

USE AND VALUE INFORMATION

**MFish Statement of Intent Outcome:
“People are able to realise the best value from the sustainable and
efficient use of fisheries”**

Allocation and use

83 Efficient use within the fishery is achieved by enabling access to those who value the fishery the most. “Users” are defined as: extractive users, who obtain value through harvesting the scallops; and non-extractive users, who derive value from knowing that a healthy aquatic environment exists for generations to come. The key responsibility of government is to ensure the fair allocation of user rights. For extractive users, this is achieved through the allocation of the TAC, while for non-extractive users it is achieved through a sustainable fisheries management regime.

84 The TAC is the principal sustainability tool for ensuring the sustainable use of a fishery. Within a TAC, the various catch limits and allowances divides the use of the fishery between sectors in a way that the Minister of Fisheries determines will realise best value. In SCA 1, a TAC of 75 tonnes is divided between the sectors as shown in table 3:

Table 3: Total allowable catch and allowances for Northland scallops (tonnes meatweight)

	Total Allowable Catch	Recreational Allowance	Customary Allowance	Total Allowable Commercial Catch	Allowance for other sources of mortality
Northland scallops (SCA 1)	75	7.5	7.5	40	20

Profile of sectors

85 All fishing activities in New Zealand fall into one of three sectors: commercial fishing, recreational fishing and customary fishing. Commercial fishing refers to all fish caught for the purpose of selling; recreational fishing refers to any fish not caught for the purposes of selling (except if it falls into the following category); and customary fishing refers to fish caught subject to a permit issued by a registered kaitiaki (under regulation 27 of the Act). The following sections describe each of these sectors in SCA 1 and how they use the fishery.

Profile of the commercial sector

86 There are currently 22 quota owners in the fishery. However, only 10 of these were recorded as landing scallops to a licensed fish receiver (LFR) during the 06–07 fishing year, implying they actively fish at least some of their ACE. The remaining 12 quota holders are likely to sell their ACE to other scallop fishers most years. Table 4 details the number of quota holdings and the levels of quota concentration amongst the top three quota holding

companies. Under section 59 of the Fisheries Act 1996, no quota holder is allowed to hold more than the equivalent of 35% of the combined TACCs across all scallop stocks.

Table 4: Number of quota owners and quota owning concentration as of July 2007

Stock	Number of quota owners with holdings by size (in millions of shares)			Smallest quota holding (shares)	Largest quota holding (shares)	CR3 (% quota holding) *	
	0-15	15-30	30-45				Total quota owners
SCA 1	21	1	0	22	942,500	20,000,000	43.1

* CR3 is the concentration ratio (% of quota) of the top three quota holding companies in the stock.

87 There is a publicly available register of the companies and individuals who own quota in SCA 1; however, this is not reproduced here as quota ownership often varies over time and a list of current quota holdings may quickly becoming out of date.

88 The actual number of boats used in SCA 1 varies from year. In the 2006–07 fishing year, nine Northland-based boats operated in SCA 1. These boats range in size from 10 to 15 metres. While these boats are normally based in ports ranging from Bream Bay to Awanui, most scallop fishing in 06–07 occurred in Bream Bay, and consequently most of these boats were based in this area for the duration of fishing. In addition to these boats, four boats normally based in the Coromandel scallop fishery (SCACS) were used in SCA 1 in 06–07.

89 Two LFRs process the majority of scallops landed from SCA 1, one based in Awanui and the other in Kaeo. Aquarius Fisheries can process approximately 240 bins (or 1300kg meatweight) a week. Both these processors sell fresh and frozen scallops to wholesalers, fish shops and supermarkets on the New Zealand market under their own brands. The domestic market for scallops is relatively stable, with any variation in annual sales more likely to reflect scallop availability rather than changing consumer demand. While scallops were exported from SCA 1 during the 1990s, the major decline in scallop abundance between 1999–2001 left exporters unable to meet demand and a high New Zealand dollar has prevented re-establishment of exports since this time. Also, significant growth by aquaculture producers in Asia has allowed those producers to fill many of the traditional European markets previously supplied (in part) by scallop exports from Northland. Scallops are increasingly imported into New Zealand from various countries (mainly China) although most domestic demand is still met by local production.

