# DOUBTLESS BAY MARINE PROTECTION GROUP Te Roopu Whakahauora o Tokerau

# DISCUSSION DOCUMENT SUMMARY

# COMMUNITY MARINE MANAGEMENT PLAN

August 2005

## NOTE: THIS IS A DRAFT DOCUMENT PRODUCED FOR THE DOUBTLESS BAY MARINE PROTECTION GROUP (DBMPG) & IS NOT FOR FINAL PUBLIC RELEASE UNTIL SUCH TIME THE DBMPG HAS UNDERONE THEIR 'SIGN-OFF' PROCESS.

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For

#### MIHI

#### PURPOSE OF THIS DISCUSSION DOCUMENT

The purpose of this Discussion Document is to seek views and input on the Doubtless Bay Marine Protection Group (DBMPG) community marine management plan. This plan will encompass Doubtless Bay, Mangonui estuary, Taipa estuary, Aurere/Awapoko estuary, Karikari Peninsula and offshore

areas; and associated catchments. This document outlines a set of recommendations for marine management in this area.

The FULL Discussion Document is available on disk from XXXXX or download from XXXXX.

This document is for discussion, comment and to promote input. It does not commit the Doubtless Bay Marine Protection Group or other interested parties to any action.

Community input and support are vital to the success of this Plan and a public consultation process will be implemented to achieve this.

# STRUCTURE OF THIS SUMMARY DOCUMENT

This Summary Discussion Document outlines key actions proposed by the Group for each of the five issues.

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Ecological, socio-economic and cultural information is available within the FULL Discussion Document.

HAVE YOUR SAY Please submit your comments by XXXXXX to XXXXXX.

### **OUR VISION**

A vision to clearly outline the Groups desires for the future is needed in order to ensure that the Plan's objectives achieve this overarching vision.

The following is a suggestion.



Our vision is for a community that manages for ecologically sustainable use, protects and conserves the coastal and marine ecosystems for the benefit of the community and future generations.

#### **AREA OF INTEREST**

The area of interest the Plan will cover includes the coastline and offshore to 200m of Doubtless Bay/Tokerau, Mangonui harbour, Karikari Peninsula and associated catchments. The catchments include Mangonui, Taipa and Aurere/Awapoko estuaries that feed into the Bay (Figure 1). Doubtless Bay is approximately 196 sq km. The total area including Karikari Peninsula, Moturoa Islands and out to 200m is 1659.4 sq km.



Figure 1. Location of Doubtless Bay and Karikari Peninsula, North Island, New Zealand.

#### **MARINE ISSUES & PROPOSED ACTIONS**

The Group has focused on several issues over the past three years. They include *Fisheries, Marine Conservation, Expressing Kaitiakitanga, Water Quality, Local Catchment Management, Education & Socio-Economic Opportunities.* 

# LACK OF EDUCATION & SOCIO-ECONOMIC OPPORTUNITIES

#### About the Issue:

Over three years of meetings, Group participants have voiced their concern about the lack of marine areas their children and students can visit to enjoy and observe a totally natural, unmodified marine environment. Participants have also discussed the issue of the lack of marine socio-economic opportunities that are not solely about fishing.

With a 6.2% population growth expansion of coastal residential development and many visitors attracted to the area, especially during summer, are all signs of increasing needs on marine resources and the environment. Group believes that having areas set aside for marine education will have socioeconomic spin-offs for the wider community. Education also vital to expressing



kaitiakitanga. The Group believes that 'hands-on' experiences in marine education (eg. Experiencing Marine Reserves program (see <u>http://www.emr.org.nz</u>) significantly benefits people awareness of the function and issues facing the marine environment, compared to just reading a book or having a poster.

#### State of Marine Education and Socio-Economic Opportunities in the Area

Peria Area School (Year 7 and 8), Taipa Area School (Year 7, 8 and 12) and Te Kura Kaupapa Maori O Rangiawhia have all been involved with the experiencing marine reserves program, and have all learnt values of protecting the marine environment (S. Sutherland, pers. comm. 2004). No other locally based marine education occurs where students can visit sites to form 'care' groups or 'adopt-a' programs.

