

66 Current and future MFish and DoC research projects are listed in the **Services** section of the report.

Total allowable catch

67 An important aspect of enabling stakeholders to achieve best value in the SR is the specification of limits within which each stakeholder group can maximise value. People should be able to realise the best value from the sustainable and efficient use of a fishery. The first step to obtaining best value from a stock is sustainable management of the total harvest so as to ensure best value can be obtained for present and future generations. The Fisheries Act 1996 contains a number of provisions to ensure a stock is managed sustainably. A key measure is the Government setting a total allowable catch (TAC) for SR stocks to provide an upper limit on take from the SR stocks. Specifying limits on extraction also contribute to maintaining the health of the aquatic environment, ensuring abundance, biodiversity and maintaining species assemblages.

Total Allowable Catch

Draft standard to be determined

68 All SR stocks are managed in the Quota Management System. TACs for these stocks have been set under s 13 of the Fisheries Act 1996. This requires the Minister of Fisheries to set a TAC that—

- Maintains each SR stock at, or above, a level that can produce the maximum sustainable yield (MSY), having regard to the interdependence of stocks; or
- Enables the level of each SR stock whose current level is below that which can produce the MSY to be altered—
 - a) In a way and at a rate that will result in the stock being restored to, or above, a level that can produce the MSY, having regard to the interdependence of stocks; and
 - b) Within a period appropriate to the stock, having regard to the biological characteristics of the stock and any environmental conditions affecting the stock.

69 The current state of the biomass of SR stocks in relation to MSY is shown in Table 3.

70 In the absence of other information, SR stock TACs have been set based on known, or estimates of, catch levels of customary Maori, recreational, all other sources of fishing-related mortality, and commercial catch. MOK 3 and MOK 5 were introduced into the QMS in 1986 below the level of the landings of the 1983-84 fishing year to rebuild the stocks. BCO 3 and BCO 5 were also introduced into the QMS in 1986 with TACs based on recent catches. SPE 3, SPE 5, TRU 3 and TRU 5 were introduced into the QMS in 1998-99 fishing year based on the average of the last five years catches at the time of introduction.... BUT 3 and BUT 5 were introduced in the 2002-03 fishing year also based on the average of the last five years catches at the time of introduction.

Table 3: The state of Southern Reef Fishery stocks in relation to the Maximum Sustainable Yield (MSY)

Stock at a level that would produce the MSY	Unknown if stock at a level that would produce the MSY
BCO 3	
BCO 5	
	BUT 3
	BUT 5
MOK 3	
MOK 5	
	SPE 3
	SPE 5
	TRU 3
	TRU 5

71 Recovery of the MOK 3 stock resulted in the TAC of MOK 3 doubling in the 1992-93 fishing year. SPE 3 is currently managed under an AMP which resulted in the TAC being increased to above 1000 tonnes in the 2001-02 fishing year.

PEOPLE ARE ABLE TO REALISE THE BEST VALUE FROM THE SUSTAINABLE AND EFFICIENT USE OF FISHERIES

72 This section looks at the current ‘best value’ status of the fishery by providing information on allocation and use, profile of the sectors, and use and value indicators.

Allocation & Use

Draft standard defines a shared fishery and the process for allocation of TAC between sectors in a shared fishery

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

74 In setting or varying any total allowable commercial catch, the Minister of Fisheries shall have regard to the TAC for that stock and allows for: Maori customary non-commercial fishing interests; recreational interests; and all other mortality to that stock caused by fishing. Commercial fishers receive the remaining proportion of the TAC, known as the total allowable commercial catch (TACC). The TAC and the division amongst user groups for the SR stocks are outlined in Table 4.

75 For fish stocks that entered the QMS prior to the Fisheries Act 1996 coming into force, the TACs set were for commercial fishing only (ie, they were equivalent to TACCs).

Table 4: Southern Reef Fishery stock TACs, TACCs and allowances, and commercial landings (in tonnes)

Stock	TAC	Customary allowance	Recreational allowance	Other fishing-related mortality allowance	TACC 2004-05	Average commercial landings for 3 years prior to QMS introduction
BCO 3	*163	#	#	#	163	70
BCO 5	*1548	#	#	#	1548	865
BUT 3	134	65	65	1	3	1
BUT 5	66	10	10	1	45	28
MOK 3	*127	#	#	#	127	-
MOK 5	*44	#	#	#	44	-
SPE 3	1022	11	11	0	1000	856
SPE 5	38	1	1	0	36	32
TRU 3	53	7	13	0	33	31
TRU 5	54	11	21	0	22	29

* TACs set for commercial fishing before the 1996 Fisheries Act came into force.

Allowance has not been set

Profile of Sectors

Commercial

76 The commercial catch of the SR is valued¹⁰ at around \$25 million and accounts for approximately 65% of the total catch in the fishery. There are currently 223 quota owners in the SR. The number of quota owners varies depending on the stock (Table 5). Under section 59 of the Fisheries Act 1996, no quota holder is allowed to hold more than 35% of a SR stock quota. Most SR quota holders are represented by South East Finfish Management Limited (SEFML).

