

Changes In The Regulatory Environment Of New Zealand's Marine Fisheries 1970 To 2003

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This paper evaluates changes in the fisheries regulation environment in New Zealand's marine fisheries from 1970 to 2003.

The quota management system was heralded as the introduction of a market based reform, with a move away from input controls to output controls. The QMS impacted primarily on the commercial sector but also the recreational sector.

It was hypothesized (by policy advisors and policy makers) that the QMS would lead to less government intervention and less regulation for the commercial sector.

The paper presents findings that suggest the expectations of policy makers may have been misplaced.

Regulation, commercial and recreational fishing, QMS

The regulation of economic activity consists of Acts of Parliament and subsidiary legislative instruments which lay down constraints within which economic activity can take place. (Treasury, 1987)

The regulations discussed in this paper are the operational controls established collectively by the commercial fishing regulation sets affecting the northern half of the North Island (the Auckland Fisheries Management area [AFMA]). There are currently 13 sets of regulations. Controls can also be implemented by non statutory processes such as voluntary agreements between fishers; however the focus of this paper is on the nature and extent of the operational controls created by the regulations under statute.

Fisheries regulatory controls are actions to control the activity of fishing, processing, quota use and associated activities (such as catch reporting, offences and penalties). Such regulations may be used to implement statutes appropriately, to constrain or prohibit some activity, to manage some event which is within the purview of the Statute. Controls are thus derivatives from regulations. For example the following regulation establishes closed areas:

*2A Trawling by vessels over 46 m long prohibited in certain waters
No commercial fisher shall use any New Zealand fishing vessel over 46 m in overall length for trawling at any time—*

(a) In those waters of the Auckland Fishery Management Area lying east of a line commencing at North Cape at a point 34°24'S

(b) In those waters enclosed by a line commencing at a point 36°24.1'S and 173°47.40'E; then proceeding directly

(c) In those waters enclosed by a line commencing at a point 35°20'S and 172°52.8'E; then proceeding directly ... (SR 1986/216)

Although 2A is a single regulation; it creates three controls (in this case closed areas).

The impacts of regulation on fisheries has been of interest to economists, fisheries managers and others, particularly since some classes of controls (most notably input controls) were found to be ineffective in managing fishing catch and/or they created distortionary effects. Since the 1950s some fisheries economists have advocated certain forms of regulatory controls should be minimised, secondly advocates for rights based management usually view government intervention and regulation as limiting the opportunities of user rights to develop. Economists (such as Scott 1988; Pearse 1991; Pearse and Walters 1992) considered one of the primary benefits of ITQ management should be the reduction in government regulations:

...the allocation of responsibilities between governmental regulators and fishermen needs to be reassessed. One area of changed responsibility is in the organization of fishing. The traditional regulatory approach to managing fishing puts the governmental manager at the centre, organizing fishing times and places, specifying the permitted kinds of vessels, gear and fishing

techniques, and monitoring, policing and enforcing. Much of this kind of close regulation of activity is unnecessary under a quota management system (Pearse and Walters 1992)

Pearce (1991) in his review of the New Zealand Quota management system commented that:

The planning and regulatory approach to fisheries management is fundamentally at odds with that based on property rights and economic incentives. The former presupposes day-to-day regulatory control on fishing operations, while the latter establishes a framework to enable fishers to efficiently manage their own affairs.

There are numerous references in the literature where New Zealand fisheries managers stated reduced government intervention as one of the principle objectives of the New Zealand QMS (Norris 1982; Ministry of Agriculture and Fisheries 1984; Crothers 1988; Shallard 1991; Clark 1993). The Ministry of Agriculture and Fisheries (MAF) public consultation document *Inshore finfish fisheries - Proposed policy for future management* stated a major benefit of the proposed QMS was that 'There is less need for gear restrictions to constrain gear.' (Pg 11)

On the other hand a number of industry leaders have identified the level of regulatory controls and the associated bureaucracy introduced since the QMS were a major concern to the sector (Sharp 1991, Talley 1991, Branson 1994).

Hersoug (2002) succinctly summarizes the situation as follows:

One of the most important expectations within fisheries economics is that ITQ-schemes should lead to a reduced bureaucracy and more self management, that is, to reduced administration (Scott 1988). In the New Zealand case the data does not warrant such unreserved conclusions.

