

IAN AXFORD  
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PUBLIC POLICY

# **More with Less: Exploring Service Delivery Models for New Zealand Marine Fisheries**

Prepared by  
**Caroline S. Park**

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*Feeling gratitude and not expressing it is like wrapping a present and not giving it.*

– William Arthur Ward

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Caroline S. Park  
Wellington, August 2012



## EXECUTIVE SUMMARY

Fisheries management is becoming more and more complex. Managers not only need to address conservation of fishery stocks but also domestic and international mandates regarding the effects of fishing on protected species, seabird bycatch and the marine ecosystem. New Zealand and the United States face the same fisheries management challenges but address them in very different ways.

In 1986, New Zealand made a dramatic switch in commercial fisheries from input controls to individual transferable quotas (ITQs). By allocating ITQs, which are rights to harvest a specified amount of fish, the new Quota Management System (QMS) sought to improve economic returns and efficiencies and the sustainability of stocks. The QMS has been held up around the world as a model for fisheries management. It does not however tell the whole story of New Zealand fisheries management. Customary and amateur fishing and some commercial fishing are still managed by input controls and other traditional regulatory measures.

While the United States has adopted some market-based programmes, it primarily relies on fishery management plans and regulations to manage its commercial and amateur (referred to as “recreational” in the United States) fisheries. The main US federal fisheries statute prioritises conservation. Efficiency is only one of several considerations that must be taken into account when developing conservation and management measures.

For both countries, the services required for fisheries management are similar and include scientific research, enforcement, and monitoring and policy advice. A major difference lies in how those services are funded. Beginning in 1994, the New Zealand Crown policy was to recover costs of fisheries and conservation services from ITQ holders. The United States has cost recovery requirements for limited access privilege programmes, a type of market-based measure, but fees are capped at a low level.

The QMS and cost recovery have resulted in intense government and industry engagement and conflict on effective ways to deliver Crown fisheries and conservation services. The developers of the QMS had envisioned that, over time, ITQ holders would assume more of these responsibilities. However, this approach has not fully materialised. Instead the Crown and commercial stakeholder organisations have debated over a variety of alternative delivery models for services.

Different service delivery models present the possibility of reduced costs and improved efficiency of services. On the flip side, there are considerable risks associated with transferring responsibility from government to private hands. Quality of services, integrity, trust, and public perception are critical aspects of fisheries and conservation services and difficult to address under any delivery model.

Since the inception of the QMS, New Zealand has continuously sought ways to improve fisheries management and reduce costs. Its experiences in this regard will be instructive for other countries, including the United States, as they grapple with achieving the best compromise between market-based and traditional fisheries regimes. For New Zealand, a critical question is whether alternative service delivery models will result in further, significant efficiencies.





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## INTRODUCTION

*Lost time is never found again; and what we call time enough, always proves little enough. Let us then up and be doing, and doing to the purpose; so by diligence shall we do more with less perplexity.*

– Benjamin Franklin, *The Way to Wealth* (1758).

“More with less” has become a common cry as governments, the private sector and individuals cope with the current economic crisis. Regulatory reform, downsizing, restructuring and budget reductions are government responses to this cry. But what does “more with less” mean? Benjamin Franklin first coined the phrase in the late 1700s. One hundred years later, Frederic Bastiat, a French economist, gave a slightly different twist to the phrase by referring to man’s concern of “lessen[ing] the ratio of effort to result... In a word: to do more with less.”<sup>1</sup> During World War II, the phrase evolved into a broader sense of getting by with less.<sup>2</sup> In the fisheries context, Franklin’s call to be “up and be doing... to the purpose” and doing more “with less perplexity” seems particularly pertinent. Fisheries issues continue to increase in complexity, so it will not be enough to maintain the status quo or seek short-term cost savings. Governments need to clarify their purposes and priorities and find new ways to face fishery management challenges.

For nearly thirty years, New Zealand has engaged in a spirited “more with less” dialogue as a result of the commercial Quota Management System (QMS), which was introduced in 1986.<sup>3</sup> The QMS allocates rights to harvest amounts of fish in specified areas during a fishing year and allows the rights to be traded (referred to as “individual transferable quotas” or “ITQs”). This radical change in fisheries management was adopted during sweeping “Rogernomics” reforms intended to address the national economic and financial crisis of the 1980s.<sup>4</sup> During this time, New Zealand shifted to more free market approaches, eliminating subsidies, corporatising public services and reducing the role of government.<sup>5</sup>

Policy makers envisioned that the QMS would promote economic efficiency in commercial fisheries, sustainability of fishery resources and fair and equitable allocation of access to fish resources.<sup>6</sup> In addition they believed that ITQ holders would have incentives for a long-term view of fishery management.<sup>7</sup> Initially the Crown charged quota owners with resource rentals<sup>8</sup> but, in the face of Māori resource ownership claims under the Treaty of Waitangi, opted instead for a cost recovery regime in 1994. Under cost recovery, quota owners pay the costs of Crown-provided

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<sup>1</sup> *Workplace Refrain: Do More With Less*

<sup>2</sup> *Ibid.*

<sup>3</sup> A deepwater enterprise allocation scheme, which allocated individual quotas for seven deepwater species or species groups, preceded the QMS. See The Quota Management System in Chapter 1 for further explanation.

<sup>4</sup> *Social welfare & the state*

<sup>5</sup> *Ibid.*

<sup>6</sup> Pearse (1991) at Chapter 1 (Policy Objectives)

<sup>7</sup> *Ibid.* at Chapter 3 (Extensions of the Quota System)

<sup>8</sup> See notes 80-84 and associated text for explanation of resource rentals

fisheries and conservation services attributed to them.<sup>9</sup> This is based on the principle that they benefit from harvesting rights and could cause harm from effects of fishing, thus they should pay the costs of required services.<sup>10</sup> The consultation process for cost recovery levies has provided transparency into both the nature and costs of Crown services and an opportunity for commercial stakeholder input into proposed services and levies.<sup>11</sup>

There is continuous scrutiny of how to deliver Crown services most effectively for commercial fisheries. Over the years the Crown has supported, to varying degrees, the idea that rights holders should have responsibilities for managing fisheries.<sup>12</sup> Amateur and customary fisheries, however, are not managed under a rights-based framework. Notwithstanding the hybrid nature of the management regime, New Zealand has proceeded with exploring service delivery models ranging from full devolution of management to devolution of services and co-management and self-governance initiatives. At the heart of these models are questions about the core role of government, the rights and responsibilities of quota holders, and the relationship between the government and other fishery stakeholders (e.g. customary and amateur fishing sectors and the environmental community).

New Zealand and the United States have taken different regulatory approaches to fisheries management but face the same challenges: sustaining fishery resources for long-term use, conservation of protected species and marine ecosystems, fewer public resources, and demands for reduced regulatory burden. This Report examines how New Zealand has tried to address these challenges through alternative service delivery models.

The United States has previously looked to the QMS for insights on the design and implementation of an ITQ system,<sup>13</sup> and new US legislation in 2007 sparked renewed interest in market-based programmes.<sup>14</sup> Moving forward the United States needs to consider not only how to develop such programmes but also how to administer and sustain them with high quality, cost effective services. New Zealand's experiences with service delivery models provide valuable lessons in this regard. For its part, New Zealand may be getting to a point of diminishing returns in seeking cost efficiencies through alternative models. This debate has been ongoing from the outset of the QMS,

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<sup>9</sup> Section 262 of the Fisheries Act 1996 (cost recovery principles) and Fisheries (Cost Recovery) Rules 2001 (SR 2001/229) (setting forth apportionment of costs of fisheries and conservation services). Services include science, monitoring, commercial enforcement and registries.

<sup>10</sup> Section 262 of the Fisheries Act 1996

<sup>11</sup> *Consultation on Proposed Fisheries and Conservation Services Cost Recovery Levies – 2012-13*

<sup>12</sup> The Ministry of Fisheries' management strategies in 1997 included specifying rights and responsibilities of all fisheries resource users, giving rights holders increased responsibility to manage collectively within appropriate sustainability and other parameters (i.e. devolution of management), having rights holders bear costs of their fishing activities, and cost-effective delivery of fisheries services. Hersoug (2002) at 122-123. In 2009, the Ministry's strategic actions to improve governance included enabling quota owners to take collective management action, strengthening Māori collective management arrangements, and supporting amateur fishers to organise and undertake collective management action. *Fisheries 2030* (2009) at 10.

<sup>13</sup> See *Selected Catch Share and Related References* (including articles on the New Zealand QMS)

<sup>14</sup> A new limited access privilege programme provision was effective in 2007 (16 U.S.C. 1853a), and the federal government issued a policy to encourage consideration of ITQs and other market-based approaches. *NOAA Catch Share Policy* (2010).

and the Crown has taken major steps to change delivery of certain services. Whether there are further, significant efficiencies to be gained is unclear.