90 There is a degree of vertical integration in the fishery with the two major LFRs also owning a significant proportion of quota in SCA 1. However, neither of these LFRs actively fish for scallops, and instead sell ACE to other fishers. While some fishers in SCA 1 have operated processing facilities in the past, none do so presently.

Commercial use

91 Commercial fishing for scallops began in Northland around 1970 when a scallop “box dredge” was built based on designs from Australia. Initially, scallops were caught by one fisher and landed to a processor in Unahi (north of Awanui), however, domestic demand for scallops increased over the 70s and by the mid 1980s, there were 24 scallop boats operating across the fishery.

92 Commercial fishers argue that the variability seen during the 90s is attributable to several reasons. Firstly, they note that the court-imposed injunction on fisheries entering the QMS (after a legal challenge by Maori groups in 1987) allowed many fishers extra time to reactivate dormant scallop licenses and create a catch history in SCA 1. They note an increase from around 24 to 36 fishers around this time, with most of the new entrants primarily interested in establishing a catch history prior to quota introduction. This inevitably saw greater catches than the fishery had traditionally sustained. Secondly, several years of unusually high scallop abundance also led to significantly higher catches than normal during the early to mid 90s.

93 Commercial fishing for scallops in New Zealand is managed through the Quota Management System (QMS) and as with all QMS species, several conditions must be met for scallops to be legally harvested and sold. Key amongst these is a requirement for all commercial fishers to have a valid permit (issued through Fishserve) and for all catch to be balanced against annual catch entitlement (ACE). ACE essentially represents a right to fish for a certain quantity of a given fish in a specified area and timeframe. ACE is generated by quota (as a proportion of total allowable catch) each year and can be used directly by quota holders or on sold to other fishers.⁹ A further condition associated with commercial fishing in SCA 1 is that under schedule 8 of the Act, any commercial fisher must hold at least three tonnes of ACE in a given year in order to be able to fish. However, s74 of the Act details several exceptions to this rule, such as the “Grandfather clause” which allows fishers who’s original allocation of quota was less than three tonnes to continue fishing.

94 Once these conditions are satisfied, commercial fishers in SCA 1 harvest scallops according to a range of rules and restrictions. These include:

- a minimum size limit of 100mm in diameter applies to commercial fishers in SCA 1 (any scallops caught measuring less than this must be returned to the sea immediately);
- a commercial fishing season from 15 July to 14 February (though most fishing generally occurs between August and November);
- using dredge which is not greater than 2.5m wide; and
- a range of other restrictions pertaining to the times and areas in which commercial scallop fishing can occur (figure 5 shows the areas where commercial fishing is allowed to occur within SCA 1).

95 The gazetted conversion rate in the Northland scallop fishery is 12.5%, i.e., from a tonne greenweight of scallops landed, 125 kilograms meatweight is produced. However, actual rates vary slightly according to scallop condition and market requirements. The lowest meatweight recovery rate recorded in the fishery was 11.13% in 2002 while the highest was 14.61% in 1995.

⁹ For more information on quota and the Quota Management System, see “How commercial fishing is managed” at <http://www.fish.govt.nz/en-nz/Commercial>