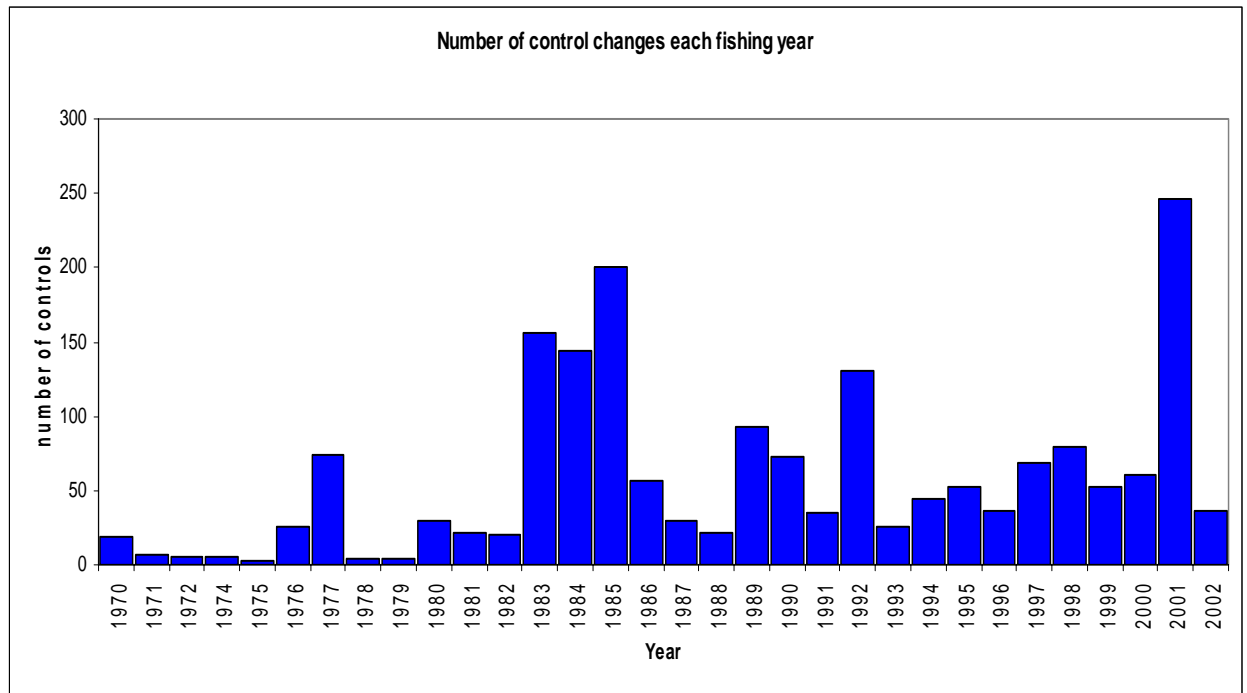
The level of cost created by the regulatory regime is unknown. Although an international comparison of management costs suggests New Zealand has low management costs relative to a number of other fishing nations

In New Zealand about 5% of the value of fish landings is collected for the purpose of cost recovery. This covers a large part but not all of New Zealand's fisheries management costs. 236/1 Government expenditure in the USA on fisheries management is about 15% of the gross revenue, in Norway about 8% of the value of landings in recent years, and in Iceland it has been about 3%, and in Newfoundland 15-25% (Arnason et al. 2000).

The cost analysis methodology did not include a detailed assessment of the costs of regulatory controls on the fishing sector.

Figure 1 summarises the levels of regulatory activity (number of control changes) from 1970 to 2002. Prior to the introduction of the QMS in 1986 regulatory activity was low with the exception of two peaks. The first peak was in the 1976 and 1977 fishing years, the increased control activity related to the introduction of the extended economic zone (EEZ). The second peak from 1983 – 1985 was due to the new gazette notices approach to regulation and in 1985 regulations introduced to establish the new QMS regime institutions.

Figure 1: Controls Introduced Each Fishing Year.



Since the introduction of the QMS the regulatory activity has increased significantly. Regulation activity post 1986 has in all but two years exceeded the maximum annual activity prior to 1986 (excluding the two pre 1986 peaks exceptions discussed above)

In analysing the level of regulation since the introduction of the QMS two sets of controls were considered;

- Regulations that were carried over from the pre QMS regime and subsequently remained in place; and
- Regulations that arose subsequent to the QMS introduction.