With over 100,000 visitors to Leigh (Goat Island) marine reserve annually, there has been socio-economic opportunities arise. This is in the form of hotels/motels, ecotourism (eg. glass-bottom boats, kayak hire), scuba diving charters and scuba diving and snorkel gear equipment and hire outlets, restaurants and cafes.

Residents and local business people of Leigh believe the community would be economically worse off without the reserve<sup>1</sup>. For Leigh all retail businesses obtain a substantial portion of trade from visitors to the reserve, primarily over the summer

# Comments from local students about experiencing marine reserves

"I think Goat Island marine reserve is a really great example of how marine life should be cared for and treated for. Without marine reserves a fish population may be gone forever, so remember marine reserves all the way" Danielle Campbell.

"I reckon we should have more marine reserves around NZ because the younger kids of today won't be able to see fish like [in] the old days and little kids will not know what they really are" Janessa Henderson.

"The fish are more bigger and better. They are friendlier. We learnt more about the fish in 2 days than I have in my life. Plus there are more fish for our future generations. So I leave you with an idea of a marine reserve in the Far North" Morgan Backhouse-Smith.

"Thre is more sea life in marine reserves than out of them. I think we should get more marine reserves in our country so that the next generation can experience the sea life like us" Nirvana Van Stratum-Jackson.

"Seeing the fishing boats lingering outside the boundaries of the Leigh marine reserve shows how important it must be. As Dr Bill Ballantine says, if people are so against it, why is it so popular...we need marine reserves" Kent Simpson, Teacher Peria months. Almost unanimous support for the marine reserve from residents and most visitors and local businesses support the reserve.

The US Department of Commerce suggests that the substantial social and economic benefits derived from marine reserves may even exceed the extractive uses of marine reserves. Similar results have been observed in Australia. In 1991-92, tourism at the Great Barrier Reef World Heritage Area earned \$682 million<sup>2</sup>. Only 5 percent of the 343,500km<sup>2</sup> reef was a no-take area, while the remainder was zoned multi-use. In the same period, commercial fishing on the reef earned \$128 million, private boating and fishing \$94 million and research \$19 million. Together the value of these activities was estimated at close to \$1 billion per annum,

while government expenditure on management was \$18.1 million. In 2002, the Australian Commonwealth Government announced its support for at least 25% of the reef to be included in the no-take area. The GBR tourism industry is valued at \$539 million compared to fishing industry with \$130.1 million. The increase in protection is expected to deliver substantial net benefits to Queensland and all Australians<sup>3</sup>.

The economic value provided from New Zealand's marine reserves is currently being estimated by the Department of Conservation.

<sup>&</sup>lt;sup>1</sup> See Cocklin & Flood 1992. The socio-economic implications of establishing a marine reserve at Leigh.

<sup>&</sup>lt;sup>2</sup> Driml, S 1994 Protection for Profit – Economic and financial values of the Great Barrier Reef World Heritage Area and other protected areas. Great Barrier Reef Marine Park Authority

<sup>&</sup>lt;sup>3</sup> Hand, T. 2003. An economic and social evaluation of implementing the representative areas program by rezoning the Great Barrier Reef Marine Park. Report on the revised zoning plan. Report prepared by PDP Australia Pty Ltd. 88 pages.

Desired Outcome:

Present and future generations visit the sea and see a marine ecosystem with its integrity intact and learn about the role of ecology in human existence.

Goal	Action
Promote education and socio- economic opportunities	<ul> <li>Prepare an ongoing public awareness campaign to inform and educate the community, not just schools but users, about the marine environment.</li> <li>In collaboration with local schools identify, create and protect marine super sites in Doubtless Bay and the Far North, which will include no-take areas and estuarine habitats.</li> <li>Encourage young environmental stewards to participate in all aspects of local monitoring and the control of marine environment.</li> <li>Report on the economic advantages and disadvantages of no-take areas to the local economy.</li> <li>Support any development of economic opportunities that will clearly and directly benefit present and future generations and the integrity of the marine environment (eg. MarineWatch).</li> </ul>

HAVE YOUR SAY

Please read the background information. The Group welcomes your comments on issues raised in this Discussion Document and the proposed actions. Do you think socio-economic and education opportunities will benefit you, your whanau and your community?