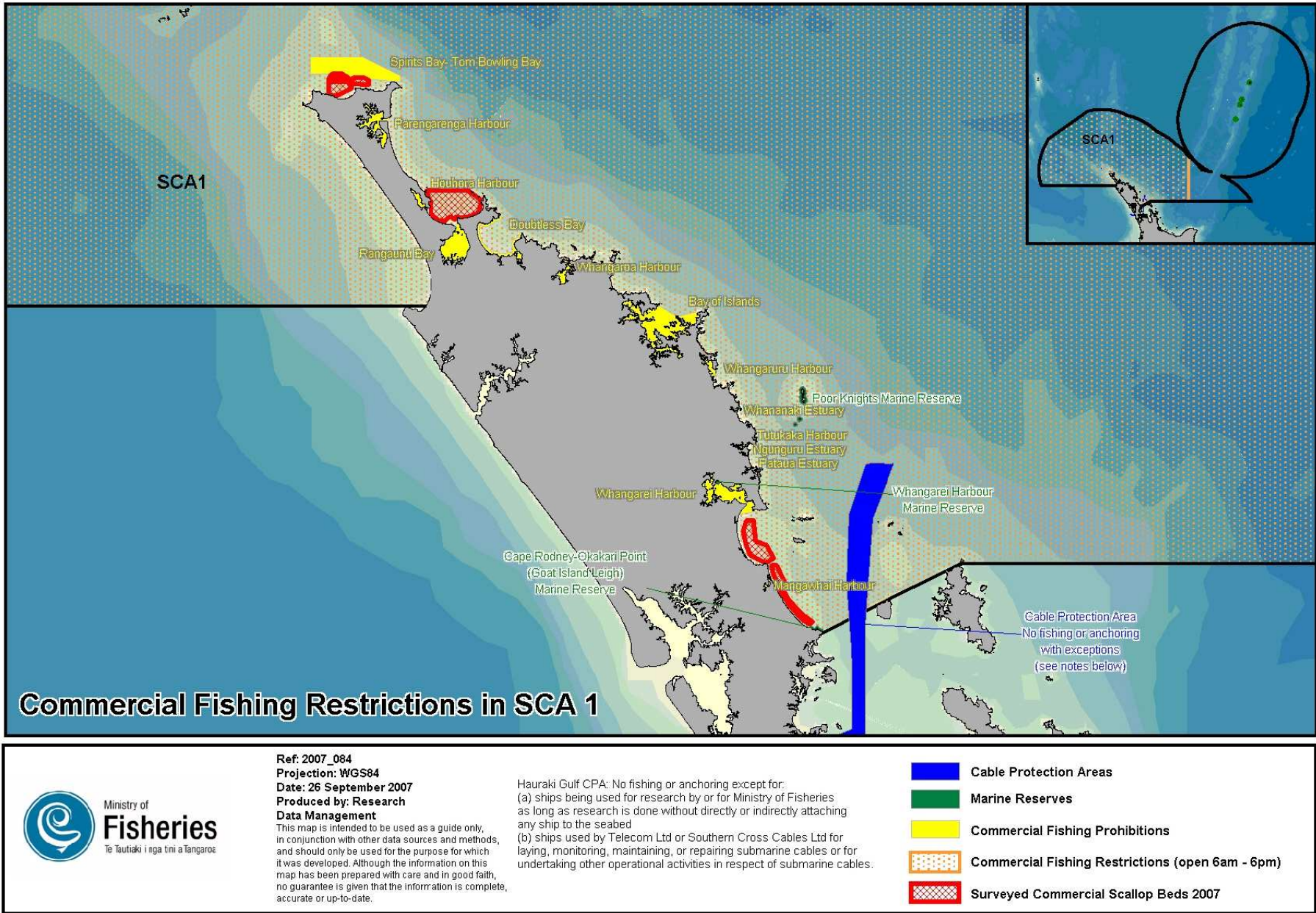


Figure 5: Commercial fishing restrictions in SCA 1

96 Scallops are a high-value product with a port price in the 06–07 fishing year of \$14.17 per kilogram of scallops (meatweight). Scallop processors estimate that in the 07–08 fishing year, commercial fishers in Northland are likely to receive \$16–17 per kilogram (meatweight) of scallops landed. While the retail price is subject to change, they estimate that scallops will sell for \$50–60 per kilogram from fish shops and supermarkets.

97 Commercial landings of scallops from SCA 1 have been highly variable since 1980 with major fluctuations in annual landings clearly visible in figure 6. A TACC (shown as the solid line) was set in this fishery in 1997, and has been lowered three times since in response to sustainability concerns and changing harvest strategies. This fishery is now managed with a baseline TACC (and allowances) that can be increased if a pre-season survey suggests there are enough scallops to support an increase.

