option 2	11,220		

Coastal waters out to 12 nautical miles (nm)

Appendix 12



Date: 5-12-04
 Observer: SIMON Griffiths
 Pilot: MATT JUDD
 Take off time: 0939
 Landing time: 1320
 Cloud cover (1/8): 4
 Wind direction: SW
 Wind speed (kts): 40
 Sea state: Rough
 Swell height: <1.0
 Rain: Heavy AT TIMES

WEI →

Appendix 13

Appendix 13 - NIWA survey of recreational fishing areas (5.12.04 to 23.4.05)

No of boats observed fishing during aerial surveys

Sum of Totals	
Area	Total
Black Rocks	681
Bream Bay	905
Cape Brett	313
Cavalli Islands	285
Great Exhibition Bay	20
GRV	99
Hen and Chicks	450
Houhora harbour	47
Karikari Peninsula	461
Kerikeri	174
Little Barrier Island	550
Mangonui	388
Mokohinaus	243
North Cape	27
Oakura	272
Pakiri	114
Parengarenga	31
Rangaunu harbour	234
Rawhiti	786
Russell	171
Taiharuru	331
Takou Bay	137
Taupo Bay	224
Tutukaka	231
Whangarei harbour	764
Whangaroa harbour	203
Grand Total	8141

Appendix 14

Mimiwhangata Marine Reserve Proposal

Appendix 14 - Commercial fishers and interest organisations the Discussion Document was posted to

individual / organisation name

1. Commercial fishers and interest organisations
2. Ministry of Fisheries

organisations

Leigh Commercial Fisherman Association

commercial fisher

commercial fisher

commercial fisher

commercial fisher

commercial fisher

commercial fisher

commercial fisher

commercial fisher

commercial fisher

commercial fisher

commercial fisher

NZ Aquaculture Council

NZ Marine Farming Association

NZ Federation of Commercial Fishermen (Inc.)

NZ Sea Food industry Council (SeaFIC)

New Zealand Fishing Industry Board

Northern Inshore Fisheries Co Ltd

Northern Inshore Fisheries Co Ltd

Moana Pacific (trawl and long line)

Pagrus Auratus Co Ltd

Rock Lobster Industry Council

Sanfords Ltd

Siminovich Fisheries

commercial fisher

commercial fisher

Tuna New Zealand

Te Ohu Kai Moana

2. Ministry of Fisheries

Fishserve

MinFish in Whangarei

MinFish in Auckland

MinFish Head Office

MinFish Head Office

Appendix 15

Leigh Commercial Fishermen's Association Inc.

PO Box 158, Leigh

PH 09 422 7918

Fax 09 422 7918

Email: lcfa@wave.co.nz

10 October 2004

Mimiwhangata Discussion Document
Department of Conservation
Northland Conservancy
PO Box 842
Whangarei

00557

RE: Mimiwhangata Marine Reserve Proposal

Leigh Commercial Fishermen's Association Incorporated (LCFA) strongly opposes any Proposed Marine Reserve put in place at Mimiwhangata.

LCFA represents 45 members, many who would be directly affected by the proposed Marine Reserve (both option one and option two), as it will deny them access to their traditional fishing grounds. This will cause hardship to the fishers and their families thus affecting small communities along the north-east coast of New Zealand.

In 1986, the Individual Transferable Quota Management System was implemented, with the majority of fishers in favour, realizing that there had to be some way to sustainably manage the industry. The fishers were told that there would be no more area closures if the ITQ management system was implemented. This has never been realized, as over the subsequent years, many inshore areas have been closed to commercial fishing.

We have areas of seasonal closures such as in the Hauraki Gulf and Bay of Islands. There is already a network of "No Take" areas up and down the north-east coast of NZ coastal waters. There are Marine Reserves at the Poor Knights and Leigh (Goat Island). Tawharanui is a "No Take" Marine Park and Mimiwhangata Marine Park has been closed to commercial fishers since 1993. Just 70 km south of the Mimiwhangata Marine Reserve Proposal is the Proposal for a Marine Reserve covering 50,100 ha at the north east- coast of Great Barrier Island (Aotea). The cable/shipping zones prohibit anchoring or fishing and covers an area of 87,370 ha from the edge of the territorial waters to the coast. When will it stop? With every area closure we sadly see more fishers that cannot make a viable living and thus are forced out of the fishing industry.

By closing off an area the size of the proposed Marine Reserve the fishermen that use it will have to find other places to fish. Every time an area is closed to fishing, it puts more pressure on other areas, as fishermen shut out of one area have to move into areas that others are already fishing in. This puts pressure and damages the fish stocks in that area. You still have the same number of fishermen, but using a smaller area.

LCFA does not support any more Marine Reserves being introduced at this time and therefore strongly objects to an arbitrary goal of 10% of the EEZ being protected in the

absence of a more rational approach to protection that might be developed in the Ocean's Policy and the Marine Protected Areas strategy.

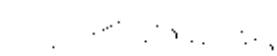
LCFA would want an evaluation of all closed areas to commercial fishing inclusive of Marine Reserves and areas such as the cable/ shipping and navy zones already in existence. There needs to be an overall plan presented when the Ocean's Policy and Marine Protected Areas Strategies are completed and there can be a long-term plan put in place instead of the ad hoc methods now being used.