Table 5: Number of quota owners and quota owning concentration in the Southern Reef Fishery as of January 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) *
	0-1	1-5	5-10	>10	Total			
BCO 3	31	18	6	0	55	2	8,941,082	23.9
BCO 5	51	22	4	1	78	1	13,740,973	32.3
BUT 3	4	2	2	3	11	16,350	29,952,994	79.0
BUT 5	7	6	2	3	18	4,444	39,755,556	72.4
MOK 3	27	16	4	2	49	1	17,864,723	37.8
MOK 5	12	12	4	3	31	13,712	17,385,044	40.2
SPE 3	47	5	0	5	57	1	20,408,807	55.3
SPE 5	39	7	4	2	52	1	26,011,111	55.6
TRU 3	25	9	4	2	40	1	20,000,000	48.3
TRU 5	8	2	2	3	15	9,091	29,109,090	71.8

¹⁰ This value is the market value of the commercial catching right (individual transferable quota) of SR stocks.

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

77 The largest quota owning company in SR is Te Ohu Kai Moana Trustee Limited. Other companies that have substantial quota ownership of a number of the stocks in the SR include: Sanford Limited, Talley's Group Management Limited, KPF Investments Limited, Pupuri Taonga Limited, Independent Fisheries Holdings Limited, B L Fisheries Limited, McCulloch Trustees 2004 Limited, and Ngāi Tahu Seafood Resources Limited. The Crown is not a major quota owner for stocks in the SR.

78 The amount of quota shares of a stock owned by the quota holder determines their level of Annual Catch Entitlement (ACE). ACE is the right to take a certain weight of the stock during a fishing year. ACE is generated at the beginning of each new fishing year. There are currently 286 ACE holders in the SR (Table 6). While some ACE holders also hold quota shares or are licensed fish receivers, overall the commercial SR is not highly vertically integrated.

Table 6: Number of ACE holders and ACE holding concentration in the Southern Reef Fishery as of January 2007

Stock	Total number of ACE holders	CR3 (% ACE holding) *	Number of ACE holders holding quota shares	Number of licensed fish receivers holding ACE
BCO 3	69	23.6	37	13
BCO 5	118	31.6	45	19
BUT 3	10	90.6	6	5
BUT 5	20	79.2	14	7
MOK 3	71	33.0	30	12
MOK 5	41	40.4	22	14
SPE 3	91	45.0	32	18
SPE 5	53	54.0	22	14
TRU 3	58	44.9	22	12
TRU 5	25	72.0	10	8

* CR3 is the concentration ratio (% of quota) for the top three ACE holders in each stock.

79 Most commercial fishers use potting and set netting to target stocks in the SR. In addition, bottom trawling vessels catch SR stocks, primarily as bycatch. Most of the vessels used in the fishery are between 10 and 20 m (Table 7). There are a number of larger vessels that catch SR stocks in the deepwater fishery. The major fishing ports are Lyttelton, Timaru, and Bluff. A number of fishing vessels less than 19 m are based at smaller ports – Kaikoura, Moeraki, Karitane, Taieri Mouth, and Riverton.

Table 7: Number and size of Southern Reef Fishery fishing boats by base port

Port	Vessel Size (m)							Total
	<10	10-14	15-19	20-24	25-29	30-34	>35	
Akaroa	-	4	-	-	-	-	-	4
Auckland	-	-	1	1	1	-	-	3
Bluff	2	35	12	2	-	-	-	51
Careys Bay	-	4	1	-	-	-	-	5
Coromandel	-	1	-	-	-	-	-	1
Dunedin	-	3	-	-	-	-	-	3
Gisborne	-	-	1	-	-	-	-	1
Greymouth	-	2	-	-	-	-	-	2
Halfmoon Bay	1	5	-	-	-	-	-	6
Horseshoe Point	-	1	-	-	-	-	-	1
Jacksons Bay	-	1	-	-	-	-	-	1
Kaikoura	4	11	-	-	-	-	-	15
Karitane	1	5	-	-	-	-	-	6
Le Bons Bay	-	-	-	-	-	-	1	1
Lyttelton	-	4	10	3	1	-	15	33
Milford Sound	-	1	1	-	-	-	-	2
Moeraki	-	7	-	-	-	-	-	7
Napier	-	-	-	3	-	-	1	4
Nelson	-	2	1	2	2	-	13	20
Oamaru	-	1	-	-	-	-	-	1
Owenga	-	1	-	-	-	-	-	1
Picton	-	2	1	1	-	-	-	4
Port Chalmers	-	1	2	-	-	-	-	3
Rangiora	1	-	-	-	-	-	-	1
Riverton	2	12	1	-	-	-	-	15
Stewart Island	-	2	-	-	-	-	-	2
Taieri Mouth	1	7	-	-	-	-	-	8
Tarakohe	-	1	-	1	-	-	-	2
Tauranga	-	1	2	-	-	-	-	3
Timaru	-	7	4	4	2	1	12	30
Waikawa-Southland	-	2	-	-	-	-	-	2
Waitangi	1	-	-	-	-	-	-	1
Wellington	-	1	1	1	2	-	-	5
TOTAL	13	124	38	18	8	1	42	244

80 Much of the commercial catch of SR is processed locally and destined for the local market, although there is an export market for blue cod. There are currently 66 Licensed Fish Receivers (LFRs) engaged in processing catches of SR stocks (Table 8).