REGULATIONS CARRIED OVER IN 1986

It was never the intention of the Ministry of Fisheries to remove all input controls. Ministry of Fisheries commentators had always asserted that some input controls would be needed, but that others were unnecessary (Norris 1982, Ministry of Fisheries 1984). However in the end effectively all the controls were carried over and have remained in place.

From a review of the literature seven themes emerge as to why input and other controls introduced in 1986 have not been revoked.

i. The lack of effort controls prior to 1986 meant that no action was required.

Falloon (1992), a Ministry of Agriculture and Fisheries policy analyst, commented that New Zealand did not have the level of input controls common in some overseas fisheries and did not experience the typical gains from ITQs that result from unnecessary effort controls. New Zealand had almost no competitively fished TACs, and secondly although there were some controls on vessel size, gear used, and areas fished these controls probably had limited impact on harvesting efficiency.

ii. The fishing industry was opposed to change.

Many effort regulations were never reviewed because of industry was opposed to their removal. Once an effort regulation has been imposed – such as a ban on using a certain method in a certain area – the Ministry found it difficult to change, even if the original rationale for the rule no longer holds.

The regulation creates a new set of beneficiaries who clearly identify themselves as adversely affected by the removal... Those who would gain from the removal are often dispersed, e.g. they comprise the total number of quota holders, and they find it harder to identify the benefits that would result (Falloon 1992).

A similar comment by another Ministry policy manager also suggested industry opposition to change may be a factor:

These regulations add to the cost of enforcement. Surprisingly, in New Zealand it is the industry that has resisted recent attempts at rationalisation of some input-control regulations. This appears to be because they are associated with the “social structure” of the industry and sunk-investment related to those controls. I believed that the incentives of cost recovery along with the rationalisation of management controls in fisheries plans may provide a long term solution. However, a better approach might be to revoke unnecessary input-controls simultaneously with the implementation of ITQs (Edwards 1999).

Edwards was presumably referring to the Ministry initiative to reduce the 43 metre limitation on fishing vessels fishing within the Territorial Sea. The issue was canvassed in detail with industry and other sector in the 1998-99 Review Of Sustainability Measures. The Ministry decided not to proceed with the change because of the opposition from some industry sectors and the recreational sector. Bess & Harte (2000) consider the Ministry’s inertia to change as a characteristic of New Zealand’s QMS; ‘...the MFish is still equipped with the full range of regulatory mechanisms but is increasingly reluctant to employ them without consensus support from property rights holders.’

iii. The QMS in 1986 were largely ‘uncharted territory’ for fisheries management.

Ackroyd and Hide (1990) suggested one reason for the high level of regulation was the uniqueness and the completeness of the New Zealand QMS in 1986 (the regime initially covered more than 20 of the main species fished) and that amalgamation of the two regimes occurred because of concern that ITQs might not have been successful.

iv. The ministry considered a review of the regulations to be a low priority.

Review of the QMS policy has always been recognized as a primary role of the Ministry of Fisheries. The manager of fisheries policy identified as one of the four roles for his section was to ‘.....Review existing policy to determine whether the policy is desirable or redundant in the light of later studies.’ (Major 1991) However in the mid 1990s the MAFFisheries Policy section undertook a review of the QMS and identified eight ‘areas of particular concern’ (Major 1994). Reduced government intervention was not mentioned as a concern; it would appear that by the mid 1990s the Ministry of Fisheries did not consider further reduction in government intervention was a high policy priority.

The following comment from the Minister of Fisheries also suggests that opportunity for an overall policy review was limited:

New Zealand has been criticised - maybe justifiably - for not adequately analysing and reporting on our fisheries management experiences. Our usual response to this criticism is that, as one of the laboratory rats of the fisheries management world, we are too busy getting on with the job to undertake this analysis (Hodgson 2002).

v. There is a lack of problem recognition by the minister and ministry.

The following quote from Doug Kidd, a lawyer and Minister Fisheries in the mid 1990s suggests a lack of recognition of the intervention issue:

The quota system - based on tradable access rights and the economic incentives that accompany them – is proving to be an effective way of managing fisheries, and much better than the traditional approach of government intervention and increasing regulation. (Sutinen 1997)

vi. Commercial fishers are unable to create change because of industry fragmentation.