What is the purpose of this marine reserve proposal? Is it for increasing and maintaining fish stocks, as stated many times in the proposal booklet? The Quota Management System is in place for that purpose and is one tool among many that the Ministry of Fisheries is able to implement to sustain fish stocks. Fishing and fishing related impacts are already managed under the Fisheries Act. Why does the DoC seek to duplicate what the fisheries legislation already provides for? A "No Take" reserve does not on its own deliver the appropriate tool to protect biodiversity in the proposed area. There are many other threats, such as pollution from the land, just to name one.

It is our understanding that the purpose of the Marine Reserves Act is not for "Restoration" but to protect what is already there.

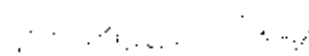
In summary LCFA strongly opposes any proposed Marine Reserve that may be established at Mimiwhangata. A marine reserve will impact on fishers by denying them access to traditional fishing grounds and thus denying them their resource rights inherent under the Quota Management System. Rather than the ad hoc and opportunist methods that the DoC is using, perhaps it should focus on completion of policies and strategic frameworks for protected areas before pushing more marine reserves at us.

Yours sincerely



Cindy Bailey (Secretary)

53 PT Wells Rd
RD 6, Warkworth



Gavin Perry (President)

29 Torca Rd
PO Box 121, Matakana

Appendix 16



12 October 2004

Mimiwhangata Consultation
Department of Conservation
Northland Conservancy
PO Box 842
Whangarei

Mimiwhangata: Community Discussion Document

Introduction

The Northern Inshore Fisheries Company Ltd (TNIFCL) represents the rights and interests of quota holders in inshore fin fishstocks in Fishery Management Areas 1 and 9, as shareholders in the Company. As such TNIFCL represents the interests of Corporate fishing companies, individual fishers and Te Ohu Kai Moana. TNIFCL provides coordination, advisory and advocacy service for the shareholders. Our shareholders collectively represent around 80% of the quota holding in the inshore commercial fishery for FMA s 1 and 9

You will be aware that our interest in marine reserves is significant as major rights holders and users of resources in the marine environment. Secure rights of access to the marine environment underpin the industry's contribution to the nation and are fundamental to protecting the integrity of New Zealand's fisheries management regime. TNIFCL fully support sustainable utilisation practices which do not have an adverse effect on biodiversity across the marine environment.

As marine reserves can have significant economic and social impacts on sustainable extractive uses, we are interested in ensuring marine reserves are established only where analysis demonstrates that:

- a marine reserve is the best management tool for achieving the identified protection objectives; and
- the benefits of having a marine reserve outweigh the costs, and any costs one existing uses and values can be avoided, remedied or mitigated.

TNIFCL will not be responding to the specific questions in your questionnaire. Instead we take the opportunity to comment on the discussion document and provide an indication of the type

of information and analysis we would expect to be included in a formal application for a marine reserve at Mimiwhangata should it be decided to pursue such a course.

General comments on the discussion document

TNIFCL consider that *Mimiwhangata Community Discussion Document* is a misleading document that fails to provide readers with the necessary information or analysis to make an informed judgment on the merit and justification of the proposed reserve. It fails to adequately demonstrate that the public interest can only be served by a marine reserve. Standard concepts fundamental to the protection of marine biodiversity and misrepresented and misused in support of the creation of a reserve (see below for more detailed comments). The discussion document proposes to exclude fishing from a large area because of its perceived impacts on ecological values, but neither the ecological values of the area nor the alleged fishing impacts are properly addressed or described.

TNIFCL understand that this document is only a discussion paper and that a formal marine reserve application may be developed at a later stage. However, this discussion document is still part of a community consultation process and should provide sufficient and relevant information to inform the public of the problem, the objectives, the management options and the proposed management tool. It is of particular concern to TNIFCL that ill-informed comments, emotive statements and unsupported assertions of benefit in the discussion document maybe used to both sway public opinion and in developing the formal marine reserve application by the Department of Conservation

Absence of a coherent problem definition for the proposed marine reserve area and a clear and balanced evaluation of the management options to indicate that a marine reserve is the optimal tool?

This document uses the marine reserve argument as an end in itself rather than presenting a considered approach to biodiversity options. This consultation document is entirely predicated on the inevitability of a marine reserve at Mimiwhangata. Without testing the assumption of the cause in some controlled manner, and analysis of the extractive use of the area, it would appear that DoC has no justification in proposing the application of a blunt instrument like a marine reserve over an increased area to meet the single objective of "*protecting the area in as natural state as possible for study and enjoyment of the Community.*" (p12) . TNIFCL contend that this objective is too generic to be of any relevance. These generic goals at the very least need to be translated into clear objectives at the local level, based on an analysis of the ecological values that require protection and assessment of any threats they may be under.

The lack of clarity as to why the proposed area should be absolutely protected is a major failing of the application. No evidence is presented that indicates that all the habitats for scientific study are currently threatened. DOC have failed to produce a coherent problem definition for the proposed marine reserve against which management options can be evaluated. Sources of human risk to habitats that need to be managed are not identified and no case for full protection of this area from all sources of controllable risk is made. The entire tenor of this application is based on the premise of the outcome of a marine reserve. TNIFCL submit that their remains substantial work to be done by the applicant to build a professional case for a marine reserve application

There are clearly some management problems at Mimiwhangata if the evidence supports the statement that the ecological values in the Marine Park have not improved (and in some cases got worse) over the twenty years since commercial fishing was banned and recreational fishing restricted. The discussion document does not make much of an attempt to unravel what might be really happening as it is focused on advocating a particular tool rather than seriously addressing the management issues.