Chapter 1 of this Report provides background information on and the historical context for New Zealand's exploration of service delivery models. Key drivers of commercial fisheries management include Māori fishery interests and claims under the Treaty of Waitangi, economic efficiency objectives that led to the QMS and legislative measures that influence ITQ holders' engagement in management processes. Chapter 2 explains how the United States and New Zealand define the purposes of fisheries management and compares the legal frameworks used to achieve them. Chapter 3 provides examples of service delivery models and discusses factors that contribute to the success or failure of industry initiatives. Chapter 4 describes the criteria – core Crown roles and risks – that have been applied in making service delivery decisions. As reflected in the roles and risks, fisheries management encompasses more than promoting efficiency in commercial fisheries. There are concerns about how trying to manage “with less” (i.e. reducing costs, reducing the role of Government, and using different service delivery providers) affects broader fisheries goals and interests.

Primary research for this Report came from interviews with experts at the Ministry for Primary Industries (MPI),<sup>15</sup> former employees of the Ministry of Fisheries (MFish),<sup>16</sup> representatives of commercial stakeholder organisations and fishing companies, independent fisheries consultants and representatives of environmental organisations.

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<sup>15</sup> See note 162 and associated text for information on MPI

<sup>16</sup> See Service Providers in Chapter 3 for information on MFish



# 1 NEW ZEALAND FISHERIES

“Ocean territory superpower” is a fitting nickname for New Zealand.<sup>17</sup> The United States, whose fifty States cover approximately 9.1 million square kilometres (km<sup>2</sup>), has the largest exclusive economic zone (EEZ) in the world – 8.84 km<sup>2</sup> of ocean.<sup>18</sup> While New Zealand is only about the size of the State of Colorado,<sup>19</sup> it boasts the fourth largest EEZ (3.8 km<sup>2</sup>), up to twenty-four times the size of its land area.<sup>20</sup> In total New Zealand’s sea area (EEZ, territorial sea and continental shelf) is 5.8 million km<sup>2</sup> and hosts an estimated 34,400 marine species and associated ecosystems.<sup>21</sup> These ecosystems comprise up to 10% of global marine biodiversity<sup>22</sup> and contain an estimated 80% of New Zealand’s indigenous biodiversity.<sup>23</sup>

While the breadth of its EEZ affords New Zealand considerable economic opportunities,<sup>24</sup> the productivity of fisheries is relatively low due to the great depths of the waters and low nutrient load.<sup>25</sup> New Zealand only contributes about one per cent of total global fish production,<sup>26</sup> and in 2009, ranked thirty-fourth in the world, just below Senegal, for wild capture fish production.<sup>27</sup> Although it is a relatively small player in global fisheries, New Zealand has received great attention worldwide because of its comprehensive ITQ system and consideration of devolution of management and other service delivery models.<sup>28</sup>

This Chapter sets the stage for the service delivery debate, describing Māori fishing interests and claims under the Treaty of Waitangi, the evolution of commercial fisheries from input controls to the QMS, and cost recovery and other measures that create incentives for ITQ holders’ engagement in management processes. It also provides “at a glance” facts about the commercial, amateur and customary fishing sectors and aquaculture.

## Māori Fishing Interests and the Treaty of Waitangi

For the Māori – the *tangata whenua* or “people of the land” – the ocean and fish have

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<sup>17</sup> *Seafood industry fact file*

<sup>18</sup> The EEZ is an area adjacent to a coastal State’s territorial sea that extends 200 nautical miles from a baseline, which is usually the low-water line of the State. The territorial sea extends 12 nautical miles from the baseline, which is usually the low-water line of a coastal State. UNCLOS Articles 3 and 57.

<sup>19</sup> *Background Note: New Zealand*

<sup>20</sup> *About Ocean Survey 20/20*

<sup>21</sup> *Aquatic Environment and Biodiversity Annual Review* (2011) at 125

<sup>22</sup> *Ibid.*

<sup>23</sup> *Offshore Options: Managing Environmental Effects in New Zealand’s Exclusive Economic Zone*

<sup>24</sup> A coastal State’s sovereignty extends into its territorial sea, including the air space above it and its bed and subsoil. UNCLOS Articles 2 and 3. Within the EEZ, a coastal State has “sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds.” *Id.* at Article 56(1)(a).

<sup>25</sup> *Offshore Options: Managing Environmental Effects in New Zealand’s Exclusive Economic Zone*

<sup>26</sup> Statistics New Zealand (2010) at 5

<sup>27</sup> *2009 FAO Yearbook of Fishery and Aquaculture Statistics: Capture production* (2011) at 24 (Table A-1)

<sup>28</sup> See e.g. Townsend (2010) at 301, 319 and Townsend and Shotton (2008) at 2-3

economic, cultural and spiritual significance. One creation story describes Tangaroa (“god of the sea”) as being born of the earth mother (Papatūānuku) and sky father (Ranginui).<sup>29</sup> In another story, Māui, a demi-god, used a fish hook to haul the North Island (known as Te Ika-a-Māui or “the fish of Māui”) out of the sea.<sup>30</sup>

Māori society is organised into *iwi*, *hāpu* and *whānau*, respectively, tribes, sub-tribes or clans and extended families.<sup>31</sup> Prior to European settlement, Māori *rangatira* (chiefs of *iwi* or *hāpu*) managed fishery resources within defined geographic areas.<sup>32</sup> Fishing grounds and shellfish beds were treated as property in common and there were extensive regulations on catch and use of those resources.<sup>33</sup> Fish were a critical part of the traditional diet and trade.<sup>34</sup> Being able to provide fresh finfish and shellfish at *tangi* (Māori funeral rite) and other important events continues to be a measure of prestige and wealth.<sup>35</sup>

“Fisheries” were explicitly mentioned in the English version of the Treaty of Waitangi (first signed on 6 February 1840), which was intended to provide a “settled form of civil government” over Crown subjects.<sup>36</sup> Article 2 of the English version

“confirms and guarantees to the Chiefs and Tribes of New Zealand and to the respective families and individuals thereof the full exclusive and undisturbed possession of their Lands and Estates Forests *Fisheries* and other properties which they may collectively or individually possess so long as it is their wish and desire to retain the same in their possession...”<sup>37</sup> (*emphasis added*)

The Māori version refers more broadly to *te tino rangatiratanga* (the unqualified exercise of authority over lands) and *taonga* (tangible and intangible treasures). Both versions acknowledge Māori ownership of lands and fisheries, but they differ significantly in how they articulate the relationship between the Māori and the Crown. Article 1 of the English version states that the Māori ceded all rights and powers of sovereignty, but the Māori version says that *te kawanatanga katoa* (government) was ceded. From the Māori perspective, the Queen was supposed to provide a government to maintain peace, order and protection while they retained authority to manage their affairs.<sup>38</sup> As described below, the Crown exercised extensive regulatory controls over fishery resources and fishing activity.

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<sup>29</sup> *Tangaroa – the sea*

<sup>30</sup> *Whenua – how the land was shaped - The North and South islands*

<sup>31</sup> *Tribal organisation*

<sup>32</sup> McClurg and Arbuckle (2009) at 88

<sup>33</sup> Hersoug (2002) at 15-16, 66-67

<sup>34</sup> Lock and Leslie (2007) at 26

<sup>35</sup> *Māori Fisheries*

<sup>36</sup> Palmer (2008) at 49, 51 (quoting instructions from Lord Normanby, Secretary of State for Colonies, to Captain William Hobson, first Lieutenant-Governor (1839), and proclamation of Hobson (1840)). Legal status of the Treaty is a source of considerable controversy. *Ibid.* at 24-25 (noting that the Treaty has never been directly incorporated into law “with binding force for general purposes” and that it has “incoherent legal status, incoherent legal force, and [there is] a fundamental and tense uncertainty about [its] constitutional place”).