Table 8: Number of licensed fish receivers (LFR) that process Southern Reef Fishery stocks at each port/town for 2005-06 fishing year

Port/town	> 100t	50-100t	10-50t	<10t	Total number of LFR fish processors by location
Akaroa	-	-	-	1	1
Auckland	1	-	-	5	6
Balclutha	-	-	-	1	1
Bluff	2	-	-	-	2
Brighton	-	-	-	2	2
Chatham Islands	-	-	-	1	1
Christchurch	1	1	4	6	12
Dunedin	-	1	2	3	6
Greymouth	-	-	-	1	1
Hamilton	-	-	-	2	2
Hampden	-	-	-	1	1
Invercargill	2	1	3	2	7
Kaikoura	-	-	-	3	3
Motueka	1	-	-	-	1
Nelson	-	1	-	1	2
Otautau	-	-	1	-	1
Palmerston	-	-	-	3	3
Picton	-	-	-	1	1
Riverton	-	-	2	1	3
Stewart Island	-	1	-	-	1
Tauranga	-	-	1	1	2
Te Anau	-	-	1	-	1
Timaru	-	1	-	-	1
Waiholā	-	-	1	-	1
Waimauku	-	-	-	1	1
Wellington	-	-	-	2	2
TOTAL	7	6	15	38	66

Recreational

81 Recreational fishing is an important element of the SR with blue cod being the most important recreational species. All SR stocks are target fished by non-commercial fishers. Blue cod, sea perch and trumpeter are normally caught by boat-based fishers using a rod and line. Set net fishers typically target blue moki and butterfish. In the past, sea perch were seldom targeted by recreational fishers, but significant numbers were caught. Some were used for bait, but most were discarded. However, as blue cod have become less available in some areas (eg, Kaikoura, Fiordland) sea perch have become increasingly targeted by fishers in many areas.

82 A key component of estimating recreational harvest from diary surveys is determining the proportion of recreational fishers in the population. The Ministry's Recreational Working Group has concluded that the methodological framework used for telephone interviews used in these surveys have produced some incorrect eligibility figures, and consider the 1999-00 and 2000-01 surveys probably provide better information than the earlier surveys.

83 Based on the 2000-01 survey¹¹, there are 900,000 people in New Zealand based on the 2000-01 survey¹² who claim to be fishers. However, this estimate is likely to be an over-estimate as many diarists report no fishing during the surveys, suggesting they are not active fishers at all. Of the 900,000 about 180,000 are thought to be resident in SR region. In addition, fishers from overseas and other areas of New Zealand fish in the SR area, particularly at holiday areas such as Kaikoura, Akaroa, Stewart Island and Fiordland.

84 There are areas within SR area (eg, Kaikoura, Banks Peninsula, Shag Point, Catlins) where there are a number of fishers who regularly rely on sea food for their table. But, it is likely that the majority of recreational fishing in SR area is motivated by having an enjoyable outdoor activity, while catching a fish to take home. There is an increasing use of charter vessels by recreational fishers in the SR, with an accompanying increase in the number of charter vessels and their locations along the coast.

85 Recreational fishers are required to fish within the constraints of the daily bag limit. Each species within the SR (apart from sea perch) has a daily limit set which fishers are not permitted to exceed. In addition, fishers are unable to take more than a combined limit of 30 finfish in any one day (sea perch is not included in this combined limit). Recreational fishers are permitted to accumulate their daily bag limits over several days fishing, provided each days catch is properly identified. The exception to this is in the Fiordland Marine Area where fishers are not permitted to accumulate their daily bag limits. The individual stock bag limits are discussed in more detail in the section on **Use and Value Indicators**.

86 There is a large number of fishing clubs within the SR region, but only a small proportion of recreational fishers are thought to belong to clubs. Recreational fishers are represented by a network of local recreational fishing groups that work collectively through the South Marine Recreational Fishers Advisory Committee.

Customary (Tāngata Whenua)

87 The tāngata whenua of the SR belong to the Ngāi Tahu iwi (tribe), whose tribal territory covers 80% of the South Island and all of the SR area. The overall tribe is made up of hapu (sub-tribes) which settled in district areas, but tribal governance is based on 18 settlements known as Papatipu Rūnanga. The governing body of Ngāi Tahu ‘Te Rūnanga o Ngāi Tahu’ is made up of representatives from each of these Papatipu Rūnanga.