In a review of the Icelandic QMS regime, Arnason *et al* (2000) concluded that:

while it would seem to be in the overall interest of the industry to eliminate effort control regulations their very existence is often a

sign of an industry fragmentation and controversy that would prohibit it from acting in concert, which adds an additional reason why governments need to be involved in fisheries management and distracts from the relevance of the coarse theorem.

In the author's experience conflict between the two main industry sector around the introduction of the QMS would have reduced the opportunity for a concerted effort to review and remove input and other controls.

vii. Bureaucracies are not supportive of diminution of their management control and powers.

Harding (1991) an ex Ministry of Fisheries officer, argued that regulation in the QMS expanded rapidly because of the bureaucracy ethos of the Ministry and an intention to retain power; he predicted that eventually the level of bureaucratisation would impede the QMS' intended efficiency gains. Similar comment has been made by other commentators on overseas fisheries.

It seems unlikely to me that regulatory officials will support the adoption of programmes that will seriously or eliminate their management role over the long term (Libecap 1989).

In my experience (as a fisheries manager for 20 years, and subsequently as an observer of New Zealand's fisheries management) this has not been the case in New Zealand situation. Our situation was closer to the following conclusion:

Using modern theories of bureaucracy, one would predict that on these two scores bureaucrats would oppose the introduction of rights based regimes. But one would be wrong. My observation is that the new systems, where they exist, have been steered into place or at least welcomed by public servants. What goes wrong with the theories? Perhaps, as to goals, many management bureaucrats, overwhelmed with the difficulty of what they are asked to do, have open minds to new ways of doing it.... Besides the setting-up of the new system would, for a few years at least, be a satisfying challenge. (Scott 1989)

Regulations Introduced Since 1986

That since 1986 there was an increase in the QMS administration controls is not surprising. The introduction of a new regime heavily dependent on monitoring catches and quota held would be likely increase administrative controls. For example a quarter of the new systems administration relate to reporting and recording of information on catches and fish processing. Prior to the QMS there was only limited information required on catches, and requirement for the monitoring of the receipt and holding of fish by fish receivers/processors. Under the QMS, information from fish receivers is critical to provide a check against the fish landed (and quota used) by fishers. Biological controls such as regulations for TACs would likely increase because of the focus on sustainability.

New Zealand's QMS management involving significant re-regulation of fisheries is not unique. Mansfield (2004) in a study of the Alaskan Pollock fishery notes an increase in regulation when the fishery management moved to a rights based approach. Although fisheries managers emphasised the importance of market based mechanisms to address sustainability and economic problems (such as fleet rationalisation); implementing the regime required complex rule making to protect the market. Mansfield draws on Karl Polanyi's notion of "double movement" (that capitalism automatically provokes protectionist impulses) as the reason such activity occurs; and concludes that privatisation of the oceans involves a unique form of neoliberal practice combining both private industry and government regulation. Mansfield also identifies that "..., despite the rhetoric of "rationalization" as a solution to past failures, none of the traditional regulations have been dismantled for this fishery."

These arguments however do not explain why other controls (such as input controls) also increased post 1986. The reasons can likely be found amongst those for the pre QMS regulations being retained. For example industry fragmentation seems likely to have contributed to several input controls introduced since 1986. Two examples were the 43 metre fishing vessel issue referred to above, and conflict between sectors which led to the exclusion of longliners from part of the Hauraki Gulf in the mid 1990s. Another likely factor was the continued pressure from the non-commercial sector and community groups for further management of the commercial sector.

Impact of the QMS on commercial and recreational fishing rights.

Commercial Sector

The New Zealand QMS regime is built on a strong market model, but a weak rights holder self-determination model. Quota holders can rightly claim a significant improvement post 1986 in the security of their rights. Legislative provision for the trading of fishing rights, a Torrens form of right registration and rights issued in perpetuity are in strong contrast to the insecurity of the licence/permit rights in place prior to 1986. However the increase in regulatory controls post 1986 indicates that the harvesting and processing sector are likely worse off (in an operational sense) with the burden of increasing regulatory controls and penalties.

The retention of management authority within the state (based on statute and regulations) has (with few exceptions) maintained the separation of management rights from trading rights to the industry. Market mechanisms dominate quota operations, but 'command and control' continues to rule the fisheries management regime. The evolution of the commercial rights regime still has some significant milestones to achieve.