98 Commercial fishers note that while they are legally entitled to catch the baseline TACC of 40 tonnes in any given year, they may choose not to (e.g., if they determine that scallops are not at a high enough density to support commercial harvesting).

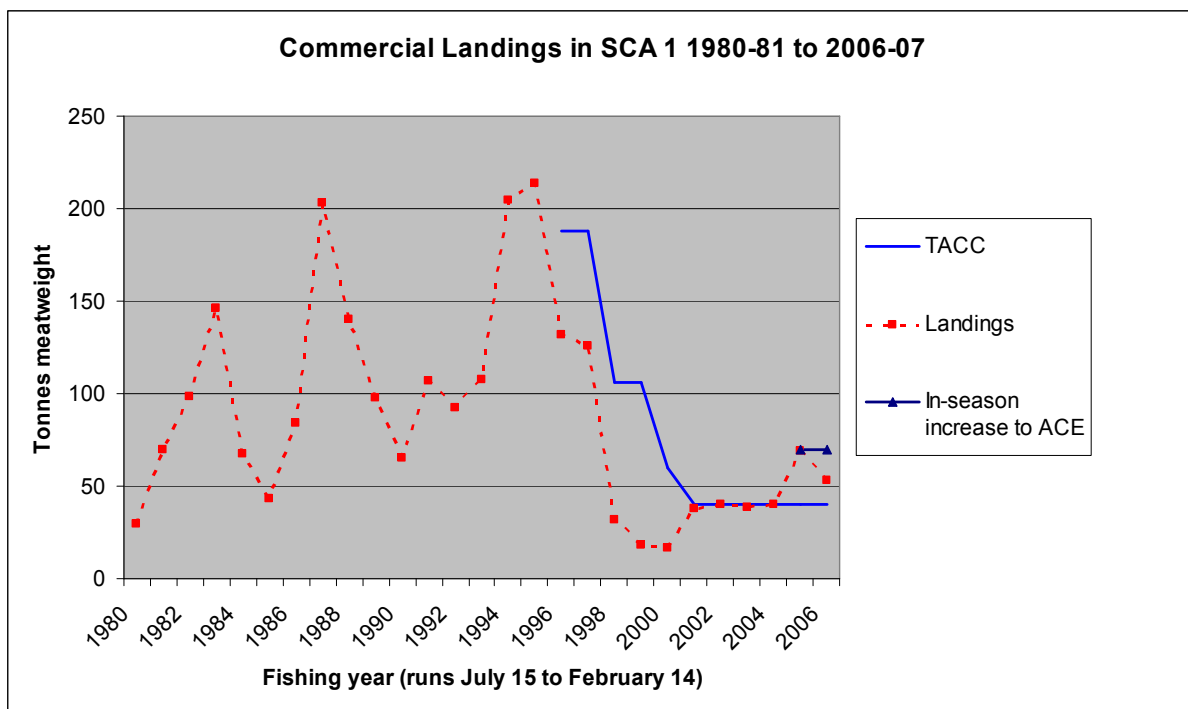


Figure 6: Commercial landings, TACC and in-season ACE increases for SCA 1 1980–2006.

99 Figure 6 shows considerable variability in the Northland scallop fishery over the last 27 years. Since 2001, the TACC for this fishery has been set at the relatively cautious level of 40 tonnes, and ACE can be increased within the season if a pre-season survey suggests such an increase is supportable (as shown in 2005 and 2006 when ACE was increased to 70 tonnes).

100 In addition to fluctuations in annual landings, there is also considerable variability in the areas with the Northland scallop fishery that produce the majority of catch. As figure 7 shows, certain beds seem to account for the majority of landings for several years, before declining in significance. Such variability is likely caused by a range of factors, including

changing sea temperature and food availability, invasive species, levels of fishing activity and changing market requirements.