<sup>37</sup> The Māori and English texts and a comparison between the two are available at *Read the Treaty*. History Group of the New Zealand Ministry for Culture and Heritage. Retrieved 11 June 2012 from <http://www.nzhistory.net.nz/politics/treaty/read-the-treaty/english-text>

<sup>38</sup> *Differences between the texts - read the Treaty*



## Moving from Conservation to Development of the Fishing Industry

The Crown first began regulating fishing in the mid-1850s. It used licences to limit entry to certain fisheries and specified allowable sizes for fish that could be landed as well as times, places, and methods allowed for fishing.<sup>39</sup> The Fisheries Act 1908 consolidated prior statutes, established New Zealand jurisdiction over a three mile territorial sea and set up a framework that was the basis of management through 1983.<sup>40</sup> Beginning in the 1920s, Government followed a conservative approach to management due to concerns about the need to conserve fish stocks.<sup>41</sup> Fishers were mainly owner-operators of small vessels that caught inshore species, such as crayfish, snapper, blue cod, groper and warehou, for local and domestic consumption.<sup>42</sup>

When large foreign fishing vessels began fishing offshore in the late 1950s,<sup>43</sup> the Crown turned its attention to development of the domestic fishing industry. In the 1960s, the Crown allowed New Zealand residents or companies with more than 50% New Zealand ownership to enter the catching sector, provided loans for new fishing vessels, and provided the processing sector with export subsidies.<sup>44</sup> To encourage New Zealand companies into deepwater fisheries,<sup>45</sup> the Government offered financial incentives, encouraged joint ventures, allowed companies to use and temporarily register foreign charter vessels, and allocated surplus resources to foreign vessels through government-to-government licence arrangements.<sup>46</sup> After establishing its 200 nautical mile EEZ and twelve nautical mile territorial sea in 1978,<sup>47</sup> “New Zealandisation” of the deepwater, EEZ fisheries became the government policy.<sup>48</sup>

In inshore fisheries, too many boats were chasing too few fish.<sup>49</sup> Inshore stocks were being fished at biologically unsustainable levels and subsidisation of the fleet resulted in overcapitalisation.<sup>50</sup> The fishing fleet increased from 2161 to 5178 vessels between 1967 and 1977: a 163% increase in the number of small-scale vessels (under 12 metres in length) and 122% increase in vessels over twenty-one metres.<sup>51</sup> To address inshore overcapacity, the Government, among other things, implemented a moratorium on all inshore finfish permits in 1982<sup>52</sup> and eliminated part-time

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<sup>39</sup> *History of Fishing in New Zealand: Industry Development*

<sup>40</sup> *Ibid.*

<sup>41</sup> Connor (2001) at 222

<sup>42</sup> *Fishing Industry – A cottage industry*

<sup>43</sup> *History of Fishing in New Zealand: Growth and the EEZ*

<sup>44</sup> Hersoug (2002) at 19

<sup>45</sup> See *infra* Wild Capture Fisheries and Aquaculture for description of deepwater fisheries

<sup>46</sup> *Ibid.* at 21. Foreign charter vessels are foreign-owned and fish in New Zealand waters pursuant to a contract with or charter to a New Zealand company that holds a fishing permit. *Report of the Ministerial Inquiry into the use and operation of Foreign Charter Vessels* at 21, 23.

<sup>47</sup> The Territorial Sea and Fishing Zone Act 1965 increased New Zealand’s fishing zone from three to twelve nautical miles. The Territorial Sea and Exclusive Economic Zone Act 1977 established New Zealand’s 200 nautical mile EEZ and extended its territorial sea to 12 nautical miles.

<sup>48</sup> Johnson (2004) at 275

<sup>49</sup> *Fishing industry - The Quota Management System*. See *infra* Wild Capture Fisheries and Aquaculture for description of inshore fisheries.

<sup>50</sup> *History of Fishing in New Zealand: Growth and the EEZ*.

<sup>51</sup> Connor (2001) at 223

<sup>52</sup> Johnson (2004) at 357

fishermen from commercial fisheries.<sup>53</sup> Many part-time fishermen were Māori living in rural areas, where employment opportunities were limited.<sup>54</sup> Two-thousand two-hundred sixty (2,260) permits were cancelled with no compensation, but there was no appreciable reduction in fishing effort as a result.<sup>55</sup> Part-timers were removed not because of their immediate impact on fishery resources but because of the potential threat of increased effort if they were to fish full-time.<sup>56</sup>

### **The Quota Management System: Focus on Efficiencies**

The above-described and other Government actions were not enough to address the inshore fishery crisis and stimulate the deepwater fishery. New Zealand's solution: privatise commercial fisheries by providing individual transferable quotas (ITQs). In 1983, New Zealand experimented with individual quotas in the deepwater fisheries, allocating on a provisional basis quota in seven of the main fisheries.<sup>57</sup> The deepwater enterprise allocation scheme was deemed a success and paved the way for the QMS.

The QMS was introduced under the Fisheries Amendment Act 1986.<sup>58</sup> It reflected a dramatic shift from reliance on input controls (limits on the intensity of fishing effort) to use of output controls (direct limits on catch and landings).<sup>59</sup> Although not spelled out in the 1986 Act, the purpose of the new system was to improve economic efficiencies in harvesting.<sup>60</sup> The QMS, which was effective 1 October 1986, initially included thirty-two species.<sup>61</sup> The 1986 Act provided for the specification of a total allowable catch for commercial fishing for each species or class of fish subject to the QMS.<sup>62</sup> ITQs were expressed as a fixed tonnage of a species in a particular management area.<sup>63</sup> There have been many amendments to the administration of the QMS, including a shift to proportionate quotas, use of annual catch entitlements and cost recovery. Several of these legislative changes have created incentives for or otherwise influenced ITQ holders' engagement in management processes.

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<sup>53</sup> Section 64 of the Fisheries Act 1983 authorised issuance of a fishing permit to a commercial fisherman who owned a registered fishing vessel. Section 2 defined "commercial fishermen" as a person who "relies wholly or substantially on his fishing activities for his income" or a company or other body of persons with "an appreciable investment in the fishing industry or intends to make one." For the 1983/84 fishing year, the Government criteria for a commercial fisherman were: earnings equal to or greater than NZ \$10,000 from fishing, or earnings of 80% or more of income from fishing; or earnings from fishing being a vital part of a subsistence income (\$ 6,400). Bess (2005) at 341

<sup>54</sup> Ibid.

<sup>55</sup> McClurg and Arbuckle (2009) at 93

<sup>56</sup> Connor (2001) at 225-226. See also Johnson (2004) at 357 (noting that the New Zealand Federation of Commercial Fishermen supported the removal of part-time fishers).

<sup>57</sup> *History of Fishing in New Zealand: QMS and Treaty Settlement*. The deepwater enterprise allocation scheme did not have statutory provisions regarding transferability of quota. Connor (2001) at 229.

<sup>58</sup> Part IIA of Fisheries Amendment Act 1996

<sup>59</sup> Pope (2002) at 76 (explaining input and output controls)

<sup>60</sup> *History of Fishing in New Zealand: QMS and the Treaty Settlement*. See also note 144 regarding policy objectives.

<sup>61</sup> *History of Fishing in New Zealand: QMS and the Treaty Settlement*

<sup>62</sup> The total allowable catch for commercial fishing was specified "after allowing for the Maori, traditional, recreational, and other non-commercial interests in the fishery." Section 28C of the Fisheries Amendment Act 1986.

<sup>63</sup> Id. s 28O

### ***Proportionate Quota***

In 1990, the Crown changed the basis for quota allocation from fixed tonnage to a proportion of the total allowable commercial catch (TACC).<sup>64</sup> Under the tonnage approach, if the total allowable catch (TAC) went up, new ITQ belonged to the Crown and could be sold. If the TAC went down, the Crown compensated quota holders.<sup>65</sup> When it implemented the QMS, the Government expected that fish stocks would increase due to improved management.<sup>66</sup> Potential collapse of the orange roughy fishery, and the need to reduce significantly the TAC for the stock, made the tonnage approach too expensive.<sup>67</sup>

The proportionate quota approach transferred the risks and benefits of TAC changes from the Crown to quota holders.<sup>68</sup> It also purportedly created incentives for quota owners' engagement in long-term management of fisheries,<sup>69</sup> although as explained below, incentives in commercial fisheries are complicated.

### ***Annual Catch Entitlements and Deemed Values***

Between 1986 and 2001, an ITQ holder could sell or lease quota for a specified period of time with quota reverting back to him or her at the end of a lease period.<sup>70</sup> Catch had to be balanced against quota holdings. Beginning in 2001, catch had to be balanced against annual catch entitlements (ACE), which are generated based on ITQ holders' shares and the TACC.<sup>71</sup> ITQ holders sell ACE, which provide harvesting entitlements for a year then expire. A fishing permit holder does not need to own quota or, as a general matter, to have ACE before fishing.<sup>72</sup> On a monthly and annual basis, catches are balanced against the permit holder's ACE holdings, and if there is insufficient ACE, the fisher must pay a fee called a deemed value.<sup>73</sup>

Deemed values vary from stock to stock and different rates may apply to the same stock depending on how much catch is in excess of ACE holdings.<sup>74</sup> The purpose of deemed values is to create an incentive for commercial fishers to acquire or maintain

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<sup>64</sup> Section 15 of the Fisheries Act 1990 provides that where the TACC is reduced/increased, the quantity of fish that may be taken under an ITQ shall be reduced/increased on a proportionate basis to total the amount of the decreased/increased TACC.