TNIFCL believe that a more consideration needs to be given as to the factors that might help explain the current situation

- Maybe commercial fishing was not the main cause of the degradation observed prior to the establishment of a marine park? Or perhaps this indicates that without additional management closing an area to commercial fishing has no significant impact on ecological values in an area like Mimiwhagata?
- There has clearly been a lack of enforcement with compliance with the fishing regulations in the park. The document surmises that recreational fishing pressure has increased in the park to levels and impacts in excess of the banished fishing pressure.
- It is possible that non- fishing related threats have always been and continue to be a significant cause of ecological degradation in the park and could not be addresses by a marine reserve declaration.

From the material presented it is not possible to conclude that making the area a marine reserve will effectively address the range of potential management problems. A more sensible management response at this stage would be to take a closer look at defining what the problems and risks to biodiversity really are.

The report fails to presents any analysis of the impacts of fishing on the habitats in the proposed reserve and the type of method deployed or species taken, including spatial and temporal patterns of fishing and different extractive groups (customary, recreational, commercial). The consultation document refers repeatedly to pressures of fishing in the 1950s and 1970's (anecdotal evidence). What has been the changes in patterns of fishing since the 1970s. It is disappointing and misleading that no reference is made to the introduction of the QMS and the resultant shifts in fishing effort. It is difficult therefore to assess whether a blunt instrument like a marine reserve is required for the entire area proposed.

While the Marine Reserves Act contains no explicit requirement to consider alternative management approaches it is clearly the government's policy to do so. The document refers to the New Zealand biodiversity Strategy. The strategy sets out an objective to "achieve a target of protecting 10% of New Zealand's environment by 2010 in view of establishing a network or representative marine areas. The Biodiversity Strategy makes it clear that this objective is to be achieved through a range of mechanisms, not just marine reserves. At the New Zealand Recreational Fishers Conference in Whangarei July 2004 the officials from the Ministry of Fisheries and Department of Conservation reported that they were making progress on the development of standards and processes for evaluating the most appropriate protection mechanism to apply in given circumstances. Surely this application should be considered under this framework to test the requirement for a marine reserve rather than alternative management options?

The applicant uses the marine reserve argument as an end in itself rather than presenting a considered approach to biodiversity options. There are a range of mechanisms that contribute to protecting marine biodiversity from human activities. Each mechanism differs in the type of risk it is designed to manage, the level of protection afforded and costs (monetary and non monetary) and balances associated with the exclusion of activities targeted for control. Marine reserves provide a high level of protection but at a very high loss of utility cost.

Once the problems and risks are identified a staged approach to testing the assumption would be reasonable. The document attributes the failure of the Marine Park to regenerate fishstocks to "continued recreational fishing". Given that this is DoC's assessment of the cause surely the first option should be to police the recreational fishing more rigorously within the Marine Park rather than shutting the area to fishing altogether. The next stage after a suitable period of study, should no improvement be seen, should be to test the effect of no fishing, or further restrictions on fishing within the marine park through fishing regulations.

Given that the Act requires a balance between marine reserves and interference with other use TNIFCL would expect to see there be a presentation of the management options and the selection of the optimal mechanism i.e the lowest cost intervention to existing users to achieve the management objective, consistent with good regulatory practice.

Design and purpose of the questionnaire

TNIFCL have not responded to the questionnaire. In the view of TNIFCL it is unduly narrow in focus. The questionnaire distributed by DoC places the burden on respondents of a commitment to a marine reserve. In the absence of confirmed boundaries how can respondents comment on use of an area and undue interference that might arise. In our view it would be inappropriate of DoC to utilise the preferences indicated by respondents to construct a marine reserve application. The Marine Reserves Act must be the guiding reference in the development of any proposal.

Boundary selection

The boundaries of the marine reserve proposal are not very well justified in the discussion document. The discussion document does not describe how the area described was selected nor the criteria for site selection. If only ecological criteria (rather than the implicit consideration given to social-economic benefits) were used would the boundaries look different and how?

The application indicates the survey work done in the proposed marine reserve but fails to state what evaluation was done of other areas to establish this as a best or preferred site either nationally or even within the region. No analysis is presented as to which habitats are presently protected and represented in other marine reserves (existing and proposed) or protected areas (e.g. the cable zone and naval testing site) to justify why additional or further protection is warranted or necessary. In the absence of such information it appears that the reserve site has been selected in an opportunistic manner. This goes against international trends aiming at developing national networks of representative marine reserves.

In the absence of clear risk analysis on a spatial basis it is hard to decide what the best approach would be to boundary selection. No take areas should only be implemented as a last resort. Given that DoC have failed to identify the levels of threat to the various ecological value

classification and their importance to scientific study it maybe that the boundary options presented are not appropriate.

Focus on Marine Reserves as being good for compliance

Lack of compliance with the existing management measures for the Marine Park appears to be used as part of the justification of having a marine reserve. The argument being that a marine reserve is easier to understand than fishing regulations! TNIFCL believe that compliance and enforcement should be an irrelevant consideration when it comes to choosing the best management option. Management measures are developed (based on the risks that need to be managed, the objectives, and costs of potential measures) and then compliance regimes should be designed (and implemented) to enforce the chosen measures. The fact that compliance at Mimiwhangata has been poor doesn't mean that new management measures are needed rather that better compliance and enforcement activity around existing measures is needed.

Misleading and statements about the benefits of marine reserves

The main thing a marine reserve excludes is fishing. The evidence of fishing-related impacts us not strong. Several times the discussion document mentions historic levels of commercial fishing (all anecdotal) in the 1950s and 1970s. It gives a misleading impression of sources of risk.