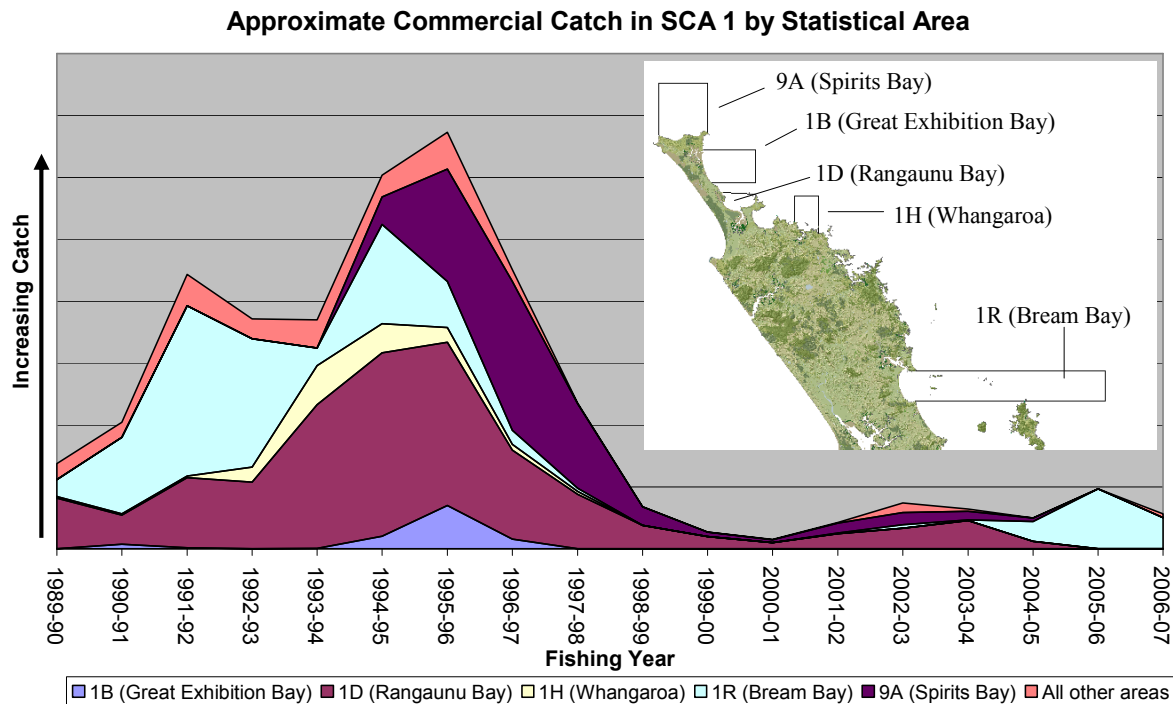


Figure 7 Commercial catch of scallops from different statistical areas within SCA 1 between 1989–90 and 2006–07.

101 Figure 7 shows considerable variability in the landings from different beds within the Northland scallop fishery, and in terms of landings from the whole fishery between 1989–90 and 2006–07. The early and mid 1990s saw a large increase in overall extractions from the fishery, with Rangaunu Bay, Bream Bay and Spirits Bay each producing large quantities of scallops for several seasons (see map inset above). In recent years, the majority of commercial catch has come from Bream Bay, with other beds not producing scallops in the densities required for commercial harvest. Note: while this graph is useful for comparing relative quantities of scallops caught from different statistical areas in SCA 1, inconsistencies in catch estimation and reporting mean that the actual quantities estimated are inaccurate. As such, this graph is useful only in providing a visual indication of changing catch patterns in SCA 1.

Commercial value

102 The factors that influence the value commercial operators obtain from the Northland scallop fishery will need to be determined through discussion with the commercial sector, however they may include:

- the level of the TACC and any in-season increase
- the condition of scallops (e.g. “fat” scallops free from diseases such as *blackgill*)

- the stability of the fishery between years
- the density of scallops within the fishery (see below)
- the price of diesel and other inputs required for fishing
- fisheries management costs
- costs associated with biotoxin testing
- prevailing domestic prices for scallops (currently no scallops from Northland are exported)

103 The total value of quota in SCA 1 can be roughly estimated by working out the average price per quota share from all trades in the fishery, and multiplying by the number of shares. There have been ten trades in SCA 1 at an average quota share price of \$0.024146. This gives a total quota value of \$2 414 600 in SCA 1, though it should be noted that this is only an indicator of the value of the fishery, not an absolute measure.