<sup>65</sup> *New Zealand Federation of Commercial Fishermen Inc v Minister of Fisheries* (CP 237/95 and CP 294/96, 24 April 1997) at 22

<sup>66</sup> Lock and Leslie (2007) at 17

<sup>67</sup> Connor (2001) at 231

<sup>68</sup> *New Zealand Federation of Commercial Fishermen Inc v Minister of Fisheries* (CP 237/95 and CP 294/96, 24 April 1997) at 22

<sup>69</sup> See Yandle (2008) at 303 (commenting that the switch to proportionality gave quota owners incentives to better manage fish stocks)

<sup>70</sup> Section 28Q of the Fisheries Amendment Act 1986

<sup>71</sup> Sections 66-67 of the Fisheries Act 1996. These sections of the 1996 Act, with some substitutions and amendments, came into force on 1 October 2001 pursuant to clauses 2(4) and (5) of the Fisheries Act Commencement Order (No 2) 2001 (SR 2001/179).

<sup>72</sup> Generally, only a fishing vessel registration and commercial fishing permit are required for commercial fishing. Sections 89 and 103 of the Fisheries Act 1996. Section 74 of the Act provides for required minimum holdings of ACE for stocks listed in Schedule 8.

<sup>73</sup> *Id.* ss 76 and 76A

<sup>74</sup> *Id.* s 75(2)(b), (4)

sufficient ACE during a fishing year and land fish.<sup>75</sup>

Incentives around fishing activities are complicated, given the separation of ownership and harvesting rights (quota and ACE), the interplay between ACE and deemed values, and the different types of fishery participants. Quota is highly concentrated in a few companies,<sup>76</sup> but they have different business and operational approaches and some are diversified in areas beyond fisheries.<sup>77</sup> In many fisheries, businesses are vertically-integrated,<sup>78</sup> but there are small owner-operators, who may or may not be ITQ holders, who continue to participate in inshore finfish fisheries.<sup>79</sup>

### ***Resource Rentals and Cost Recovery***

The 1986 Act required quota holders to pay resource rentals, which were fees per ton of each species intended to capture “super profits” that resulted from the QMS.<sup>80</sup> The theory was that Government had created private harvesting rights from a common resource and should recover the rents.<sup>81</sup> The Government initially charged resource rentals across the whole industry (approximately NZ \$ 22 million per annum).<sup>82</sup> In the face of a Treaty dispute with the Māori over ownership of fish resources,<sup>83</sup> discussed in the next section, the Government opted to remove resource rentals and implement a commercial cost recovery regime under the Fisheries Amendment Act 1994.<sup>84</sup>

The purpose of cost recovery was to enable the Crown to recover costs of Crown fisheries and conservation services (e.g., science, monitoring, commercial enforcement, registry services) incurred due to the existence of the industry.<sup>85</sup> Industry pays one hundred per cent of certain costs, such as commercial enforcement and registry services.<sup>86</sup> The Crown determines what services are needed and bears a

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<sup>75</sup> Id. s 75(2)(a). In setting deemed values, the Minister may also consider the desirability of fishers landing catch for which they do not have ACE; the market value of the ACE and stock; economic benefits obtained by the most efficient fisher, licensed fish receiver, retailer, or other persons from the taking, processing or sale of fish or fish taken in association; the extent to which catch is exceeded or likely to exceed TACC; and any other relevant matters. Id. s 75(2).

<sup>76</sup> See notes 133-134 and associated text for information about concentration of quota

<sup>77</sup> See e.g. *Talley's – About Us* (describing seafood, vegetable and dairy divisions)

<sup>78</sup> See e.g. *Sanford Limited Submission on Aquaculture Legislation Amendment Bill (No 3)* (2011) at 4 (stating that company is “vertically integrated in the inshore and deepwater fisheries and aquaculture sectors” and owns fishing quota and vessels, marine farms and seeding and harvest vessels, and processing and marketing operations)

<sup>79</sup> See note 347 and associated text for description of inshore finfish fisheries

<sup>80</sup> Section 28zc of the Fisheries Amendment Act 1986. See Garcia and Boncoeur (2005) at 2.2.8 (noting that well-managed, renewable natural resources “generate a rent as a super-profit above the normal return on labour and capital” and can provide a “windfall gain” to the first right holder).

<sup>81</sup> Hersoug (2002) at 118

<sup>82</sup> *Report to the Minister of Fisheries from the Joint Crown and Industry Working Group on Issues Associated with the Under and Over Recovery of Cost Recovery Levies for the Period 1994/95 to 2000/01* (February 2003) at 6

<sup>83</sup> Waitangi Tribunal (1992) at 7.5.2-7.5.3 (describing Māori assertion of ownership in fishery resources and the Crown’s allocation of rights to catch and charging of resource rentals payable to the Crown)

<sup>84</sup> Sections 107EA-107L and Schedule 1E of the Fisheries Amendment Act 1994. *Report to the Minister of Fisheries from the Joint Crown and Industry Working Group on Issues Associated with the Under and Over Recovery of Cost Recovery Levies for the Period 1994/95 to 2000/01* at 6.

<sup>85</sup> *Ibid.*

<sup>86</sup> *Consultation on Proposed Fisheries and Conservation Services Cost Recovery Levies: 2012-13* at 23. Registry services are explained in further detail under Devolution of Registry Services: CFS/

share of the costs where they relate to either a public good function or customary or amateur fishing stakeholders.<sup>87</sup> Cost recovery, through a consultation process on proposed services and levies, created incentives for quota owners to be active in management processes and “cost control.”<sup>88</sup>

Industry levies during the first year of cost recovery were around NZ \$36.4 million.<sup>89</sup> When cost recovery was adopted, there had been an expectation that levies would decrease as industry became more involved in fisheries management and purchasing scientific research.<sup>90</sup> In 2011/2012, levies were around NZ \$32.5 million and are proposed to be around NZ \$33.4 million for 2012/2013.<sup>91</sup>

## **Māori Fisheries Settlement: Commercial and Customary Rights**

At several points during the history of commercial fisheries, the Crown explicitly acknowledged Māori fishery interests as set forth under the Treaty of Waitangi, most notably in fisheries legislation in 1877, 1908 and 1983.<sup>92</sup> What these interests meant did not crystallise until the Crown began to allocate harvesting rights under the QMS. The developers of the QMS did not believe that the new commercial management system would impact Māori interests, which were perceived as non-commercial. However, the Waitangi Tribunal<sup>93</sup> affirmed that the Māori had “full, exclusive and undisturbed possession of their fisheries,” which included preservation of the right to fish and protection of places of fishing.<sup>94</sup>

The Government and Māori parties entered into protracted negotiations to address Māori commercial and customary fishing rights and make better provision for Māori participation in fisheries conservation and management processes.<sup>95</sup> Under the Māori

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FishServe in Chapter 3.

<sup>87</sup> For example, the proposed 2012/2013 Fisheries Services Business Plan allocates 62% of fisheries science costs to industry and the remaining 38% to the Crown and the Crown bears 100% of the costs for policy advice, the Māori Deed of Settlement, aquaculture development, international obligations and other services. *Ibid.*

<sup>88</sup> Yandle (2008) at 303

<sup>89</sup> *Report to the Minister of Fisheries from the Joint Crown and Industry Working Group on Issues Associated with the Under and Over Recovery of Cost Recovery Levies for the Period 1994/95 to 2000/01* at 6

<sup>90</sup> *Ibid.*

<sup>91</sup> *Consultation on Proposed Fisheries and Conservation Services Cost Recovery Levies: 2012-13* at 23

<sup>92</sup> The Fish Protection Act 1877 says “nothing in this Act...shall be deemed to repeal, alter or affect any provisions of the Treaty of Waitangi, or take away, annul, or abridge any of the rights of the aboriginal natives to any fishery secured to them thereunder.” Section 77 of the 1908 Fisheries Act stated that “nothing in this Act shall affect any existing Maori fishing rights,” and section 88(2) of the Fisheries Act 1983 included similar text with the removal of the term “existing.”

<sup>93</sup> The Waitangi Tribunal is a commission that makes recommendations on claims by Māori regarding Crown breaches of promises made in the Treaty of Waitangi. *Waitangi Tribunal.*

<sup>94</sup> Waitangi Tribunal (1988) at 11.3.7 (f)

<sup>95</sup> Preamble to Treaty of Waitangi Settlement Act 1992. With regard to management processes, the Act amended the Fisheries Act 1983 to include the Treaty of Waitangi Fisheries Commission in consultations regarding changes to the total allowable commercial catch, declaration of fish subject to the quota system, deemed values and other decisions. *Id.* ss 23, 24, 29. The Commission (formerly the Māori Fisheries Commission) had responsibility for managing settlement assets and facilitating entry of the Māori into the business and activity of fishing. *Id.* s 14 and sections 5 and 40 of the Māori Fisheries Act 1989.