Information on impacts of the remaining recreational fishing activity in the park is also not clear and potentially misleading for instance:

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Appendix 17



THE PAGRUS AURATUS COMPANY LTD

12 October 2004

Mimiwhangata Consultation
Department of Conservation
Northland Conservancy
PO Box 842
Whangarei

Mimiwhangata: Community Discussion Document

Introduction

The Pagrus Auratus Company Ltd (TPACL) represents the rights and interests of quota holders in snapper stocks in Fishery Management Areas 1, as shareholders in the Company. As such TPACL represents the interests of Corporate fishing companies, individual fishers and Te Ohu Kai Moana. TPACL provides coordination, advisory and advocacy service for the shareholders. Our shareholders collectively represent around 90% of the quota holding in the commercial snapper fishery for FMA 1.

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For example:

- Gorgonians and sponges can often be found in the deep reefs (p3) - there are no bottom fishing techniques allowed in the marine park and no evidence to demonstrate

that these environments/species are affected by bottom trawling outside the park, so it is hard to see how they will benefit from additional protection.

- Aggregation of goatfish near a reef (p15)– In the document DoC states that scientific studies show little change in the abundance of reef fish. A comprehensive list of reef fish species are protected under existing commercial regulations that prohibit their sale giving them existing protection
- Subtropical fish are going to remain rare in NZ habitats regardless of the level of protection – rare subtropical red-lined bubble shell (p3), young tropical surgeon fish (p3).

The discussion document confuses the reader by presenting marine reserves as fishery management tools. We refer DoC to the SeaFIC submission on the Great Barrier Island discussion document (June 2003) outlining industries views on this matter.

Lack of appropriate consideration to the legislation?

The consultation document appears to avoid the main requirement of the Marine Reserves Act in that they are established for the purpose of scientific study. This point appears to have been almost entirely overlooked or deliberately omitted in the community discussion document ("What are Marine Reserves? p 13).

Almost the entire premise of the consultation document is that the purpose of the marine reserve is the creation/restoration of a vanished marine world. The statutory power to propose and declare a marine reserve requires that the relevant area "contains" marine life that is distinctive/typical/unique/beautiful etc (S3(1)). The discussion document makes no claim that this area "contains" such life. It is central to the discussion document that the area once held such life but as since been denuded of it. It is *ultra vires* DoC's powers to propose or declare a marine reserve in the hope or expectation that an area will regenerate.

Doc has called for submissions from persons "affected" by the creation of the marine reserve, by which seems to mean locals and users of the area. The focus of DoC's consultation on local communities is not appropriate. It must consider all public interest. The view of TPACL it is not only local communities that are affected by marine reserve declarations but all amateur fishermen and all relevant ACE and permit holders who have the legislative right to fish anywhere within FMA 1 subject to existing fisheries regulations.

TPACL at this time registers its concern that despite requesting to be informed of all public meetings it has yet to receive a single notification of any public meeting of interested parties.

Summary

TPACL recommends that DoC re-evaluate their intentions in the context of the Marine Reserves Act 1971 and the New Zealand Biodiversity Strategy and then present a proper proposal for the consideration of the public.

Yours sincerely

Kate Bartram
Executive Officer

Appendix 18

4 August 2005

Kate Bartram
Executive Officer
Northern Inshore Fisheries Co Ltd and Pagrus Auratus Co Ltd
Private Bag 24 901
WELLINGTON

our ref: PAS 01-06

Mimiwhangata Marine Reserve proposal – Request to meet

Dear Ms Bartram,

As discussed and outlined in my e-mail to you dated 22.7.05, we would like to meet with a representative(s) from Northern Inshore Fisheries Co Ltd, Pagrus Auratus Co Ltd; and any commercial fishers that your organisations represent and you believe may be affected by the proposed marine reserve at Mimiwhangata.

As requested by you the issues that DOC would like to discuss with your companies and commercial fishers who may be affected by the proposed marine reserve include:

- How many commercial fishers are operating within the proposed marine reserve areas (see option 1 and option 2 - document entitled - *Marine Reserve Proposal - Mimiwhangata: Community Discussion Document*) as opposed to operating outside of the areas.
- How much effort (fishing days) were spent fishing within the aforementioned areas by those commercial fishers (between 1 October 2001 to 30 September 2004).
- How much effort (fishing days) were spent fishing outside of the aforementioned areas over the same period by those fishers.
- What species and quantities of fish are caught within the aforementioned areas over the same period.
- What species and quantities of fish are caught outside of the aforementioned areas over the same period.
- What fishing methods are used to catch those fish (both within and outside of the aforementioned areas).
- What other effects would the proposed marine reserve have on commercial fishing activities.

As also discussed if you would like to identify other agenda items you wish to discuss at our meeting, please forward to me as soon as possible. As we have not scheduled a meeting for the 1st or 2nd week of August 2005 we ask that we could meet within the 2nd or 3rd week of August 2005.

Please note that this meeting is without prejudice and it's intent is to gather further information and follow up on earlier consultation with your organisations and commercial fishers that you represent.

If you have any queries please do not hesitate to contact me directly

Alan Fleming
Marine Protection Ranger
WHANGARAEI AREA OFFICE

c.c. Bruce Young (Chairman – Pagrus Auratus Co Ltd)

Appendix 19

28 July 2005

Alan Fleming
Department of Conservation
P.O Box 134
The Strand
RUSSELL

Dear Mr Fleming

Mimiwhangata Marine Reserve Proposal

Thank you for your email regarding a proposed meeting with the Department of Conservation to discuss the Mimiwhangata Marine Proposal. I apologise for the delay in response but I have been incapacitated with a recent bout of sickness.