88 Individual Papatipu Rūnanga deal with fisheries issues, including the tāngata tiaki-kaitiaki that authorise customary fishing and manage mātaítai reserves. Broader policy issues are referred to ‘Te Rūnanga o Ngāi Tahu’.

Non-extractive Users

89 Non-extractive users are those who derive value from knowing that a healthy aquatic environment exists for generations to come. There will likely be a substantial number of people who fit into this category but the actual numbers involved are very difficult to quantify.

¹¹ Boyd, R.O., Gowing, O., and Reilly, J.L. 2000-2001 national marine recreational fishing survey: diary results and harvest estimates. Draft New Zealand Fisheries Assessment Report. May 2004. 57 pp.

¹² Boyd, R.O., Gowing, O., and Reilly, J.L. 2000-2001 national marine recreational fishing survey: diary results and harvest estimates. Draft New Zealand Fisheries Assessment Report. May 2004. 57 pp.

Use and value indicators

Commercial

Commercial Use

Draft standard outlines reporting requirements for commercial fishers in the fishery

90 Stocks must be landed and reported by fishers unless the fish are undersized. Some QMS stocks may be returned to the sea if they are listed on the 6th Schedule of the Act, but this does not apply to any SR fishstocks.

91 Some fish species deteriorate significantly if not processed immediately after harvest. To allow commercial fishers to process at sea, conversion factors have been determined to convert processed fish weight to greenweight (whole weight of fish). Conversion factors for blue cod, butterfish, blue moki, sea perch and trumpeter are listed below in Table 9. Most vessels in the SR are small inshore vessels making day trips. As a result, the majority of the catch has minimal processing, usually only being gutted or headed & gutted (Table 10). Only in BCO 5, and SPE 3 and SPE 5, with longer trips and larger vessels fishing further offshore (for SPE 3 and SPE 5), is more processing of the catch undertaken.

Table 9: Conversion factors by fishstock of the Southern Reef Fishery over the 2001-02 to 2005-06 fishing years

Species	Conversion factor for each product state					
	Whole or green (GRE)	Gutted (GUT)	Headed and gutted (HGU)	Dressed (DRE)	Fillets (FIL)	Fillets skin-off (SKF)
Blue cod	1.00	1.15	1.40	1.70	1.70	2.60
Butterfish	1.00	1.10	1.50	1.80	2.50	3.10
Blue moki	1.00	1.10	1.40	2.00	2.50	3.10
Sea perch	1.00	1.10	1.90	2.35	2.85	3.85
Trumpeter	1.00	1.10	1.50	1.80	2.50	3.10

Table 10: The percent of total catch landed in each product state by fishstock of the Southern Reef Fishery over the 2001-02 to 2005-06 fishing years

Fishstock	Percent of total catch landed by product state					
	Whole or green (GRE)	Gutted (GUT)	Headed & gutted (HGU)	Dressed (DRE)	Fillets (FIL)	Fillets skin-off (SKF)
BCO 3	6%	42%	37%	6%	2%	2%
BCO 5	1%	11%	42%	12%	30%	1%
BUT 3		99%				
BUT 5		15%	83%			
MOK 3	86%		13%			
MOK 5	87%	6%	6%			
SPE 3	67%			30%		
SPE 5	57%			40%		
TRU 3	43%	25%	30%			
TRU 5	82%	7%	7%			