104 In order for fishing to be commercially viable, scallops must be present at or above a “critical density” of approximately 0.04 legal-sized scallops per square metre of accessible seafloor (or one legal scallop per 25m²). Over the last 20 years, fishing has occurred on a number of commercial scallop beds between Spirits Bay in the North and Mangawhai/Pakiri in the south. While scallops are always present in each of these beds, whether or not fishing occurs in a particular bed depends on how much of the bed is thought to have scallops present at or above a density of 1 per 25m².

105 Commercial value can also be considered in terms of the value provided by the commercial fishery to the wider community. Industry representatives estimate that the Northland Scallop fishery (in conjunction with various oyster producers) supports approximately 30 full time jobs and an additional 20 part time jobs annually. These representatives note that most of these jobs are concentrated in the Awanui-Kaimaumau region, where unemployment is higher than the national average.

Profile of the recreational sector

106 A recreational fisher in SCA 1 is any person who fishes for scallop under the Fisheries (Amateur Fishing) Regulations 1986 (see table 6 for the key regulations relevant to recreational fishing in SCA 1). This encompasses a large range of people who fish for a variety of reasons.

107 It is not known how many recreational fishers actively target scallops in the Northland area. While many recreational fishing clubs exist within the Northland scallop fishery, these organisations tend to focus on fishing for finfish such as snapper or gamefish such as marlin. Fishing for scallops is not generally a major focus for these clubs. However, diving clubs and diving charter operators within the SCA 1 area are known to actively target scallops, and there may be other groups who are able to represent the interests of recreational scallop fishers. MFish looks forward to developing a clearer understanding of the recreational sector in SCA 1 through the fish plan process.

Recreational use

108 Recreational fishing for scallops is a popular activity in Northland. Scallops are targeted for fun and to feed either the fisher or their family and friends. Most recreational fishing occurs in the harbours and inlets closed to commercial fishing (see figure 5). Particularly popular areas include the Bay of Islands and Whangarei Harbour where Fishery Officers estimate 50 boats can often be seen fishing the main beds of these harbours during summer.

109 Most fishing in these areas is thought to be conducted by divers (either free diving or UBA), as is most recreational fishing for scallops in the SCA 1 area. However, dredging for scallops is also popular where the bottom type is suitable, and in areas that are too deep, too dangerous or too murky for diving.

110 There is considerable uncertainty in terms of the total number of recreational scallop fishers in SCA 1, how frequently they go fishing, and the average size of each catch. However, estimates of total recreational catch in Northland scallops have been made, primarily through boat ramp surveys and telephone diaries. While there is considerable uncertainty in the survey estimates, the current recreational allowance of 7.5 tonnes (meatweight) was determined using the greater estimate of two telephone diary surveys conducted in 1993–94.

111 Recreational fishers in the Northland scallop fishery are subject to the recreational rules of the Auckland and Kermadec Marine Area (see figure 8). This means regardless of the harvest method used, a daily bag limit of 20 scallops for each recreational fisher applies. This limit is designed to ensure the sustainability of popular recreational scallop fisheries in a heavily fished area.

112 A recent regulation change allows the daily bag limits for several people to be collected simultaneously where a diver is collecting the bag limits for up to two safety people aboard the boat from which he/she is diving. As with the Northland commercial scallop fishery, recreational fishers are limited to scallops over 100mm in width. However, for the majority of SCA 1, the recreational scallop season differs from the commercial season, running 1 September to 31 March, beginning September 2007 (inclusive, see figure 9). For a full list of regulations pertaining to SCA 1, see table 6.