During our telephone conversation on 17th July 2005, Northern Inshore raised concerns that DoC appeared to be moving ahead with the preparation of a marine reserve application based on an extension of the existing marine park without listening to or addressing the substantive concerns raised by the commercial fishing industry relating to a range of issues including:

- Failure to provide the necessary information or analysis to make an informed judgement on the merit and justification of the proposed reserve
- Absence of a coherent problem definition for the proposed marine reserve area and a clear and balanced evaluation of the management options to indicate that a marine reserve is the optimal tool
- Fit with biodiversity strategy and the MPA policy and processes
- Absence of analysis to define boundaries based on ecological criteria and risk analysis on a spatial basis related to levels of threat to ecological values at a regional scale
- Lack of appropriate consideration to the legislation

If, after following due process within the MPA framework, DoC identify the marine reserve as the best management tool for achieving the identified protection objectives then a marine reserve application must stand on its merit within the legislative framework. The application for an area must be for the purpose of preserving, as a marine reserve for the scientific study of marine life, areas of New Zealand that contain underwater scenery, natural features, or marine life, of such distinctive quality, or so typical, or unique that their continued preservation in the national interest.

Northern Inshore believe that consultation with DoC at this stage is premature until they produce a further public consultation document addressing earlier concerns fully, or an application which clearly sets out the justification for any marine reserve and boundaries for such an area. At that stage the commercial fishing sector will be better able to engage constructively to consider how the proposed Marine Reserve may interfere with commercial fishing.

We look forward to engaging when you have made more progress with your application.

Yours sincerely,

Kate Bartram
Executive Officer

Appendix 20



Trawl, Catch, Effort and Processing Return

To be completed on each day at sea 1723154

Date / /	Vessel's registration number (your vessel)	Vessel name (your vessel)
	Vessel registration number of other vessel (if pair fishing)	

Position at midday (noon)			Water temperature at shot 1		Page
Latitude	Longitude	E/W	Surface	Bottom	of
	S				

Shot	Time	Latitude		Longitude			Gear code Headline height	Depth groundrope Depth bottom	Trawling speed	Target species	Estimated catch by species in order of quantity					
		Deg	Min	Deg	Min	E/W					Quantity	Species code Quantity (kg)	Species code Quantity (kg)	Species code Quantity (kg)	Species code Quantity (kg)	Species code Quantity (kg)
1	START			S							Total (kg)					
	END			S												
2	START			S							Total (kg)					
	END			S												
3	START			S							Total (kg)					
	END			S												
4	START			S							Total (kg)					
	END			S												
5	START			S							Total (kg)					
	END			S												
6	START			S							Total (kg)					
	END			S												

Daily Processing Summary

Species	Processed state	Number of processed units	Unit weight (kg)	Processed catch weight (kg)	Conversion factor	Calculated weight before processing (kg)	Species	Processed state	Number of processed units	Unit weight (kg)	Processed catch weight (kg)	Conversion factor	Calculated weight before processing (kg)

I declare that the information I have given on this return is correct and complete, and that I have read and understood the explanatory notes supplied with this return.

Product from offal only		Activity comment (Transshipping, steaming etc)	Permit holder's name	Permit holder's client number	Signature of master	Date signed
Meal (kg)	Oil (litres)					
						/ /

Appendix 21

Catch, Effort and Landing Return Trip Data



MINISTRY OF FISHERIES
Te Taitiaki i nga hini a Tangaroa

First day of trip / /	Last day of trip if different from first day of trip / /	Landing date / /	Vessel registration number	Vessel name	Vessel registration number of other vessel (if pair fishing)	Point of landing	Page
	of						

Catch/Effort Data

Day and month / /	Method code	Position		Effort data				For each change of day, method or stat area, enter estimated greenweight catch by species in order of quantity							
		Lat	Long or Stat area	Time hours mins	A	B	C	D	Target species	Species code	Species code	Species code	Species code	Species code	
		Long	or Stat area						Total (kg)	Weight (kg)	Weight (kg)	Weight (kg)	Weight (kg)	Weight (kg)	
/ /															
/ /															
/ /															
/ /															
/ /															

No: A 2658579

Catch Landing Data

Fishstock (Species/Area)	Landed state	Number	Containers		Destination		Greenweight (kilograms)	Purchase tax invoice number from LFR
			Type	Content weight	Type	LFR no. or vessel reg no.		

Start a new sheet for each landing. It is an offence to fail to complete this return or supply false information or make any material omission.	Permit holder's name	Permit holder's client no.	Signature of master or permit holder	Date signed / /

Appendix 22

Appendix 22 - Species caught with Statistical areas 002, 003, 004, 005, 006, 007 and 008 for the period October 2001 to September 2004