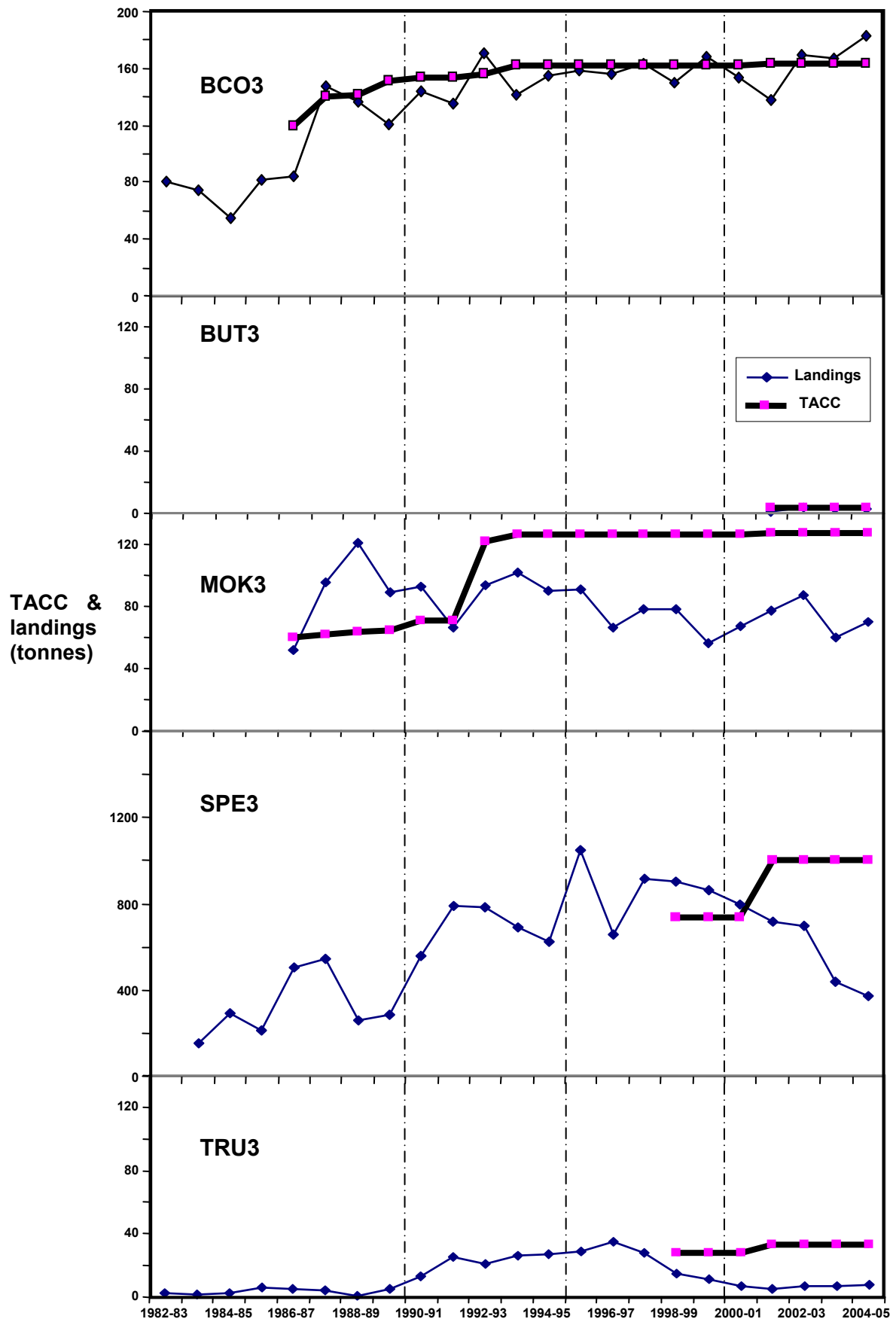


Figure 2: Commercial landings and TACCs (in tonnes) of Southern Reef Fishery fishstocks