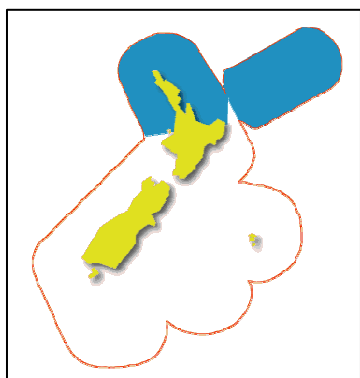


Figure 8: Auckland and Kermadec Marine Area



Figure 9: The recreational scallop season in this area runs 1 September to 31 March

113 Non-commercial fishers describe poor scallop beds in Doubtless Bay which had

previously supported major commercial and non-commercial fisheries. Non-commercial fishers argue that since the early 1990s, the scallops in this area have generally failed to reach the minimum legal size, and are much less abundant than they had been historically. Commercial fishers have also made similar comments, and no longer fish within Doubtless Bay.

Recreational value

114 Factors that recreational fishers value from the fishery need to be discussed with the recreational sector, but are likely to include the following:

- high catch rates (fishers are able to obtain the daily bag limit most of the time);
- good sized scallops (100mm+ scallops readily available);
- scallops in good condition (scallops are “fat” and not affected by pollution or disease); and
- a fair and easily understandable regulatory framework (e.g. the ability to collect a reasonable number of scallops while abiding the regulations).

Profile of the customary sector

115 The Government has an ongoing obligation under s 10 of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992 to develop policies to help recognise the use and management practices of Maori in the exercise of their non-commercial fishing rights.

116 One of the ways in which this obligation is provided for is through the creation of the Fisheries (Kaimoana Customary Fishing) Regulations 1998 (commonly referred to as the ‘customary regulations’). These regulations enable the taking of fisheries resources for customary food gathering purposes from waters in the North Island. Tangata whenua can nominate tangata kaitiaki to authorise customary Māori fishing outside of restrictions of the amateur fishing regulations (e.g. the Tangata Kaitiaki can apply different bag or size limits than are set out in the recreational regulations).

117 For those iwi and hapu groups who have yet to gazette their rohe moana or appoint tangata kaitiaki under the customary regulations, customary fishing rights are exercised through the provisions of the amateur fishing regulations and the Fisheries Act. In particular, Regulations 27 and 27A of the Fisheries (Amateur Fishing) Regulations 1986 provide for customary take outside the general provisions for amateur take. The situations in which such take can occur are relatively limited (for hui and tangi only). In addition, Part 9 of the Fisheries Act outlines provisions for taiapure-local fisheries and other customary fishing provisions (e.g. temporary closures or method controls under section 186A).

118 Within the Northland scallop fishery, there are many iwi and hapu, including Ngāti Kuri, Ngai Takoto, Te Aupouri, Te Rarawa, Ngāti Kahu, Ngā Puhi, Ngāti Wai and Ngāti Whatua. Each of these groups will have different fisheries priorities, but are all likely to have an interest in scallops, given their importance as a traditional food source. Historically, this fishery would have been utilised either through diving in shallow waters, or hand gathering at low tide or of beach cast scallops.

119 At present, MFish has limited information on the level of customary take in SCA 1. Discussion with the customary sector during the development of the Northland scallop fishery plan will assist to improve information about the customary fishery.

Customary management tools

120 At present, few fisheries have reliable records or estimates of Māori customary catch. The Northland scallop fishery, the customary catch was determined using MFish's standard policy of equating customary allowance with the recreational allowance where the species concerned is of importance to Māori. Thus, the customary allowance in SCA 1 is set at the same level as the recreational allowance, 7.5 tonnes (meatweight). However, it is not known whether or not this allowance is over-caught or under-caught. Maori fishers also note that they often fish under the recreational fishing rules when gathering food for customary use, with Section 27A and/or the Kaimoana Regulations used only for larger gatherings.

121 There are several ways that tangata whenua can manage fisheries in their areas under current fisheries legislation. These include:

- establishment of rohe moana and appointment of tangata kaitiaki/tiaki
- establishment of mātaihai reserves
- establishment of taiapure
- fisheries planning process
- temporary closures (section 186A of the Fisheries Act 1996).