Mimiwhangata Marine Reserve Proposal

Sum of estimated weight (kgs)	statistical area							Grand Total
species	002	003	004	005	006	007	008	
Albacore Tuna	4936.00	5926.00	3404.00	168.00	12.00	12860.00	3315.00	30621.00
Alfonsino & Long-finned Beryx	2065.00	8967.90	4388.00		5.00	30.00	4625.00	20080.90
Anchovy		22200.00						22200.00
Arrow Squid	11330.40	19278.00	395.00	3873.00	2016.50	95.00	16155.50	53143.40
Barracouta	22273.20	120857.50	1008.00	18487.00	1940.00	3518.00	39780.60	207864.30
Bass Groper	12493.00	2862.00	14511.00	5.00			1761.00	31632.00
Black Flounder	616.00	1081.20	40.00		1.50	919.50	6.00	2664.20
Blue Cod	9397.00	2447.00	30.00	41408.90	411.50	5126.00	883.70	59704.10
Blue Mackerel	5162873.50	12051142.00		370.00	55.00	605.00	797983.90	18013029.40
Blue Maomao	9173.00	372.00		22.00	8.00		5060.00	14635.00
Blue Shark	193.00	188.00	110.00		25.00	5.00		521.00
Bluenose	466815.00	190067.00	364926.00	2851.00		1336.00	163116.00	1189111.00
Brill	15.00	161.00	25.00			52.00	10.00	263.00
Broad Squid	8.00	2709.50		4647.50	2482.50		417.00	10264.50
Broadbill Swordfish	696.00	11.00	1102.00				1361.50	3170.50
Broadsnouted Sevengill Shark		30.00						30.00
Bronze Whaler Shark	4627.00	4949.00		709.00	460.00	3923.50	776.00	15444.50
Butterfish	115.00	331.00		1665.00		680.00	432.00	3223.00
Capro Dory		220.00	70.00				38313.00	38603.00
Cardinal Fish	62.00	140.00	1270.00				1017519.00	1018991.00
Carpet Shark	430.00	1325.00	120.00	48.00	5.00		800.00	2728.00
Chaceon spp	245.10	23.50	905.80				160.40	1334.80
Cockle	196.00	920922.13	3500.00					924618.13
Common Roughy		300.00					7617.00	7917.00
Common Warehou	130.00	6938.00	10.00			30.00	2046.00	9154.00
Conger Eel	3377.50	5080.00	307.00	229.50	270.00	1083.00	1053.50	11400.50
Dolphinfish		4.00					1.00	5.00
Eagle Ray	1623.00	2060.00	10.00	12577.00	2667.50	3678.00	3658.00	26273.50
Eels, Marine		37.00		2.00	120.00	5.00	12.00	176.00
Electric Ray	900.00	10.00		224.00	245.00		1003.00	2382.00

Elephant Fish	5988.00	19110.00	500.00	130.00		347.00	25.00	26100.00
Flats	47143.00	30920.70	1433.00	248.50	2013.70	259170.70	471.00	341400.60
Flounder		67.00						67.00
Frostfish	11325.00	27052.60	1151.00	1840.00	577.00	11.00	70677.60	112634.20
Garfish	10.00	7428.00		136.00		593.00	3945.00	12112.00
Gemfish	26476.00	36174.00	7081.00	30.00	35.00		219745.40	289541.40
Ghost Shark	665.00	6093.00	455.00	120.00	90.00	20.00	13910.50	21353.50
Giant Stargazer	678.00	20936.00	40.00	3508.50	161.00	967.00	980.00	27270.50
Grey Mullet	312061.50	68005.00	2602.00	1325.00	4328.00	101698.00	4099.50	494119.00
Gurnard	80958.85	238858.80	2074.60	190036.63	63811.33	18213.00	167635.65	761588.86
Hake	70.00	56.00	30.00				149.00	305.00
Hammerhead Shark	140.00	2227.00		2859.00	434.00	752.00	793.00	7205.00
Hapuku	23469.00	17209.50	7827.00	1775.00	136.00	478.00	3544.50	54439.00
Hapuku & Bass	184669.20	141300.50	121635.00	3706.00	337.00	4306.00	68722.60	524676.30
Hoki	425.00	2053.00	2618.00				473126.00	478222.00
Jack Mackerel	1963347.50	1224004.00	20.00	15612.00	42205.00	3745.00	2436611.50	5685545.00
Japanese Gurnard	11660.00	3356.25	11025.00	18.00	1.00	70.00	9849.00	35979.25
Javelin Fish		160.00	112.00	120.00			18415.00	18807.00
John Dory	20824.10	185239.50	655.00	160789.50	179191.20	14164.20	98973.20	659836.70
Kahawai	164696.60	81853.35	284.00	112919.00	16346.50	233334.00	176948.00	786381.45
Kina	8111.00	78148.00	2100.00	58563.00	420.00	102022.00	348698.00	598062.00
King Tarakihi	6660.00	1234.00	935.00			260.00	290.00	9379.00
Kingfish	30310.20	12829.00	632.00	6131.00	1656.00	2146.00	14192.50	67896.70
Koheru	34506.00	6596.00				1.00	39000.00	80103.00
Leatherjacket	16043.20	99948.25	56.00	111608.50	17292.50	527.50	84554.50	330030.45
Lemon Sole	40.00	2312.00				8.00	30.00	2390.00
Limpets		10.00					80.00	90.00
Ling	157272.00	16097.00	11252.00	165.00	10.00	2113.00	199168.00	386077.00
Mako Shark	1728.00	571.00	585.00	210.00	33.00	12.00	142.00	3281.00
Mirror Dory	80.00	825.00	3333.00				26643.00	30881.00
Moki	466.00	748.00	880.00	472.50	10.00	143.00	940.00	3659.50
N.Z. Sole	410.00	6961.00	510.00	9.00	55.00	553.00	3.00	8501.00
Northern Bastard Cod	1293.00	5378.00	519.00	278.00	159.00	11.00	433.00	8071.00
Northern Spiny Dogfish	5337.50	480.00	2477.00			70.00	1540.00	9904.50
Octopus	83.00	567.00		1881.00	1902.50	559.50	641.00	5634.00
Oilfish	500.00	305.00	533.00				105.00	1443.00