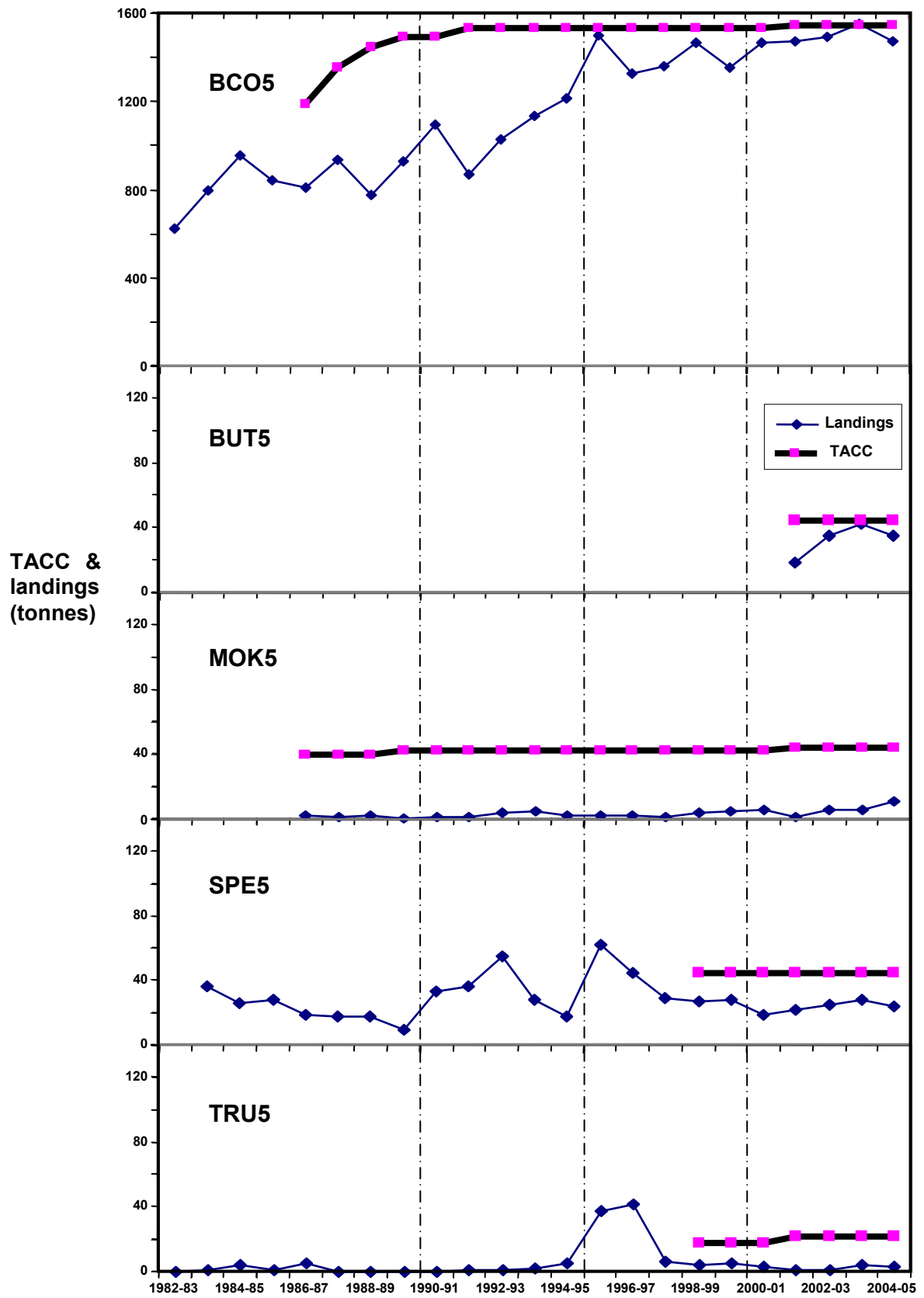


Figure 2: continued

92 Commercial landings of each stock for each fishing year are dependent on the TACC, catch availability, and market conditions. The reported commercial landings against TACC for each of the five species are shown in Figure 2. The landings of BCO 3 and BCO 5 have been about the TACC, just above or below, in recent years. The landings of BUT 3 and BUT 5 have been just under the TACC in recent years, and MOK 3, MOK 5, SPE 5, TRU 3, and TRU 5 have been significantly under-caught. The landings of SPE 3 were above the TACC, but since the TACC was increased under an Adaptive Management Programme (AMP) the principal fisher has withdrawn from the fishery and catches have fallen below the original TACC.

Commercial Value Indicators

93 The commercial catch of SR is valued¹³ at around \$25 million.

94 Commercial operators in the SR have four ways to maximise value:

- Maximising the value of the harvest right – the quota
- Maximising the value of catching right – the ACE
- Maximising the value from the fish caught and landed.
- Adding value to the fish landed.

95 Quota is the long term asset while ACE is the annual return realised from that asset. Table 10 describes the value of the quota over the last five years for the species covered in this plan.

Table 10: Recent quota share transfer prices for Southern Reef Fishery stocks (from 1 October 2001 to 30 September 2006)

Fishstock	Quantity traded (shares)	Total number of transfers	Low (per share)	Average (per share)	High (per share)	Average (\$ per tonne)
BCO 3	69,521,051	35	0.0003	0.0334	0.0895	20,571.10
BCO 5	57,074,766	91	0.0034	0.1990	15.0000	12,857.30
BUT 3	71,051,669	13	0.0000	0.0002	0.0003	9,657.33
BUT 5	73,417,214	15	0.0010	0.0057	0.0073	12,735.40
MOK 3	49,493,738	29	0.0000	0.0036	0.0050	2,905.89
MOK 5	37,007,495	20	0.0002	0.0008	0.0017	2,016.72
SPE 3	39,862,692	33	0.0100	0.0233	0.0352	2,337.50
SPE 5	8,972,220	10	0.0004	0.0005	0.0007	1,430.17
TRU 3	32,257,574	20	0.0004	0.0010	0.0035	3,150.63
TRU 5	115,472,728	5	0.0003	0.0006	0.0009	2,785.16

96 Table 11 provides the values for ACE in the SR for the 2005-06 fishing year.

¹³ This value is the market value of the commercial catching right (individual transferable quota) of SR stocks.

Table 11: Recent ACE transfer prices in the Southern Reef Fishery (from 1 October 2005 to 30 September 2006)

Fishstock	Quantity traded (kg)	Total number of transfers	Low (per kg)	Average (per kg)	High (per kg)	Average (\$ per tonne)
BCO 3	196,013	250	0.4015	0.8908	2	890.8
BCO 5	2,167,962	415	0.3	0.7901	1.6153	790.1
BUT 3	1,546	9				
BUT 5	58,411	17	0.3814	0.5137	0.6201	513.7
MOK 3	158,404	227	0.0397	0.1503	0.2857	150.3
MOK 5	24,026	36	0.0754	0.109	0.1764	109
SPE 3	1,207,056	268	0.025	0.0424	0.06	42.4
SPE 5	45,194	131	0.0388	0.0959	0.2247	95.9
TRU 3	34,700	91	0.1875	0.6189	1.0625	618.9
TRU 5	14,333	18	0.2	0.3262	0.5	326.2

97 Revenue to commercial operators is generated through the sale of landed catch either domestically or internationally. There are limited exports of the species covered within this plan with the bulk of catch destined for domestic consumption. The only species with moderate exporting is the blue cod with exports for the entire country reaching about 45 tonnes in 2005. The following table provides the latest estimates of the relevant species' domestic prices (Table 12). Port price, the price LFRs pay to commercial fishers for fish they catch, is used as the domestic price.