Fisheries Act 1989 and Treaty of Waitangi Settlement Act 1992 (interim and final settlements), the Māori received 10% of existing QMS quota through Government buy-back and other means,<sup>96</sup> a process for claiming *taiapure* (areas of special significance as a source of food or for spiritual and cultural reasons),<sup>97</sup> 20% of quota for new species brought into the QMS,<sup>98</sup> and \$150 million to fund purchase of 50% of Sealord Products Limited.<sup>99</sup> In total, the settlement cost NZ \$280 million.<sup>100</sup> The 1992 Act provided for full and final settlement of commercial fishing claims.<sup>101</sup> Non-commercial fishing rights and interests continue to “give rise to Treaty obligations on the Crown” but are not enforceable in civil proceedings and cannot, unless specified in regulation, be used as a defence in criminal, regulatory or other proceedings.<sup>102</sup>

### **Allocation of Settlement Assets**

Te Ohu Kai Moana Limited (TOKM) is a trust company that has responsibility for managing and facilitating allocation of quota and other settlements assets to *iwi*.<sup>103</sup> TOKM owns Aotearoa Fisheries Limited, a company that fishes quota held by TOKM and handles commercial aspects of the assets.<sup>104</sup> It took almost two decades of intensive consultation, debate and litigation among *iwi* to develop a method for allocating fishing assets to *iwi*.<sup>105</sup> Among other things *iwi* grappled with fundamental questions regarding what is an *iwi* and how an *iwi*'s population and coastline should be factored into allocation decisions.<sup>106</sup> Resolution of the allocation issue, which was finalised in the Māori Fisheries Act 2004, is described as a “remarkable and unheralded achievement” of Māoridom.<sup>107</sup> It was critical in establishing a stable ITQ rights framework.<sup>108</sup> One industry representative commented that use of ITQs to settle Treaty claims “unwittingly locked the QMS into place. If [current] or future governments attempted to tamper with quota-rights they could be accused of attempting to once again settle indigenous claims with a basket of empty promises or a bag of trinkets.”<sup>109</sup>

### **Utilisation and Sustainability**

Between 1986-1996, fisheries management was focused primarily on commercial fisheries, implementation of the QMS and settlement of Māori fisheries claims. “Utilisation of fishery resources while ensuring sustainability” became the stated

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<sup>96</sup> Sections 40-42 of the Māori Fisheries Act 1989

<sup>97</sup> Id. s 74

<sup>98</sup> Treaty of Waitangi Settlement Act 1992

<sup>99</sup> Id. ss 5, 7

<sup>100</sup> McClurg and Arbuckle (2009) at 95

<sup>101</sup> Section 9(c) of the Treaty of Waitangi Settlement Act 1992

<sup>102</sup> Id. ss 10(a), (d)

<sup>103</sup> Sections 33-34 of the Māori Fisheries Act 2004. TOKM succeeded the Treaty of Waitangi Fisheries Commission, which is described in note 95. Id. ss 189, 194.

<sup>104</sup> Id. ss 60, 61, 66, 75

<sup>105</sup> *Legislation & Policy Background*

<sup>106</sup> *Ibid.*

<sup>107</sup> McClurg and Arbuckle (2009) at 98

<sup>108</sup> Yandle (2008) at 303 (noting that use of ITQs to settle Treaty claims “strengthened the perception (and political reality) of ITQs are a perpetual ownership right”)

<sup>109</sup> Talley (2000) at Section 5

purpose of fisheries management under the Fisheries Act 1996.<sup>110</sup> “Utilisation” embodies more than just commercial values: it includes conserving and enhancing fisheries resources and providing for the social and cultural well-being of people.<sup>111</sup> “Sustainability” refers to fishery resources and also “avoiding, remedying, or mitigating any adverse effects of fishing on the aquatic environment.”<sup>112</sup> The latter includes, as an example, protecting Maui’s and Hector’s dolphins and sea lions, which has been a source of controversy in recent years.<sup>113</sup> It also includes addressing seabird bycatch and the effects of fishing on benthic habitats.<sup>114</sup>

While fisheries stakeholders have changed over time, many of the same people who were involved in fisheries in 1986 are the same now, although their roles, interests and the ways they engage in management processes may be different. New Zealand fisheries stakeholders include commercial, amateur and Māori non-commercial customary fishing interests, an aquaculture sector and environmental organisations.<sup>115</sup> The commercial, amateur, and customary sectors have estimated takes of 408,000 tonnes, 25,000 tonnes, and 4,813 tonnes respectively.<sup>116</sup>

### **Total Allowable Catch & Total Allowable Commercial Catch**

When managing a QMS stock, the Minister is required to set a total allowable catch (TAC) covering the whole stock.<sup>117</sup> After setting the TAC, the Minister sets a total allowable commercial catch (TACC) so that the difference between the two “shall allow for” Māori customary non-commercial fishing, amateur interests and all other mortality to that stock caused by fishing.<sup>118</sup> The 1996 Act does not explicitly prioritise between sectors,<sup>119</sup> but as a policy matter, customary rights have been considered to take priority.<sup>120</sup>

### **Amateur Fishing**

A 2007/08 survey estimated that, during a twelve month period, around 16.6% of New Zealanders aged sixteen and older participated in marine/saltwater fishing at

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<sup>110</sup> Sections 8 and 9 of the Fisheries Act 1996

<sup>111</sup> Id. s 8(2). The definition also refers to using and developing fisheries resources.

<sup>112</sup> “Ensuring sustainability” means “maintaining the potential of fisheries resources to meet the reasonably foreseeable needs of future generations” and addressing the adverse effects of fishing. Id.

<sup>113</sup> See e.g. *Fishers criticise Maui dolphin set net ban* (reporting on 2012 extension of ban on set net fishing along Taranaki coast to protect Maui’s dolphins) and *Squid fishery decision criticised* (discussing maximum number of fishing-related sea lion deaths allowed in Auckland Islands squid fishery in 2012)

<sup>114</sup> See *Aquatic Environment and Biodiversity Annual Review* (2011) at 5-6, 12-13 (describing legislative mandates regarding adverse effects of fishing and summarising research on protected species, bycatch, ecosystem effects, benthic effects, and marine biodiversity)

<sup>115</sup> See e.g. *Marine – WWF New Zealand* (noting marine programme work on marine protected areas, sustainable fisheries, protection for Hector’s and Maui’s dolphins and seabird measures with fishers)

<sup>116</sup> *New Zealand Fisheries at a Glance*

<sup>117</sup> Section 13 of the Fisheries Act 1996

<sup>118</sup> Id. s 21(1)

<sup>119</sup> *New Zealand Recreational Fishing Council Inc v Minister of Fisheries* (SC 40/2008, 28 May 2009) (noting that section 21 of the Fisheries Act 1996 does not indicate that non-commercial fishing interests are to be given substantive priority over commercial interests)

<sup>120</sup> Lock and Leslie (2007) at 8-9, 42

least once.<sup>121</sup> Popular marine species caught by amateur fishers include snapper, blue cod, kingfish, paua and rock lobster.<sup>122</sup> There is little information available regarding amateur catch,<sup>123</sup> and the Ministry initiated several projects in 2011 and 2012 to improve catch statistics.<sup>124</sup> Marine amateur fishers are not subject to permitting or reporting requirements<sup>125</sup> but are subject to general and region-specific regulations, which are described in the next chapter.

## Wild Capture Fisheries and Aquaculture

One hundred thirty (130) species are commercially fished and 97 of them are managed under the QMS.<sup>126</sup> The deepwater, EEZ fisheries are a multi-million dollar industry with catches that comprise roughly three-quarters of the total catch of QMS species.<sup>127</sup> While only commercial vessels fish in the deepwater fisheries, inshore fisheries, which generally occur within the 12 nautical mile territorial sea, include commercial, amateur and customary fishers.<sup>128</sup>

Industry harvests roughly 600,000 tonnes annually from wild capture fisheries and aquaculture.<sup>129</sup> Key commercial, wild capture species in terms of value or volume include rock lobster (crayfish), paua (abalone) and snapper from the inshore and shellfish fisheries, and hoki, squid, ling, oreo dories, orange roughy and silver warehou from the deepwater fisheries.<sup>130</sup> The value of commercial quota was estimated in 2009 at around \$4.0 billion.<sup>131</sup> In the September 2009 year, hoki, rock lobster and paua had the highest asset values: \$815 million, \$771 million and \$304 million respectively.<sup>132</sup>

The main companies in the fishing industry are Sanford Ltd, Aotearoa Fisheries Ltd, Sealord Ltd, Talley's Fisheries Ltd, Ngai Tahu Fisheries Settlement Ltd and Vela.<sup>133</sup> Since the introduction of the QMS, the number of fishers and fishing entities has decreased, and quota has become highly concentrated. For example, approximately ninety per cent of the quota is held by 7.6 per cent of the total number of quota owners in the deepwater hoki fishery (HOK1) and by 9.7 per cent of the quota owners in the inshore snapper fishery (SNA1).<sup>134</sup>

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<sup>121</sup> Sport and Recreation New Zealand (2009) at 4

<sup>122</sup> *Popular Species*

<sup>123</sup> *Shared Fisheries* (2006) at 3

<sup>124</sup> *Marine Recreational Fishing Research Programme*

<sup>125</sup> Section 89(2)(a) of the Fisheries Act (exempting from permit requirements the taking of fish other than for the purpose of sale and done in accordance with amateur fishing regulations)

<sup>126</sup> *Fisheries at a Glance*

<sup>127</sup> *Deepwater*

<sup>128</sup> *Draft National Fisheries Plan for Inshore Finfish* (2011) at 5 (noting that "inshore area" is not formally defined but "taken to mean the area within a landward boundary of mean high water springs and a seaward boundary of either the 12 nautical mile outer limit of the territorial seas [sic] or the 200m water depth contour"). See *ibid.* at Appendix 1 for profile of inshore sectors.