Orange Roughy	47673.00	60.00	21652.00				184369.00	253754.00
Other Sharks And Dogs	1928.00	3241.50	890.00	1313.00	635.00	1255.00	4108.00	13370.50
Paddle Crab	60.00	280807.00	975.00	64945.00	3590.00	2510.00	90575.85	443462.85
Parore	60308.00	27625.00	905.70	122.00	671.00	37035.00	6687.50	133354.20
Parrotfish		5.00						5.00
Pilchard	60.00	1869779.00		544280.00	35000.00	10197.00	31000.00	2490316.00
Pink Maomao	11622.00	1973.75		81.00	38.00	67.00	7686.50	21468.25
Pipefish		4954.20						4954.20
Pipi	200.00	642072.00						642272.00
Porae	46337.93	35357.50	245.00	15599.80	1506.00	2006.00	9344.00	110396.23
Porcupine Fish	1565.00	3640.00	25.00	15867.00	2863.00		2420.00	26380.00
Prawn Killer		130.00	1990.00				24310.00	26430.00
Prickly Shark		5.00						5.00
Rattails	205.00	1125.00	390.00	55.00			8651.00	10426.00
Rays	1552.00	430.00				2407.70		4389.70
Rays Bream	20.00	125.00	443.00	5.00	2.00	33.00	65.00	693.00
Red Cod	4923.00	56617.00	936.00	2.00	15.00	6215.00	1032.00	69740.00
Red Mullet		3.00						3.00
Red Perch	5578.00	4368.00	501.00	269.00	17.00	51.00	142.00	10926.00
Red Scorpion Fish	53776.60	5616.75		218.00	79.00	212.00	591.00	60493.35
Red Scorpion Fish_spp b		21.00						21.00
Red Snapper	96419.20	46747.75	1564.00	1407.10	707.50	249.00	4521.30	151615.85
Ribaldo	976.00	1838.00	1854.00	70.00			663.00	5401.00
Rig	24613.40	38637.00	800.80	36322.00	19724.50	213532.63	11941.30	345571.63
Rock Lobster		4.00						4.00
Rough Skate	3675.00	23855.00	138.00	1105.00	347.00	118.00	2212.00	31450.00
Roughies	10.00	40.00		25.00				75.00
Rubbish Other Than Fish		60.00					50.00	110.00
Ruby Fish	4217.00	2419.00	700.00				8421.00	15757.00
Rudderfish		39.00					50.00	89.00
Sand Flounder	1544.00	13429.30	50.00	52.00	4197.00	52664.80	399.50	72336.60
Scallop		11595.00		8317.60		5.00	1595.00	21512.60
Scaly Gurnard		70.00						70.00
Scampi		2106.00	15762.00	120.00			218648.50	236636.50
School Shark	110955.30	63795.50	24003.50	12603.50	6752.50	18280.30	62827.80	299218.40
Sea Perch	4696.00	8749.00	1519.00	262.00	112.00	41.00	14105.25	29484.25

Seal Shark	75.00	40.00	905.00				3861.00	4881.00
Seaweed	46269.00	1055.00					80.00	47404.00
Short-tailed Black Ray	650.00	1635.00		13040.00	12766.00	515.00	2550.00	31156.00
Silver Dory	445.00	5505.00	3200.00	14.00	13.00	115.00	67368.00	76660.00
Silver Warehou	7790.00	48339.00		1322.00	300.00	101.00	28710.00	86562.00
Skate	1650.00	2280.00	230.00	1375.00	282.00	1722.00	6474.00	14013.00
Skipjack Tuna	519850.00	1055805.00	2488951.00				402750.00	4467356.00
Slender Tuna		1500.00						1500.00
Smooth Skate	722.00	2627.00	147.00	753.00	103.00	304.85	6556.00	11212.85
Snapper	1024500.90	1464842.50	15313.50	1828826.50	2188843.70	1175985.09	1407569.80	9105881.99
Sole		4.00		10.00		22.25	10.00	46.25
Southern Boarfish	110.00	5374.00	5517.00	22.00		15.00	2407.00	13445.00
Sowfish	1205.00	85.00	40.00				192.00	1522.00
Spanish Lobster		440.00	10485.00				755.00	11680.00
Spiny Dogfish	6423.00	76786.00	572.00	600.00	70.00	631.00	14027.50	99109.50
Spiny Seadragon		2.00						2.00
Spotted Stargazer	436.00	716.50	10.00	4979.00	1536.50	386.50	925.00	8989.50
Spotty		6.00						6.00
Sprats		48.00				28.00	15.00	91.00
Squirrelfish	5.00	10.00		10.00				25.00
Starfish		0.50		2.00	16.00	40.00	10.00	68.50
Stingray	75.00	1045.00	145.00	102.00	75.00	920.00	483.00	2845.00
Swollenhead Conger		39.00	1020.00				123.00	1182.00
Tarakihi	324326.50	316415.75	16495.00	52748.00	4268.50	3529.00	214081.50	931864.25
Thresher Shark	370.00	113.00	60.00	162.00	395.00	162.00	15.00	1277.00
Trevally	1130928.50	92780.50	507.00	51593.90	21517.00	34429.60	489756.00	1821512.50
Turbot		3277.00	35.00	10.00		394.00	31.00	3747.00
Whiptail Ray	1215.00	200.00	440.00	125.00	90.00	1015.00	1830.00	4915.00
Witch		15.00	75.00				1.00	91.00
Yellow-belly Flounder	10344.00	72817.60	316.00		40.00	244474.40	106.00	328098.00
Yellow-eyed Mullet	423.00	10671.50		121.00		2203.00	72.00	13490.50
Yellowfin Tuna	136.00	64.00	11.00				26.00	237.00
Grand Total	12392899.68	22031632.28	3199304.90	3420634.43	2648501.43	2594113.02	9940148.85	56227234.59

Appendix 23

Appendix 23 – Boundaries developed for the purposes of accessing the Ministry’s Geographical Information System and associated catch / effort data.