Table 12: Port prices¹⁴ of Southern Reef Fishery stocks

Fishstock	Common name	2006/07 port price (\$/kg)	2005/06 port price (\$/kg)
BCO 3	Blue cod	2.94	3.12
BCO 5	Blue cod	4.21	2.86
BUT 3	Butterfish	3.84	3.84
BUT 5	Butterfish	3.84	3.84
MOK 3	Blue moki	0.70	0.76
MOK 5	Blue moki	0.73	0.85
SPE 3	Sea perch	0.58	0.58
SPE 5	Sea perch	0.60	0.60
TRU 3	Trumpeter	2.04	2.04

98 There is little information on the value added to SR stocks by further processing by LFRs. Nor is there information on the value added by retailers or restaurants/ fish shops/ or food takeaway outlets.

Recreational

Recreational Use

99 Catches of recreational fishers are managed through daily bag limits. Each species within the SR, apart from sea perch (see below), has a daily limit set which fishers are not permitted to exceed (Table 13). In addition, fishers are not allowed to take more than a combined limit of 30 finfish in any one day, however, again this does not apply to sea perch.

¹⁴ The 2006 port price is set in 2006 from data collected from the fishing year to 30 September 2005 and used in the 2006/07 cost recovery levy order.

100 Sea perch is not included in these bag limits, except in Fiordland Marine Area where the limit for sea perch is 10 per day and sea perch is also included in the 30 finfish combined limit. In Te Whāka a Te Wera Mātaitai Reserve, recreational fishers are restricted to a combined limit of 15 finfish including sea perch.

101 Recreational fishers are permitted to accumulate their daily bag limits over several days fishing, provided each days catch is properly identified. However, Fiordland Marine Area fishers are not permitted to accumulate their daily finfish bag limits.

Table 13: Recreational daily bag limits for Southern Reef Fishery stocks

Fishstock	Common name	Area	Maximum daily bag limit
BCO 3	Blue cod	Kaikoura-North Canterbury	10
BCO 3	Blue cod	Remainder of BCO 3	30
BCO 5	Blue cod	Te Whaka a Te Wera Mātaitai Reserve (within Paterson Inlet)	10
BCO 5	Blue cod	Remainder of Paterson Inlet, Stewart Island	15
BCO 5	Blue cod	Fiordland Marine Area, Internal Waters	3
BCO 5	Blue cod	Fiordland Marine Area including the Internal Waters	20
BCO 5	Blue cod	Remainder of BCO 5	30
BUT 3 & BUT 5	Butterfish	All of BUT3 & BUT 5	15
MOK 3 & MOK 5	Blue moki	All of MOK3 & MOK 5	15
SPE 3	Sea perch	All of SPE 3	No limit
SPE 5	Sea perch	Fiordland Marine Area	10
SPE 5	Sea perch	Remainder of SPE 5	No limit
TRU 3 & TRU 5	Trumpeter	All of TRU 3 & TRU 5	15

102 Recreational fishers are surveyed from time to time to estimate the amount of each species landed by recreational fishers. Recreational landings were obtained from diary surveys in 1991–94, 1996 and Dec 1999–Nov 2000. The MFish Recreational Working Group has reservations about the accuracy of these surveys. The most recent survey in 1999–00 is considered the more reliable for estimating the recreational harvest of SR stocks (see Table 14 below).

103 The BCO 3 recreational harvest is probably the second-equal largest recreational finfish catch in New Zealand after snapper caught in SNA 1. The BCO 3 harvest is similar to the recreational snapper harvest in SNA 8, and tarakihi in TAR 1.

104 Estimates of recreational landings are above the recreational allowance for BUT 5 and SPE 3, and they are about or below the level of the recreational allowances in the other butterfish, sea perch, and trumpeter fishstocks. No allowances have been set for blue cod or blue moki fishstocks.

Table 14: Recreational landings estimates (in tonnes) for Southern Reef Fishery stocks from the Dec 1999-Nov 2000 survey. Estimated harvest is presented as a range to reflect the uncertainty in the point estimates. Trumpeter data are from the 1996 survey.

Fishstock	Number caught	cv%	Estimated harvest range (t)	Point harvest estimate, (median) (t)	Main fishing method
BCO 3	1 026 000	29	530-973	752	rod & line
BCO 5	326 000	28	165-293	229	rod & line
BUT 3	45 000	47	27-76		set net
BUT 5	17 000	42	11-27		set net
MOK 3	36 000	32	36-70	53	set net
MOK 5	38 000	89	7-115	61	set net
SPE 3	154 000	38			rod & line
SPE 5	10 000	58			rod & line
TRU 3	13 000	19			rod & line
TRU 5	21 000	19			rod & line

105 Generally, there is limited overlap between recreational and commercial fishers within the SR, however, recreational fishers are becoming concerned about depleted inshore grounds for catching blue cod and sea perch in some areas, especially in the Kaikoura area. Value may be able to be added to the recreational fishery by addressing these issues.