<sup>129</sup> *Commercial Fishing*

<sup>130</sup> *Ibid.*

<sup>131</sup> Statistics New Zealand (2010) at 4

<sup>132</sup> *Ibid.* at 13

<sup>133</sup> *Seafood industry fact file*

<sup>134</sup> Data compiled from SeaFIC Quota Ownership Register. The hoki fishery has two quota management areas: HOK10 (Kermadec) and HOK1 (all other areas). *New Zealand Commercial*



Aquaculture has been identified as a significant growth opportunity for New Zealand, and industry has a goal of increasing annual sales to \$1 billion by 2025.<sup>135</sup> The main marine aquaculture species are Greenshell<sup>TM</sup> mussels, Pacific oysters and king salmon.<sup>136</sup>

Approximately 90% of all New Zealand seafood harvests (wild capture and aquaculture) are exported. Seafood exports typically are New Zealand's fourth or fifth largest export earner<sup>137</sup> and were valued at \$1.561 billion in the year ended June 2011.<sup>138</sup> The top export species in 2011 in terms of value were rock lobster (NZ \$221 million), mussels (\$218 million), hoki (\$185 million), squid (\$105 million), salmon (\$64 million), paua (\$57 million), tuna (\$56 million), ling (\$43 million), jack mackerel (\$42 million) and orange roughy (\$37 million).<sup>139</sup> Top export markets were China and Australia followed by the United States, Hong Kong and Japan.<sup>140</sup>

## Summary

The focus of New Zealand fisheries management has, for a good portion of its history, been on commercial fishing activity. In the 1980s, commercial fisheries underwent a dramatic shift from input to output controls and from conservation to economic efficiency objectives. The QMS also reflected a major change in thinking about roles and responsibilities for Crown fisheries and conservation services. Whereas the Crown previously paid for and delivered required services, under the QMS, ITQ holders were expected to bear costs and responsibilities for services attributed to them. Settlement of Māori fishery claims, cost recovery, and other QMS provisions created incentives for ITQ holders to get involved in scientific and management processes, notably the debate over the nature and cost of services and alternatives for service delivery.

The Crown-industry service delivery dialogue is more complicated now than when the QMS was first introduced. There are a greater number of conservation and management needs. For example, fisheries management is no longer just about the sustainability of single stocks of fish but also addressing the adverse effects of fishing. In addition there are a greater number of fisheries stakeholders who want to be involved in decision making. Often, these stakeholders have divergent interests and priorities. As well as being a major player in commercial fisheries, the Māori have customary fishing interests that are recognised and addressed in the law, and there can be conflicts between the two regimes even among the Māori.<sup>141</sup> Amateur fishers, while not as well-organised as the commercial sector, are vocal and influential in fisheries management processes. Aquaculture has been identified as a significant growth opportunity, which raises concerns among commercial fishers about potential

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*Fisheries: The Atlas of Area Codes and TACCs* at 37. The snapper fishery has six management areas; SNA1 covers East Northland/Hauraki Gulf/Bay of Plenty. *Species Focus – Snapper (Pagrus Auratus)*.

<sup>135</sup> *The Government's Aquaculture Strategy and Five-year Action Plan to Support Aquaculture* at 1

<sup>136</sup> *Commercial Fishing*

<sup>137</sup> *Management of NZ's International Fishing Interests*

<sup>138</sup> *International Trade* (see Excel file under *Primary sector export values for the year ending June 2011* for export value of seafood products for year ended 30 June 2011)

<sup>139</sup> *Seafood industry fact file*

<sup>140</sup> *Ibid.*

<sup>141</sup> Te Ohu Kaimoana Maori Fisheries Trust (2011) at 13

spatial conflicts. With regard to sustainability, environmental organisations promote not only conservation of fishery resources but also protection of marine mammals, seabird mitigation measures, and marine protected areas.

The following Chapter describes the regulatory frameworks applicable to the commercial, amateur and customary fishing sectors. It also elaborates on how New Zealand and U.S. law articulate and address conservation and management needs for marine fisheries.

## 2 SUSTAINABLE FISHERIES

The goal of “sustainable fisheries” management is long-term conservation and sustainable use of fishery resources for present and future generations.<sup>142</sup> Responsible practices for fisheries conservation and management include, among other things, using the best scientific information available; preventing overfishing and excess fishing capacity; conserving target species and other species belonging to the same ecosystem or associated with or dependent upon the target species; minimising discards of non-target species (fish and non-fish); and conserving biodiversity of aquatic habitats and ecosystems.<sup>143</sup> New Zealand and the United States actively promote these principles but have done so in very different ways.

The purposes of and objectives for fisheries management inform what fisheries and conservation services are needed and how they are to be prioritised. This Chapter explains how New Zealand’s Fisheries Act 1996 and the United States’ Magnuson-Stevens Fisheries Conservation and Management Act define the purposes of fisheries management. It also compares the approaches used under those statutes to meet fishery management goals.

### Overview of Legislative Approaches

#### New Zealand’s Fisheries Act 1996

New Zealand’s fisheries management system is a hybrid of rights-based and traditional regulatory approaches. The purpose of the commercial QMS was to maximise economic returns from fisheries and provide for cost efficiencies.<sup>144</sup> As described in the last chapter, “utilisation of fishery resources while ensuring sustainability” became the stated purpose of fisheries management in 1996.<sup>145</sup> This did not shift the economic emphasis of the QMS. The QMS provisions take up a good part of the Act and include quota allocation requirements, formulas for addressing quota shares and increases or decreases in the TACC, annual catch entitlements, deemed values, cost recovery and registration of transfers, mortgages and caveats.<sup>146</sup>

Input controls and other measures are used in amateur and customary fisheries and in some commercial fisheries in addition to ACE and deemed values. Section 297 of the Act authorises regulations for a broad range of purposes including regulating or prohibiting the taking or possession of fish, the area or time period when fish may be

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<sup>142</sup> UN Food and Agriculture Organization (1995) at Article 7.1.1

<sup>143</sup> *Ibid.* at Articles 6.1-6.6, 7.1.1, 7.1.8, 7.2.2, 7.2.3. UNCLOS Article 61(2), (4).

<sup>144</sup> Pearce (1991) at Chapter 1 (Policy Objectives) (noting that New Zealand did not articulate in an official way the objectives for the QMS but it is reasonable to assume that they included ensuring a “high level of economic efficiency in commercial uses of fish,” fair and equitable allocation of fish resources among competing users, and conservation of natural resources to ensure their sustainable use and protection of ecosystems). The Ministry commissioned Pearce, an internationally recognised expert in natural resources management, to conduct an independent review of the QMS a few years after it was introduced. *Ibid.* at Forward.

<sup>145</sup> Section 8 of the Fisheries Act 1996. See notes 110-112 and associated text for definitions of “utilisation” and “sustainability.”

<sup>146</sup> Parts 4, 8 and 14 of the Fisheries Act 1996

taken, the number or weight of fish that may be taken, and fishing methods and gear.<sup>147</sup> The Fisheries (Commercial Fishing) Regulations 2001 include, among other things, restrictions on taking certain species, minimum sizes and gear requirements.<sup>148</sup> Amateur fisheries are subject to gear restrictions and requirements, bag limits, size limits and closed areas and seasons under the Fisheries (Amateur) Regulations 1986 and regulations specific to six regions.<sup>149</sup> Customary fishing regulations<sup>150</sup> provide for appointment of *Tangata Kaitiaki/Tiaki*, guardians of areas who issue authorisations for customary fishing.<sup>151</sup> They also provide for establishment of *mātaitai* reserves, which are areas that are traditional fishing grounds or otherwise of special significance,<sup>152</sup> and *taiapure*-local fisheries, which are areas of special significance to *iwi* or *hapū* as a source of food or for spiritual or cultural reasons.<sup>153</sup>

In addition to the above, sustainability measures may be used for QMS and non-QMS stocks,<sup>154</sup> and measures may be taken to address fishing-related mortality of protected species.<sup>155</sup> Fisheries plans, which are non-regulatory in nature, are used to describe objectives and strategies for fisheries, conservation and fisheries services, and other information.<sup>156</sup> Plans have been approved for the Deepwater and Middle-Depth Fisheries and Highly Migratory Species Fisheries, and there are three inshore plans (finfish, shellfish and freshwater) being applied in draft form.<sup>157</sup>

The Fisheries Act 1996 applies to fishing within the EEZ, territorial sea, internal waters and other fresh or estuarine waters within New Zealand.<sup>158</sup> Several layered, geographic units are used for commercial fisheries management. Ten Fishery Management Areas (FMAs) were used beginning around 1983 to set limits and controls; they roughly reflected the distribution of vessels in the territorial sea and EEZ.<sup>159</sup> Stocks under the QMS are broken down into Quota Management Areas

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<sup>147</sup> Id. s 297

<sup>148</sup> Sections 30-52A and 59-80 of the Fisheries (Commercial Fishing) Regulations 2001

<sup>149</sup> The recreational fishing regions are Auckland and Kermadec, Central, South East, Southland, Challenger and Fiordland. *Recreational Fishing – Know the Limits*.