Area 1 (approximates to Option 1 area)	
Latitude (north and south boundaries)	Longitude (west and east boundaries)
-35.46835394	174.4050851
-35.377034	174.5162346
Area 2 (approximates to Option 2 area)	
Latitude (north and south boundaries)	Longitude (west and east boundaries)
-35.47449025	174.4050851
-35.35467786	174.5414829

Table 7 – Boundaries of ‘Areas 1 and 2’ (approximate to proposed marine reserve areas Options 1 and 2).

Appendix 24

Appendix 24 - Estimated green weights (kg) per fishing method, for nine species of commercial caught fish in statistical area 003, i.e. the nine species of fish recorded as commercial catch in Areas 1 and 2 which approximate to the marine reserve proposal areas Options 1 and 2. This being for the period 1 October 2001 to 30 September 2004.

	Bottom longlining	Bottom trawl_single	Set netting (including gill nets)	Hand lining	Danish seining _single	Ring net	Cod potting	Drop / dahn lines	Purse seining	Rock lobster potting	Beach seine / drag nets	Lampara	Hand gathering	Grand Total
Snapper	702203	94358	14048	3219	2340	2109	80	72	20	29	11	10		818499
Tarakihi	71754	74629	1834	199	550			45						149011
John Dory	7597	47363	1267	33	200	2	15	1			1			56479
Gurnard	96388	42489	2825	43	860									142605
Arrow squid	10	4156		2					230					4398
Trevally	5946	4131	12838	27		191	5				2647		4	25789
Frost fish	1817	1700	4											3521
Kingfish	7002	108	2669	63			5	43	204		10			10287
Porae	6991	349	27446	31				20		10				34847
Grand Total	899707	269283	62931	3616	3950	2302	105	181	454	39	2669	10	4	1245433

Table 11 – Estimated green weights per fishing method for nine species of commercial caught fish in statistical area 003

Appendix 25

Appendix 25 - Recorded commercial catches (kg) for 3 fishing methods used to catch nine species of fish within Statistical Area 003, and Areas 1 and 2 (approximate to the proposed marine reserve areas option 1 and 2). This data is for the period 1 October 2001 to 30 September 2004.

Bottom trawl_single – estimated catch weights (kg)				
	Area 003	Area 1	Area 2	Area 2 as a % of Area 003
Snapper	818,499	700	850	0.10
Tarakihi	149,011	350	680	0.46
John Dory	56,479	70	70	0.12
Gurnard	142,605	10	10	0.01
Arrow squid	4,398		30	0.68
Trevally	25,789			
Frost fish	3,521		140	3.98
Kingfish	10,287			
Porae	34,847			
Totals	1,245,436	1,130	1,780	

Table 14 - Bottom trawl_single

Danish seining_single – estimated catch weights (kg)				
	Area 003	Area 1	Area 2	Area 2 as a % of Area 003
Snapper	818,499	100	527	0.06
Tarakihi	149,011	110	206	0.14
John Dory	56,479		123	0.22
Gurnard	142,605	5	258	0.18
Arrow squid	4,398	5		
Trevally	25,789		5	0.02
Frost fish	3,521			
Kingfish	10,287		10	0.10
Porae	34,847			
Totals	1,245,436	220	1,129	

Table 15 - Danish seining_single

Hand lining – estimated catch weights (kg)				
	Area 003	Area 1	Area 2	Area 2 as a % of Area 003
Snapper	818499	17	17	
Tarakihi	149011	1	1	
John Dory	56479			
Gurnard	142605			
Arrow squid	4398			
Trevally	25789			
Frost fish	3521			
Kingfish	10287			
Porae	34847	3	3	
Total	1,245,436	21	21	

Table 16 - Hand lining

Appendix 26

Appendix 26 - Number of vessels and fishing days for nine species of fish caught in statistical area 003

Number of vessels and fishing days for nine species of fish caught in statistical area 003								
	2001/02		2002/03		2003/04		Grand Total	
Species	No of vessels	No of days fished	No of vessels	No of days fished	No of vessels	No of days fished	No of vessels	No of days fished
Arrow Squid	13	142	14	106	16	163	43	411
Frostfish	19	119	21	181	23	153	63	453
Gurnard	58	1436	65	1259	64	1271	187	3966
John Dory	53	1090	60	903	56	953	169	2946
Kingfish	43	207	41	198	35	148	119	553
Porae	37	375	39	424	41	421	117	1220
Snapper	72	2227	85	2131	79	2129	236	6487
Tarakihi	57	1257	64	1112	62	1007	183	3376
Trevally	56	602	60	630	50	424	166	1656
Grand Total	408	7455	449	6944	426	6669	1283	21068

Table 17 – Number of vessels and fishing days for nine species of fish caught in statistical area 003