Recreational Sector

The initial proposal for the QMS policy had two broad goals; 'to achieve the long term continuing maximum economic benefits for the resource'; and 'to preserve a satisfactorily recreational fishery' (Ministry of Agriculture and Fisheries 1984).

Managing the fisheries resource to the maximum sustainable yield created a requirement for full utilisation of the resource. Implied from this is need to constrain catch of all sectors to ensure resources were not overfished, and to allocate fish resources between sectors. Given this it is not surprising that the focus of the conflict between commercial and recreational sectors has moved away from spatial separation disputes (and in particular the exclusion of commercial fishing in areas of important recreational fishing) to arguments over the allocation of resources from the total allowable catch (TAC). The recent legal challenges over the allocation of kahawai highlight this conflict. Following decisions by the High Court and Court of Appeal, recreational fishers are seeking the leave of the Supreme Court to consider how wording in the Fisheries Act 1996 to "*enable people to provide for their social, economic, and cultural well-being*" are to apply to the exercise of the Minister's discretion setting the TAC allowance for recreational fishing interests.

Better definition of the commercial fishing right (and the Maori commercial and customary rights) have led to calls that the recreational rights may be under threat. A specific concern is that the recreational right based in common law may be less defensible against stronger statutory rights of other sectors (Crothers 1998). Some light on the relationship has been shed by the Court's decisions in the kahawai High court and Court of Appeal cases. For example the recreational sectors presumed 'priority' right of recreational fishing over commercial fishing, but the relationship remains largely unresolved and therefore contentious.

The lack of clearly defined recreational rights has become an issue (at least as far back as 1996) for the commercial sector. The non-commercial fishery remains largely unconstrained (by comparison with the commercial sector). Constraint on the recreational sector catch is largely managed by individual daily bag limits. But these bag limits (unlike the commercial quota allocation) are largely passive and are not managed in direct proportion to changes in the TAC. A second concern is that estimates of recreational total catch are imprecise and total catch estimates are rarely updated. Given the significant catch by recreational fishers in some inshore fisheries commercial quota holders believe their quota rights may be undermined, particularly if the recreational fishing public increases as the New Zealand population increases. There is little incentive for commercial conservation and stock rebuilding in such an environment. The commercial sector would like the recreational allowance to be set at a fixed proportion of the TAC, a measure strongly opposed by the recreational sector.

Recreational fishers are generally supportive of the QMS management for the commercial sector (Walshe and Akroyd 1999). Undoubtedly there have been benefits to the recreational sector from the QMS management. The focus on sustainability is one obvious benefit. Another inadvertent benefit of QMS has been the removal of commercial fishing effort (largely as a result of small quota fishers who fished bays/harbours exiting the QMS). For example the Bay of Islands in the early 1980's had more than 40 commercial fishing vessels but now has only one part time fisher targeting fin fish. The change in fishing effort has reduced conflict between the sectors.

How a market based rights regime and a common law rights open access regime can be effectively integrated is a key issue in a recent policy initiative by the Ministry of

Fisheries (Ministry of Fisheries 2006). If the framework is successful it will be another 'world first' for New Zealand's fisheries management regime.

References

- Ackroyd, P., Hide, R. H. (1990). New Zealand's ITQ system: Prospects for the evolution of Sole Ownership Corporations. Report to the Ministry of Agriculture and Fisheries. Wellington, Lincoln University.
- Arnason, R., Hannesson, R., Schrank, W. E (2000). The costs of fisheries management: the cases of Iceland, Norway and Newfoundland. *Marine Policy* 24.
- Bess, R. and M. Harte (2000). "The role of property rights in the development of New Zealand's seafood industry." *Marine Policy*.
- Branson, A. R. (1994). An Industry Perspective on New Zealand's Experience with ITQs: Symposium 20. Global Trends: Fisheries Management, Seattle, Washington, USA, American Fisheries Society.
- Clark, I. N. (1993). "Individual transferable quotas: the New Zealand experience." *Marine Policy* 17.
- Crothers, S. (1988). "Individual transferable quotas: the New Zealand experience." *Fisheries* 13(1).
- Crothers, S. (1998). Towards Improving New Zealand's Recreational Fisheries: Recreational fishing rights and the devolution of associated management responsibilities. Address to NZ Recreational Fishing Council Annual General Meeting, Ministry of Fisheries.
- Edwards, M. (1999). The Administration of Fisheries Managed by Property Rights. Proceedings of the FishRights99 Conference, Fremantle, Western Australia, FAO Fisheries Technical Paper 404/2 - Use of Property Rights in Fisheries Management.
- Falloon, R. (1992). Individual Transferable Quotas The New Zealand Case. Directorate of Food and Agriculture, Committee on Fisheries AGR/FI/EG (92) 22. Rome, OECD.
- Fisheries Auckland and Kermadec Areas Commercial Fishing Regulations 1986. Regulation 2A
- Harding, R. J. (1991.). New Zealand fisheries management: a study in bureaucratisation. Unpublished PhD thesis. Department of Public Policy. Wellington, Victoria University of Wellington.
- Hersoug, B. (2002). Unfinished business: New Zealand's experience with rights-based fisheries management. Delft, The Netherlands, Eburon.
- Hodgson, P. (2002). Minister of Fisheries address to International Institute of Fisheries Economics and Trade 2002 conference, Victoria University, Wellington.
- Libecap, G. D. (1989). Comments on Anthony D. Scott's Conceptual origin of Rights Based Fishing, in *Rights Based Fishing*, P.A. Neher et al (eds)