<sup>150</sup> Fisheries (Kaimoana Customary Fishing) Regulations 1998 and Fisheries (South Island Customary Fishing) Regulations 1998. For fishing areas not covered by the customary regulations, Regulation 27A of the Amateur Fishing Regulations applies and allows for taking of fish for a *hui* (meeting or gathering) or *tangi* (funeral). Section 27A(1)(a) of the Fisheries (Amateur Fishing) Regulations 1986.

<sup>151</sup> Regulations 11-13 of the Fisheries (Kaimoana Customary Fishing) Regulations 1998 and Fisheries (South Island Customary Fishing) Regulations 1998. *Tangata Kaitiaki/Tiaki* are appointed by the Minister to manage local fisheries of *tangata whenua*. *Māori Customary Fisheries*.

<sup>152</sup> Regulations 18-26 of the Fisheries (Kaimoana Customary Fishing) Regulations 1998 and regulations 17-23 of the Fisheries (South Island Customary Fishing) Regulations 1998. Commercial fishing is generally prohibited and non-commercial fishing is managed via bylaws. *Mātaitai Reserves*.

<sup>153</sup> Sections 174-185 of the Fisheries Act 1996. Once established, *taiapure* are managed by a committee that is representative of the local Māori community and that has power to make recommendations to the Minister for regulations. Id. s 184.

<sup>154</sup> Section 11 of the Fisheries Act 1996 (authorising Minister to set sustainability measures for any stock of fish, aquatic life or seaweed, such as measures relating to the size, sex or biological state of a stock; fishing seasons and areas; fishing methods; and catch limits for non-QMS stocks)

<sup>155</sup> Id. s 15

<sup>156</sup> Id. s 11A. Previously “fishery management plans” were supposed to be prepared to conserve, enhance, protect, allocate and manage fishery resources. Section 4 of the Fisheries Act 1983. These mandatory plans were abandoned in favour of discretionary fisheries plans.

<sup>157</sup> *Fisheries Planning*

<sup>158</sup> Section 2 of the Fisheries Act 1996 (defining New Zealand fisheries waters)

<sup>159</sup> The FMAs are Auckland East (FMA 1), Central East (FMA 2), South-East Coast (FMA 3), South-

(QMAs) based on the FMAs and biological and management considerations.<sup>160</sup> There are also smaller Statistical Areas that are used for data collection purposes.<sup>161</sup>

The Minister for Primary Industries is responsible for the Ministry for Primary Industries (MPI), which currently administers the Fisheries Act 1996.<sup>162</sup> References in this Report to “Minister” or “Ministry” refer to the aforementioned Minister and Ministry or their predecessors (see Service Providers in Chapter 3 for explanation of government organisational changes). Before taking certain actions, the Minister must consult with representatives of interested stakeholder organisations and provide for the input and participation of *tangata whenua*.<sup>163</sup>

### United States’ Magnuson-Stevens Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act or MSA) is the primary statute that governs fishing in federal waters, which extend from the seaward boundary of State waters out to the seaward boundary of the US EEZ.<sup>164</sup> The national fisheries management programme is based on fishery management plans (FMPs), which must be prepared when a stock is overfished or otherwise is in need of conservation and management.<sup>165</sup> FMPs generally are developed through eight regional fishery management councils,<sup>166</sup> which are composed of federal and state government members and representatives of commercial and amateur (referred to in the United States as “recreational”) fishing interests and environmental and academic interests.<sup>167</sup> FMPs, FMP amendments and implementing regulations are developed through statutorily-prescribed processes that specify time periods for action and require opportunities for public participation.<sup>168</sup>

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East Chatham Rise (FMA 4), Southland (FMA 5), Sub-Antarctic (FMA 6), Challenger (FMA 7), Central West (FMA 8), Auckland West (FMA 9) and Kermadec (FMA 10). *Our Fisheries: Map View*.

<sup>160</sup> Blue cod, for example, has 8 QMAs reflecting a merger of FMAs 1 with 9 and 5 with 6. Blue shark, a highly migratory species, has one QMA that covers the whole of New Zealand fisheries waters. *New Zealand Commercial Fisheries: The Atlas of Area Codes and TACCs* at 12, 16

<sup>161</sup> *Report from the Fisheries Assessment Plenary* (2011) at 13 (providing map of statistical areas)

<sup>162</sup> MPI areas of responsibility include fisheries and aquaculture, forestry, biosecurity and food safety. *Our Work*.

<sup>163</sup> Section 12 of the Fisheries Act 1996 (requiring consultation when setting the TAC for a QMS stock, adopting sustainability measures or taking action to address effects of fishing on protected species)

<sup>164</sup> 16 U.S.C. 1801 et seq. State waters extend three nautical miles from shore except for Texas, the Gulf Coast of Florida and Puerto Rico which have nine nautical mile boundaries. *An Ocean Blueprint for the 21<sup>st</sup> Century* at 70.

<sup>165</sup> 16 U.S.C. 1854(e) and 1852(h)(1)

<sup>166</sup> Id. 1852(a)(1) (establishing New England, Mid-Atlantic, South Atlantic, Caribbean, Gulf, Pacific, North Pacific and Western Pacific Fishery Management Councils). The government prepares the FMP for Atlantic highly migratory species (e.g., tunas, sharks, billfish) in the Atlantic Ocean, Gulf of Mexico and Caribbean Sea. Id. 1852(a)(3).

<sup>167</sup> Id. 1852(b)-(c) (specifying voting and non-voting members of Councils and nomination and appointment process for non-government members)

<sup>168</sup> Id. 1852(h), (i) and 1854(a)-(c). In addition to the MSA, the Administrative Procedure Act (APA) has rulemaking requirements applicable to all federal agencies. For substantive rules, an agency must, with some exceptions, provide notice of and public opportunity to comment on proposed rules, address public comment in final rules and provide a 30-day delay in the effectiveness of final rules. 5 U.S.C. 553. The APA defines “rule” broadly to include the “whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy or describing the organization, procedure, or practice requirements of an agency.” Id. 551(4).

The purposes of the Act include conserving and managing fishery resources, promoting domestic commercial and recreational fishing, protecting essential fish habitat and providing for States and interested persons to participate in the FMP process.<sup>169</sup> To achieve these purposes the Act has a broad range of tools, some of which are similar to actions authorised under section 297 of the Fisheries Act 1996.<sup>170</sup> There are also registry and data collection provisions specific to amateur fishing.<sup>171</sup>

ITQs, limited access privilege programmes (LAPPs) and other catch share programmes are not required comprehensively in US commercial fisheries.<sup>172</sup> A 2010 policy encourages their use “to achieve long-term ecological and economic sustainability of the Nation’s fishery resources and fishing communities.”<sup>173</sup> However, they are controversial and can take a long time to develop.<sup>174</sup> Currently they are used in fifteen fisheries.<sup>175</sup> Programmes are developed to address not only sustainability of fish stocks but also social and economic considerations. For example, allocation of shares in the Alaska Halibut and Sablefish Individual Fishing Quota (IFQ) programme were classified for use by vessel type to maintain fleet composition.<sup>176</sup> Shares for catcher vessels have permit holder aboard requirements,<sup>177</sup> may only be transferred to individuals, and carry other restrictions in order to maintain the small-vessel, owner-operator character of the fleet.<sup>178</sup> If a LAPP is adopted, it must recover from privilege holders the costs of management, data collection and analysis, and enforcement,<sup>179</sup> but fees may not exceed three per cent of the ex-vessel value of fish harvested.<sup>180</sup>

The US Secretary of Commerce is responsible for administering the Magnuson-Stevens Act, including approving Council-developed FMPs and promulgating implementing regulations.<sup>181</sup> Most Secretarial authorities are delegated to officials

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<sup>169</sup> 16 U.S.C. 1801(b)

<sup>170</sup> FMPs may include limited access systems, time and area closures, limits on catch and sale of fish, restrictions on fishing gear or vessels, deep sea coral protection zones and measures to conserve target and non-target species and habitats. Id. 1853(b). There is also a “catch all” provision that authorises “such other measures, requirements, or conditions and restrictions as are determined to be necessary and appropriate for the conservation and management of the fishery.” Id. 1853(b)(14).