Recreational Value Indicators

106 Factors that recreational fishers value from the fishery will be determined in collaboration with the recreational sector, but are likely to include the following:

- favoured fish species
- good catch rates
- good sized fish
- available in good quantities in accessible places, particularly shellfish
- good condition fish (not affected by pollution)
- easy access
- good fishing for food
- outdoor experience
- low participation costs.

107 Non-commercial fishers are likely to place much higher value on SR stocks overall than on SIF stocks that occur along the same coastline. The non-commercial catch in the SR (about 1 270 tonnes annually) is twice that of the catches in the SIF (about 600 tonnes). The monetary and other values of non-commercial fisheries are very difficult to quantify.

Customary

108 The tāngata whenua of the SR belong to the Ngāi Tahu iwi (tribe) whose tribal territory covers 80% of the South Island.

Customary Use

109 Customary landings are managed by Tāngata Tiaki under the Fisheries (South Island Customary Fishing) Regulations 1999 (the customary regulations). Tāngata Tiaki have been appointed for FMA 5 and most of FMA 3. Tāngata Tiaki provide the authorisations for customary harvest in these areas. The authorisations describe the quantity and species of fish that can be taken and the purpose of the customary harvest. The customary landings for the SR stocks over the past six years are shown in Table 15. Customary landings are significantly below the customary-Maori allowance for SR stocks.

Table 15: Annual customary landings (numbers of fish or estimated green weight in kgs based on a fish weighing around a kg on average) of the Southern Reef Fishery over recent fishing years. These harvests are those recorded on customary authorisations, they do not include any customary fishing that occurs under the amateur fishing regulations.

Fishstock	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	Customary allowance (kgs)
BCO 3	0	0	700	365	20	0	#
BCO 5	370*	60	220	435	280*	540*	#
BUT 3	0	0	0	0	0	2	65 000
BUT 5	-	-	-	-	-	-	10 000
MOK 3	0	0	0	0	3	3	#
MOK 5	-	-	-	-	-	-	#
SPE 3	0	0	0	0	30	0	11 000
SPE 5	-	-	-	-	-	-	1 000
TRU 3	-	-	-	-	-	-	7 000
TRU 5	-	-	-	-	-	-	11 000

*estimated as some authorisations recorded numbers and others recorded kilograms of fish taken

- no records of any authorisations for these fishstocks

no allowances have been set

110 The customary regulations only apply in an area where the Minister has confirmed the appointment of Tāngata Tiaki/Kaitiaki as notified by tāngata whenua for that area. Tāngata Tiaki/Kaitiaki have been appointed for 15 of the 16 Rūnanga rohe of the SR.

Mātaimai reserves

111 To date, mātaimai reserves have been established in the SR area at Rapaki Bay and Koukourārata (Port Levy) on Banks Peninsula, and in Paterson Inlet (Te Whāka a Te Wera). Existing bylaws apply additional restrictions on the taking of SR stocks in the Rapaki Mātaimai Reserve and Te Whāka a Te Wera Mātaimai Reserve.

Taiāpure-local fisheries

112 Taiāpure-local fisheries have been established in Akaroa Harbour on Banks Peninsula, and East Otago just north of Otago Peninsula. Both Taiāpure-local fisheries have committees and the East Otago Taiāpure-local fishery committee is currently considering regulation to manage set netting.

Temporary closures

113 A temporary closure is in place, since September 2002, for an area of reef on the northern side of Kaikoura Peninsula. The temporary closure was put in place to allow the customary food gathering area to recover. Anecdotal information suggests a recovery of the

butterfish population in the area.

Customary Value Indicators

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

- healthy fishery
- good catch rates
- good size fish
- available in good quantities in accessible places, particularly shellfish.
- 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 (kinship)
- Whanau sustenance (family food)
- Taonga species (treasures).

115 MFish has no value indicators for the customary fishery. These will be determined in collaboration with tāngata whenua.

CREDIBLE FISHERIES MANAGEMENT

116 Credible fisheries management has been identified in the MFish SOI as having five main components. When developing section one of a fisheries plan, the main components are:

- acting in accordance with Treaty of Waitangi principles;
- engagement with tāngata whenua and stakeholders to implement the Government's policy of fisheries plans;
- objectives based management;
- monitoring and reporting on the performance of fisheries, and
- ensuring compliance with fisheries management measures.

Tāngata Whenua Input and Participation

Draft standard for tāngata whenua input and participation

117 MFish primarily engages with tāngata whenua through the iwi/hapu-based forums for the Kaikoura, Canterbury, Araitoura (Otago) and Murihiku (Southland) areas. The primary role of the forums is to provide a mechanism for iwi/hapu to provide input and participation in fisheries management.