# **DECLINING FISH STOCKS**

#### About the Issue

Local anecdotal observations of fishing, diving and using the coastal marine area, verify that changes have occurred. Fish stocks are not abundant in areas like



they used to be, for example, Mangonui estuary used to be "*red with snapper tails*"; kingfish have virtually disappeared from Mangonui estuary due to the "*explosive*" increase in commercial set netting in Doubtless Bay during the 1990s. People may still catch the odd kingfish but "*not like they used too*".

Signs of growing scarcity are everywhere: fish are getting smaller, as are catches. Some fishing grounds are seriously depleted that they may never fully recover.

New Zealand's Fisheries Act 1996 requires that fish stocks be utilised in a sustainable

manner. This means sustaining target fish stocks while also sustaining marine Fi ecosystems and non-target species. Most target stocks are harvested at rates that aim to maintain them at or near the level that produces the maximum sustainable yield. Establishing quota is the main method of stock management, which is achieved through the quota management system (QMS).

The QMS hinges on the crucial assumption that the quota level is in fact set at the right level. As has been the case with all other attempts to manage fisheries, it is becoming apparent that we do not always have perfect knowledge of fish stocks that will allow us to set quotas correctly. The status of more than half the commercially exploited fish stocks is unknown but, of the stocks whose status is known, about 10 percent are considered to be below the level of maximum sustainable yield (Annala et al 2001, PCE 1999). For example, the SNA 1 snapper stocks have declined to less than 16% of their original biomass (Figure 2) and now SNA 8 stocks on the west coast of upper north island has been reduced to 8-9%. So when you are fishing next be aware that only 16% of snapper are left on the east coast of the north island.

Figure 2. Snapper SNA1 fish stock showing the decline to below MSY. Dots represent tagging experiments to better quantify the stock size (Source. State of the Environment Report 1999).



The type of fishing method used also has a direct impact on marine organisms and habitats, and bycatch of non-target species, including marine mammals and seabirds.

The extent to which recreational and illegal fishing impacts on fish stocks and marine ecosystems is unknown.

We all know our fishery could be managed better. Whatever your reason we must ensure that the full range of fish stocks are replenished to a level that will maintain ecosystem integrity rather than collapse; and habitats are protected for future generations.

### Status of Fish Stocks in the Area

Current knowledge of the state of our fisheries is poor. Of the 236 commercial fish stocks<sup>4</sup> currently managed by the QMS, the size of the fish stock population is known for only 15%.

Where information is available, the news is not good. Half of the 35 fish stocks, for which population estimates are available, are known to be depleted below sustainable levels. See Table 1 for a summary of the population status of some commercially and recreationally important fish species.

Table 1. Year of the last stock assessment of popular angling and commercially targeted species in the Area. (Source Ministry of Fisheries 2004 Plenary Report). \*indicates main area for commercial fishing of that species.

Species	Status	Population Size	2003/04 TACC (t)	Landings (t)	Year of last biomass assessment
Snapper (SNA 1*)	Depleted	16% virgin biomass	4500	4466	1995
Scallop (SCA 1)	Declining	-			2003 (Northland substock)
Mullet (GMU 1*)	Uncertain	Unknown	925	791	None
Yellow- eyed Mullet (YEM 1)	Unknown	Unknown	20	9	None
Flounder (FLA 1)	Unknown	Unknown	1187	682	None
Kingfish (KIN 1*)	Unknown	Unknown	91	73	Insufficient data

<sup>&</sup>lt;sup>4</sup> A fish stock is a genetically-distinct group of the same species. For example, the NZ commercial snapper population has 6 fish stocks. For SNA 1 stock there are two substocks – Hauraki Gulf/Bay of Plenty and East Northland.

Kahawai (KAH 1*) ( <i>introduced</i> <i>into QMS</i> 2004)	Unknown	<20%		933	1995
Albacore (ALB 1)	Stable	60%	None available	832	2003
Trevally (TRE 1)	Uncertain	Uncertain	1506	1014	1984 Not available since QMS
Bluenose (BNS 1)	Unknown	Unknown	1050	1023	No biomass estimate available
Hapuka (HPB 1)	Uncertain	Unknown	481	442	None

Over the last twenty years, populations of orange roughy, oreos, snapper and rock lobster have been severely overfished. Some populations have been reduced to just 3% of their total population size (or total virgin (unfished) biomass).

Currently there is no recreational fishing catch and effort information for the Area until the Groups user survey and NIWA north island survey is complete.