- Major, P. (1991). *Policy requirements for fisheries management in New Zealand*. In Australian and New Zealand southern trawl fisheries conference proceedings no. 10 Australian Bureau of Agriculture and Resource Economics. Ed, M. Williams, P. Smith.
- Major, P. (1994). A Government Perspective on New Zealand's Experience with ITQs. *Global Trends: Fisheries Management*, Seattle, Washington, USA,, American Fisheries Society.
- Mansfield, B. (2004) Rules of Privatization: Contradictions in Neoliberal Regulation of North Pacific Fisheries. *Annals of the Association of American Geographers*, 94(3)
- Ministry of Agriculture and Fisheries (1984). *Inshore finfish fisheries: Proposed policy for future management*. Wellington, NZ Ministry of Agriculture and Fisheries.
- Ministry of Fisheries (1998). *Review of sustainability measures and other management controls for the 1998-99 fishing year: Final advice paper*. Wellington, Ministry of Fisheries.
- Ministry of Fisheries. (2006). *Shared Fisheries: Proposals for managing New Zealand's shared fisheries: A public discussion paper*.
- Norris, T. (1982). *The Deepwater Trawl Fishery: Long term Development Policy: Discussion paper*. Wellington, Ministry of Agriculture and Fisheries.
- Pearse P.H. (1991) *Building on progress fisheries policy development in New Zealand a report prepared for the Minister Of Fisheries Wellington*.
- Pearse, P. H. and C. J. Walters (1992). "Harvesting regulation under quota management systems for ocean fisheries." *Marine Policy* 16(3).
- Polanyi, Karl. (1944) 1957. *The great transformation: The political and economic origins of our time*. Boston: Beacon Press.
- Scott, A.D. 1989. *Conceptual origin of Rights Based Fishing*, in *Rights Based Fishing*, P.A. Neher et al (eds)
- Shallard, B. D. (1991). *Profile of New Zealand's Quota Management System*. Australian and New Zealand southern trawl fisheries conference proceedings no. 10, Melbourne, Australian Bureau of Agriculture and Resource Economics.
- Sharp, D. (1991). *The New Zealand Ministry of Agriculture and Fisheries from an New Zealand Fishing Industry Perspective*. Australian and New Zealand southern trawl fisheries conference proceedings no. 10, Melbourne, Australian Bureau of Agriculture and Resource Economics.
- Sutinen, J., G. (1997). *Recreational entitlements: Integrating Recreational Fisheries into New Zealand's Quota Management System*. Kingston Rhode Island, Department of

Environmental and Natural Resource Economics, University of Rhode Island United States of America:.

Talley, P. (1991). *The Interaction Between Marine Resources and Fleet Management*. Australian and New Zealand southern trawl fisheries conference proceedings no. 10, Melbourne, Australian Bureau of Agriculture and Resource Economics.

The Treasury (1987). *Government Management: Brief to the Incoming Government 1987* Vol1. The Treasury. New Zealand

Walshe, K. A. R., and Akroyd, J. A., 1999. *Motivations and perceptions of marine recreational fishers*. Research report to the Ministry of Fisheries on research project REC 9802. Ministry of Fisheries. Wellington.