Rohe moana

122 Notification of a rohe moana is one tool that can assist a hapu or iwi in exercising customary rights in a given area. Establishment of rohe moana recognises mana whenua/mana moana of an iwi or hapu over a given area and allows the appointment of tangata kaitiaki and the development of management plans.

123 There is one rohe moana currently established in the SCA 1 area. Nga Hapu o Taiamai ki te Marangi has notified an area extending from the Purerua Peninsula (near Kerikeri) in a northeast direction to the edge of New Zealand's exclusive economic zone.

Iwi management plans

124 When planning for the protection and use of resources, iwi may establish a formal statement of intent, referred to as an Iwi Management Plan. Whilst such plans may have broad application in terms of the Resource Management Act 1991, s16 of the Fisheries (Kaimoana Customary Fishing) Regulations 1996 recognises these plans more specifically as "planning documents" when written by tangata kaitiaki to manage their rohe moana. Rohe Moana Management Plans must be taken into account by the Minister for the purposes of s10(b) of the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

125 Whilst iwi may produce Iwi Management Plans that are broader in their application,

there is no legislative requirement for the Ministry to take these into account. However, such plans would hold weight in any discussion on fisheries management issues

Mātaitai reserves

126 Mātaitai reserves are designed to recognise and provide for the special relationship between tangata whenua and places of importance for customary food gathering. Once identified and established, these areas allow tangata whenua to manage non-commercial fishing in the area through bylaws (commercial fishing is generally prohibited).

127 As yet, no mātaitai reserves have been established in the Northland scallop fishery.

Taiāpure-local fisheries reserves

128 Taiāpure-local fisheries reserves are designed to provide for tino rangatiratanga and the fisheries rights secured in Article 2 of the Treaty of Waitangi. They allow for the management of commercial and non-commercial fishing and can be established in estuarine and littoral coastal waters that have been of significance to an iwi or hapu for food gathering or have been of cultural or spiritual importance.

129 There is one taiāpure-local fisheries reserve in the Northland scallop fishery. It covers an area in the Waikare Inlet at the southern end of the Bay of Islands. As yet there are no regulations that control fishing activities in this area arising from this taiāpure, and as such, the Amateur regulations apply. There is also an application for a taiāpure at Waka te Haua (the Bluff) on Ninety Mile Beach.

Temporary closures

130 Temporary closures are established under s186A of the Fisheries Act and are designed to allow tangata whenua to exercise their customary fishing rights. A 186A closure prohibits the taking of certain species for a renewable two-year period to allow the number or size of these species to improve.

131 There are currently no 186A closures in the Northland scallop fishery.

132 For more information on each of these tools, visit <http://www.fish.govt.nz/en/nz/Customary>

Value indicators

133 Factors that customary fishers value in the Northland scallop fishery need to be discussed with the customary sector, but may include the following:

- high catch rates;
- good sized scallops;
- available in good quantities in accessible places;
- scallops in good condition (scallops are “fat” and not affected by pollution or disease);

- healthy environment;
- providing for future generations;
- upholding the mana of the marae;
- manaakitanga (hospitality);
- kaitiakitanga (both the practice of environmental stewardship, and also the role of specific species as kaitiaki);
- whanaungatanga; and
- the ability to provide for current and future generations.

134 In addition, members of the customary sector also note that several areas within the fishery are of high spiritual value to tangata whenua. One of these areas is Spirits Bay, which is viewed as the departure point for spirits destined for Hawaiki. The beach sediment at Spirits Bay –called rikiriki– also has significance as it was traditionally used in urupā (grave sites) in the region. It is thought that rikiriki is partly composed of broken up scallop shells.

Non-extractive users

135 In addition to the many groups of people who remove scallops through various forms of harvest, there are also people who have an active interest in scallops even though they do not participate directly in the fishery. They include people who may not eat scallops, but derive satisfaction from the intrinsic value of scallops and the contribution scallops make to the biodiversity and ecology of the marine ecosystem. They may also derive satisfaction from the knowledge that healthy scallop populations will be available to future generations. Further, non-extractive users might also include people who do not disapprove of extraction in principle, but who are concerned about the impact of dredges on the benthic environment.