There are no local incentives for recreational fishers to become involved in sustainably managing their fisheries resources for future generations.

# Desired Outcome:

Local fisheries sustainably managed and protected by the local community. Commercial fishing by local boats.

Goal	Action
Promote sustainable use and protection of fisheries habitat and marine ecosystems	<ul> <li>Identify and establish a <i>mataitai</i> in Doubtless Bay and Karikari Peninsular where:</li> <li>② Bylaws are established to control effort of commercial fishing.</li> <li>③ Bylaws include a 'no-take' calendar.</li> </ul>
Protect customary fishing grounds from overfishing, habitat degradation and pollution	
To increase recreationally important fish species to levels that will reduce impact on fishing mortality on their population	Develop a voluntary code of practice for recreational fishing where: A spawning closure will be a major part.

#### **Code of Fishing Practice**

Below is a suggested code of fishing practice that the Group has developed over the past 3 years from Group meetings and interviews with fishers and fishing clubs in the Area. Developing a local code of fishing practice is an incentive for local fishers to become involved in sustainably managing the fisheries resource they use. It will involve being guardians or kaitaiki of the code through monitoring its uptake within the community and raising awareness of the code. The code is about expressing kaitaikitanga.

Suggested Code of Fishing Practice:

- Spawning closure between November to March (2x4 week periods) where no fishing can occur using all fishing methods.
- No set netting and gill netting at all times in the Area (except for Flounder & Mullet) and ban the use of other destructive fishing methods (eg. dredging).
- Only use hooks specifically designed to minimise gut hooking
- No more permits to be granted to commercial fishers for the Mangonui Habour and Doubtless Bay.
- Competitions none inside Mangonui, Taipa and Aurere estuaries.
- Compliance achieved by local fishers (customary, recreational, commercial) where visitors are made aware of Code and to respect this Code.
- The minimum size of Snapper to be 30cm
- ✤ Fishers to be encouraged to keep a Catch Diary.
- Restrict commercial fishing to every second year

#### Mataitai

Figure 3 is a suggested area for a mataitai, a Fisheries Act 1996 customary fishing tool.

For more details about mataitai reserves see the FULL DISCUSSION DOCUMENT Appendix 3; and FULL DISCUSSION DOCUMENT Appendix 4 on the type of decision-making criteria used to site the mataitai reserve.

#### Mataitai Reserves

Fisheries Act tool to protect traditional fishing grounds and significant areas special to tangata whenua. Bylaws/restrictions may be put in place to control level of taking fish, aquatic life or seaweed in the area. A maori committee or kaitiaki can be empowered to make bylaws over the area, if they consider it necessary for sustainable management. Both Maori and non-maori may fish in Mataitai reserves. Commercial fishing may not occur in Mataitai reserves unless the committee recommend to the Minster of Fisheries that it is allowed. HAVE YOUR SAY

Please read the background information. The Group welcomes your comments on issues raised in this Discussion Document and proposed actions. What are your thoughts about a community based voluntary code of fishing practice? What do think about mataitai reserves?



# LOSS OF BIODIVERSITY & HABITAT DEGRADATION

### About the Issue

Biodiversity is the diversity of non-human life on earth.

Biodiversity on earth, including NZ<sup>5</sup>, is declining.

It is a worldwide trend, due to the destruction of habitat, harvest by humans and introduction of exotic pests, diseases and plants. In the space of 3 centuries our planet will have gone from a peak of species richness to a trough of poverty (Western 1992).

Human activities within our marine environment,

Biological diversity (biodiversity) refers to the number and variety of living organisms.

It includes diversity of species, between species, and of ecosystems and the processes that maintain them.

It also refers to genetic diversity, which is about the varied genetic make-up among individuals of a single species.

Restoring biodiversity and protecting natural heritage is a key value for the Group and so has been identified as a **kev** 

<sup>&</sup>lt;sup>5</sup> NZ is a signatory to the Convention of Biological diversity, makin indigenous biodiversity. See NZ Biodiversity Strategy (2000) for k

including catchments, has placed pressure on plants, animals and even natural processes (eg. sea temperature increasing), such that some species no longer exist and others are seriously threatened in their ability to survive.

Most of New Zealand's biodiversity is in the sea – most of the world's biodiversity is in the sea. There is more marine biodiversity and greater diversity than on land (Groves 2003).

The Group has identified that diversity of habitats (eg. rocky reefs, deepwater reefs, sandflats, mudflats) and features (eg. sand dunes, estuaries) and the presence of rare and endangered species (eg. orca, whales, black coral) are values of the Area's marine environment.

#### State of the Areas Biodiversity

No comprehensive study of the Areas biodiversity has been undertaken, so enormous gaps exist in our knowledge of life under the surf and waves. But we have only just begun gathering information through a habitat survey and mapping study (Dr. R. Grace, pers. comm. 2005). Identifying the variety of habitats, which are surrogates of biodiversity, will provide some idea of ecosystem and species biodiversity.

Loss of biodiversity is in decline in the Area. An example of this can be seen from the

extensive number of kina barrens, which was once believed to be a normal feature

"Without a marine reserve you'll have a barren mataitai and/or taipure – you need a breeding area" – Hone Tanumanu, Whangara, Ngati Konohi (Te

of northeastern New Zealand. However, scientific research in no-take marine reserves has found that kina barrens are being replaced by kelp forest. This is a result of the phenomenon described as trophic cascade effect, where higher trophic level predators are returning to the food web and having an indirect effect on plant community structure (Shears & Babcock 2003).

For Karikari Peninsula, Shears and Babcock (2004) seaweed research found that Karikari Peninsula had the highest species richness with 47 species. This was higher than the offshore islands of the Poor Knights, Mokohinau and Tuhua off Tauranga.

Doubtless Bay marine habitats have also been degraded over the years with increasing trawling and dredging effort, inappropriate land use activities sending tonnes of sediment, ammonia, nitrogen and phosphorous into the Mangonui and Taipa estuaries. Lush scallop, cockle and tuatua beds have disappeared with only a small number of remnants remaining.

In New Zealand we know of 8000 marine and coastal species. In 2000, we knew of 61 seabirds, 41 marine mammals, 964 fish (108 are endemic – found nowhere else on the earth), 2000 molluscs (snails, shellfish and squid), 350 sponges, 400 echinoderms, 900 seaweed species and 700 micro-algae species.

World Wildlife Fund (WWF) New Zealand recently produced a report (Arnold 2004) outlining hotspots of marine biodiversity for cetaceans, seals and birds; fish; and benthic

invertebrates, algae and plants. Doubtless Bay, Karikari Peninsula and offshore areas are part of biodiversity hotspots for fish, benthic invertebrates, algae and plants (Arnold 2004).

#### **Biodiversity is everyone's business**

Without biodiversity you would not have the variety of food you eat, the variety of seabirds you see, and the variety of fish and shellfish you see at the beach. It is in all our backyards. Biodiversity is the basis of all our food and resources and many economic activities. In 2002, 84 countries imported seafood products from NZ to the value of \$1.51 billion.

A 1997 economic study suggested that the total annual value provided by New Zealand's indigenous biodiversity could be more than twice that of New Zealand's GDP (gross domestic product) (NZBS 2000).

We have a responsibility to maintain the existence of our sea and the species that reside there.

### Desired Outcome:

Marine life and their habitats are prolific and secure in their natural state for the enjoyment of future generations (mokopuna).

Goal	Action
To identify and protect areas of marine life and their habitats	<ul> <li>Identify and establish an effective no-take (<i>tapu</i>) system where:</li> <li>The system will support the mataitai</li> <li>The system will contain special, unique and representative habitats</li> <li>Natural ecological processes are protected</li> <li>Ensure that the system provides for local community management</li> <li>The size of the individual marine reserves are ecologically self-sustaining, may have an impact on local fisheries, preserves genetic diversity, connectivity of sites.</li> <li>Sites are permanent with a generational review with the possibility of some site becoming a rahui</li> <li>Use the best possible available information for decision-making, which is not only scientific but local anecdotal evidence.</li> <li>Ensure economic and educational opportunities will exist with the local community (eg. easy access from shoreline).</li> </ul>

#### Suggested areas for no-take zones

Figure 4 shows suggested areas for no-take (tapu) areas where no fishing will be allowed. The criteria used to design the location of the no-take areas are in the FULL DISCUSSION DOCUMENT Appendix 5. The best possible information was used to design these no-take areas including habitat mapping, biodiversity modelling, fishing effort, response modelling, and design criteria. Appendix 6 outlines the extensive process involved under the *Marine Reserves Act* to create a marine reserve.



#### HAVE YOUR SAY

Please read the background information and criteria used to design these no-take (tapu) areas. The Group welcomes your comments on issues raised in this Discussion Document or any of the proposed actions.

# DECLINING WATER QUALITY

### About the Issue

60-80% of marine pollution comes from land, losses through sedimentation, plastics, and unsuitable land use. A phenomenal 390-million tonnes of sediment are washed from the

New Zealand mainland into the sea each year (NZBS 2000). The Government recently reported that 95% of New Zealand's lowland rivers and waterways are not safe for swimming in or drinking from.

New Zealand's inshore marine areas, particularly estuaries and sheltered bays, are immensely rich and biologically diverse environments. The effect of all this sediment and nutrients when washed off the land can deplete oxygen, create harmful algal



blooms and reduce the abundance and diversity of marine life.

Many locals have all witnessed first hand the dramatic decline of water quality in Mangonui, Taipa and Aurere/Awapoko estuaries. Also from local observations and anecdotal evidence, flood plumes (freshwater plumes originating from estuary mouth) from the estuaries have seen to occur as widespread as Perhipe Beach, Whatuwhiwhi.

#### State of the Areas Water Quality

Clean water is essential for ALL forms of life. The Northland State of the Environment (SOE) 2002 report stated that combined Taipa-Mangonui estuaries were unsafe to swim in and collect shellfish during winter.

#### **Regional Coastal Plans**

Regional coastal plans are plans prepared by regional councils for the coastal marine area of a region. Their purpose is to assist the regional councils in achieving the sustainable management of their coastal environment. The plans outline the policies and rules that govern what activities the councils will allow, control or prohibit in the coastal environment. To ensure consistency and integration of the management of the coastal environment throughout New Zealand, the Regional coastal plans must not "be inconsistent" with the New Zealand Coastal Policy Statement.

Coastal Plans are a requirement under the

The water quality of the Areas estuaries area degraded compared to less degraded estuaries such as Rangaunu and Parengarenga. Human modifications to the land are having an impact on water quality of harbours and water quality is reduced to a poor level following heavy rainfall (Northland Coastal Policy 2004).

Water quality information from Taipa and Mangonui estuaries has been collected for 1998 and 2004. Water quality is not monitored every year. Information received from the NRC on these sampling occasions found:

- Oissolved oxygen (DO) to be satistfactory (6-7 g/m<sup>3</sup>) during summer and winter. This is a broad indicator of water quality health. It is one of the first parameters to monitor. Most of the measurements were taken during the day and DO can vary during the day and night because of photosynthesis and respiration occur by organic matter.
- Faecal coliforms and enterococci bacteria from animal and sewage varied between summer and winter, with 10-40 times more bacteria in winter than summer. Not safe to swim or collect shellfish during winter.
- Nitrogen, Phosphorous, Ammonia & Chl-a (Chlorophyll a) all play important role in primary production of coastal ecosystems. Ammonia can be toxic to aquatic life. Measuring these parameters provide an idea about impact of adjacent landuse. Guidelines used are ANZECC 2000 Water Quality Guidelines. For NO<sub>3</sub>-N is 0.015 g/m<sup>3</sup> (estuaries) and 0.005g/m<sup>3</sup> (coast). For Total P is 0.03 g/m<sup>3</sup> (estuaries) and 0.025 g/m<sup>3</sup> (coast). Nitrogen was higher in winter and low in summer. In winter TN (Total N) exceeds ANZECC guidelines. Such high levels can cause problems including algae growth and blooms. Is high probably because of increased runoff from catchment during winter rainfalls, which is carrying nutrients (N & P) in soil. Total Phosphorous again is higher in winter and low in summer. For 2004 sampling, TP did exceed ANZECC guideline levels. <u>Chl-a</u> information was inconclusive and insufficient information to provide any comment. <u>Ammonia</u> again was inconclusive and insuffient data to provide any comment.

# Desired Outcome: Healthy, clean catchment waterways from land to sea.

Goal	Action
To implement a community-based Doubtless Bay integrated catchment management plan and activities	<ul> <li>Q Develop a catchment-based management plan where:         <ul> <li>Define common objectives for environmentally appropriate use of catchment resources. Develop plans and strategies to achieve them. This will include indicators of suitable water quality parameters to re-establish ecological integrity in the estuaries, zero pollution policy, zero remanent forest land clearing policy and better riparian management.</li> <li>Zero clearing of vegetation where it is fundamental for the stability of land.</li> <li>Immediate measures put in place to control erosion and subsequent sedimentation of creeks and streams.</li> <li>Indigenous coastal vegetation is protected (eg. mangroves)</li> <li>Build partnerships with tangata whenua, industry, landowners and regional and local councils to develop plan.</li> </ul> </li> <li>Seek funding for riparian vegetation planting and creek/stream fencing in Mangonui and Taipa catchments.</li> <li>Support local landcare groups taking action in their catchments particularly with: measuring and monitoring water quality in all streams feeding into Doubtless Bay and; riparian planting and fencing.</li> <li>Establish a local network of volunteers.</li> </ul>
Ensure that regional councils and other government organisations are proper 'watch-dogs' of our waterways	Apply pressure to these organisations to carry out their mandate of protecting waterways.

# LOCAL MANAGEMENT & KAITIAKITANGA

### About the Issue

Locals managing local resources. This is expressing kaitiakitanga and guardianship. This has been a major ambition for the Doubtless Bay Marine Protection Group. Members have been concerned that there is virtually no local management or control of their marine environment. They are committed to working in partnership with tangata whenua who have mana moana (jurisdiction over the sea).

**Kaitiakitanga** – its about the comprehensive spiritual and environmental code which governs tangata whenua use of NZ's biological resources. This ancestral code is directly concerned with the care and protection of mauri, which according to the traditions of tangata whenua, is the dynamic life principle that underpins all biodiversity. (Adapted from Matiu & Mutu 2003 and Te Papa Atawhai Kaupapa Maori Strategic Policy, 2001)

There is a range of tools to manage the marine environment, both legal (eg. Fisheries Act, Marine Reserves Act) and non-legal means (eg. voluntary code of practices; community farming guidelines; rahui; tapu). The Group believes that to sufficiently address all the issues discussed in this Discussion Document, a range of these tools must be used.

#### State of local management and kaitiakitanga in the Area

Currently, the Ministry of Fisheries and quota holders manage fisheries resources; Northland Regional Council manage the coastal development and the District Council, Department of Conservation and Ministry for the Environment manage anything in between.

There is no co-ordinated local management or co-management situations in the Area. The Group with local hapu of Mangonui harbour worked together to implement a *rahui* for Mangonui harbour on all set netting. There are individual kaitiaki from the Area doing their bit for the environment. But local management is not about individuals. It is about a community working together to manage, monitor and measure the marine environment.

Desired Outcome:

We are all proper guardians of places, natural resources and other taonga.

Goal	Action
Promote the active exercise of kaitiaki and guardianship of our local marine environment. Co-management between tangata whenua and the wider community of local resources and habitats.	<ul> <li>② Support local hapu with establishing management partnerships and seeking ownership of seabed and foreshore, customary fishing grounds and other taonga.</li> <li>③ Prepare a policy on kaitiakitanga in order to begin the spiritual and environmental journey.</li> <li>④ Plant trees</li> <li>④ Education</li> </ul>

HAVE YOUR SAY

Please read the information provided on cultural significance and NZ management tools. How would you implement kaitiakitanga? Do you think "locals managing local resources" is a good idea?

#### THE NEXT STEPS – WHERE TO FROM HERE?

The questions many people have when reading documents like these are:

What will this Plan achieve? How will it be implemented?

The Group has learnt a lot about the Area and has improved their knowledge of the ecosystem and issues in the Area, the region and even globally. This Discussion Document and consequently Community Marine Management Plan has one underlying achievement – *to empower the local community to manage their local marine environment in a way that will benefit future generations*. This Discussion Document purposes key actions to achieve this empowerment.

The Discussion Document is the initial stage (Figure 5) of our public consultation with the community and interested groups. The Group wishes for an open and utterly transparent process, where the most up to date and correct information has been provided to you, in order to attract your input and comments.

Figure 5. The process the Group is following to achieve their vision