<sup>171</sup> Id. 1881(g) (federal recreational registry and State programme exemption and required improvements to marine recreational fishery statistics).

<sup>172</sup> See e.g. id. 1853a (providing that LAPPs may but are not required to be used). “Catch shares” are not defined in law but refer generally to ITQs, LAPPs and other allocations of quota to persons or entities. *NOAA Catch Share Policy* (2010) at 3. In addition to catch shares, FMPs may use limited access systems to limit participation in a fishery in order to achieve optimum yield in a fishery. 16 U.S.C. 1853(b)(6), 1802(27).

<sup>173</sup> Ibid.

<sup>174</sup> *Fina* (2011) at 164-165, 167

<sup>175</sup> The Mid-Atlantic Surf Clam & Ocean Quahog programme was adopted around 1990 and the most recent programme – Pacific Coast Groundfish Trawl Rationalization – was adopted in 2011. *Catch Shares – Programs by Region*.

<sup>176</sup> *Fina* (2011) at 168

<sup>177</sup> Any individual who harvests halibut or sablefish with fixed gear must have a valid IFQ permit, and if a hired master is conducting the harvest, a valid IFQ hired master permit, and must be aboard the vessel at all times during the fishing trip and be present during the landing. 50 C.F.R. 679.42(c).

<sup>178</sup> *Fina* (2011) at 168

<sup>179</sup> 16 U.S.C. 1853a(e)

<sup>180</sup> Id. 1854(d)(2)(A-B)

<sup>181</sup> Once a plan is submitted, the Secretary of Commerce has ninety days to approve, disapprove or partially approve it and any disapproval or partial disapproval must be based on an inconsistency with the MSA or other applicable law. If the Secretary fails to act within the prescribed time period, the

within the National Marine Fisheries Service (NMFS), a federal agency under the National Oceanic and Atmospheric Administration, US Department of Commerce.

## Fish Stock Status

New Zealand has approximately 97 species or species groupings<sup>182</sup> in the QMS divided into 636 individual stocks.<sup>183</sup> In the United States, forty-four FMPs cover over 982 species, species groupings or stocks which are managed as 477 stocks or stock complexes.<sup>184</sup> Both countries use maximum sustainable yield (MSY) as a management benchmark. New Zealand's Fisheries Act 1996 generally requires that a total allowable catch (TAC) be set for each QMS stock based on MSY considerations.<sup>185</sup> The Magnuson-Stevens Act and its regulatory guidelines utilise MSY in determining whether stocks are overfished or experiencing overfishing.<sup>186</sup> New Zealand and the United States define MSY, respectively, as:

“the greatest yield that can be achieved over time while maintaining the stock's productive capacity, having regard to the population dynamics of the stock and any environmental factors that influence the stock”<sup>187</sup>

“the largest long-term average catch or yield that can be taken from a stock or stock complex under prevailing ecological, environmental conditions and fishery technological characteristics (e.g., gear selectivity), and the distribution of catch among fleets”<sup>188</sup>

## Overfishing and Overfished/Depleted Stocks

Overfishing occurs when the rate of removals of fish exceeds the rate corresponding to MSY.<sup>189</sup> A fishery is overfished (referred to as “depleted” in New Zealand) when

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FMP takes effect as if approved. 16 U.S.C. 1854(a)(3). Regulations are needed to implement approved FMPs. Councils submit proposed regulations to the Secretary, and the Secretary promulgates them through a notice-and-comment process. Id. 1853(c), 1854(b).

<sup>182</sup> *New Zealand Fisheries at a Glance*. “Species” are a “group of animals or plants having common characteristics, able to breed together to produce fertile (capable of reproducing) offspring, and maintaining their ‘separateness’ from other groups.” “Species group” is a “group of species considered together, often because they are difficult to differentiate without detailed examination (very similar species) or because data for the separate species are not available (e.g. in fishery statistics or commercial categories).” *Fisheries Glossary*.

<sup>183</sup> *New Zealand Fisheries at a Glance*. Section 2 of the Fisheries Act 1996 defines “stock” as “any fish, aquatic life, or seaweed of 1 or more species that are treated as a unit for the purposes of fisheries management.”

<sup>184</sup> K. Greene, NMFS, pers. comm. The MSA defines “stock of fish” as “a species, subspecies, geographical grouping, or other category of fish capable of management as a unit,” 16 U.S.C. 1802(42). Stock complexes are “a group of stocks that are sufficiently similar in geographic distribution, life history, and vulnerabilities to the fishery such that the impact of management actions on the stocks is similar.” 50 C.F.R. § 600.310(d)(8).

<sup>185</sup> Section 13 of the Fisheries Act 1996. See notes 217-219 for further explanation of TAC provisions.

<sup>186</sup> 16 U.S.C. 1851(a)(1)(requiring preventing overfishing while achieving on a continuing basis the optimum yield from a fishery), 1854(e)(requiring rebuilding of overfished stocks) and 1802(33), (34) (defining optimum yield, overfishing and overfished with regard to maximum sustainable yield)

<sup>187</sup> Section 2 of the Fisheries Act 1996

<sup>188</sup> 50 C.F.R. 600.310(e)(1)(i)(A) (MSA National Standard 1 Guidelines)

<sup>189</sup> *Harvest Strategy Standard for New Zealand Fisheries* (2008) at 11. MSA National Standard 1 Guidelines, 50 CFR 600.310(e)(2)(i)(B).

its biomass or stock size falls below a level considered too low to ensure that MSY can be produced on a continuing basis.<sup>190</sup>

When a stock is declared overfished, the Magnuson-Stevens Act requires that an FMP be prepared and implemented within two years and contain a time-constrained rebuilding plan.<sup>191</sup> The rebuilding period may not exceed ten years unless exceptions apply and must be as short as possible.<sup>192</sup> Preventing overfishing has long been a priority under the MSA, and in 2006, Congress strengthened the MSA's overfishing provisions and enhanced the role of science in the management process.<sup>193</sup> FMPs now must contain mechanisms for specifying annual catch limits (ACLs) such that overfishing does not occur and include accountability measures.<sup>194</sup> In developing ACLs, regional fishery management councils may not exceed fishing level recommendations of their scientific and statistical committees.<sup>195</sup>

The Fisheries Act 1996 has no express overfishing or rebuilding requirements.<sup>196</sup> Section 13 of the 1996 Act requires that TAC be set with reference to MSY (see discussion on page 26 for further detail), and a 2008 Harvest Strategy Standard provides best practices with regard to stock status. Per the 2008 Standard, when a stock falls below a prescribed "soft limit," it is depleted and a formal, time-constrained rebuilding plan should be initiated.<sup>197</sup> When a stock falls below the "hard limit," it is collapsed and a closure of the fishery should be considered.<sup>198</sup> Section 14 of the Act allows the Minister to set alternative TACs, not based on MSY, that are appropriate to achieve statutory purposes.<sup>199</sup> The Harvest Strategy Standard is applicable to both section 13 and section 14 stocks.<sup>200</sup>

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<sup>190</sup> *Harvest Strategy Standard for New Zealand Fisheries* (2008) at 7, 19. MSA National Standard 1 Guidelines, 50 CFR 600.310(e)(2)(i)(E).

<sup>191</sup> 16 U.S.C. 1854(e)(3)-(4).

<sup>192</sup> A period may not exceed ten years except where the stock's biology, other environmental conditions or international management measures dictate otherwise. *Id.* 1854(e)(4)(A)(ii). In any event, the period must "be as short as possible, taking into account the status and biology of any overfished stocks of fish, the needs of fishing communities, recommendations by international organizations in which the United States participates, and the interaction of the overfished stock of fish within the marine ecosystem." *Id.* 1854(e)(4)(A)(i). In interpreting the "short as possible" provision, the US Ninth Circuit Court of Appeals has held that Congress prioritised conservation but left "some leeway to avoid disastrous short-term consequences for fishing communities." *Natural Resources Defense Council, Inc. v National Marine Fisheries Service*, 421 F.3d 872, 879-880 (9<sup>th</sup> Circ. 2005).

<sup>193</sup> The most recent amendments to the MSA occurred under the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, Public Law 109-479. President George W. Bush signed the 2006 Act into law on January 12, 2007. *Magnuson-Stevens Fishery Conservation and Management Act Reauthorized*.

<sup>194</sup> 16 U.S.C. 1853(a)(15)

<sup>195</sup> *Id.* 1852(h)(6)

<sup>196</sup> When underfishing occurs (i.e., reported catch is less than ACE holdings), the chief executive must with a few exceptions transfer up to ten per cent of the difference between catch and ACE into the next fishing year. There is no overharvest adjustment. Section 67A of the Fisheries Act 1996.

<sup>197</sup> *Harvest Strategy Standard for New Zealand Fisheries* (2008) at 7 and 19

<sup>198</sup> *Ibid.* at 7, 9, and 11

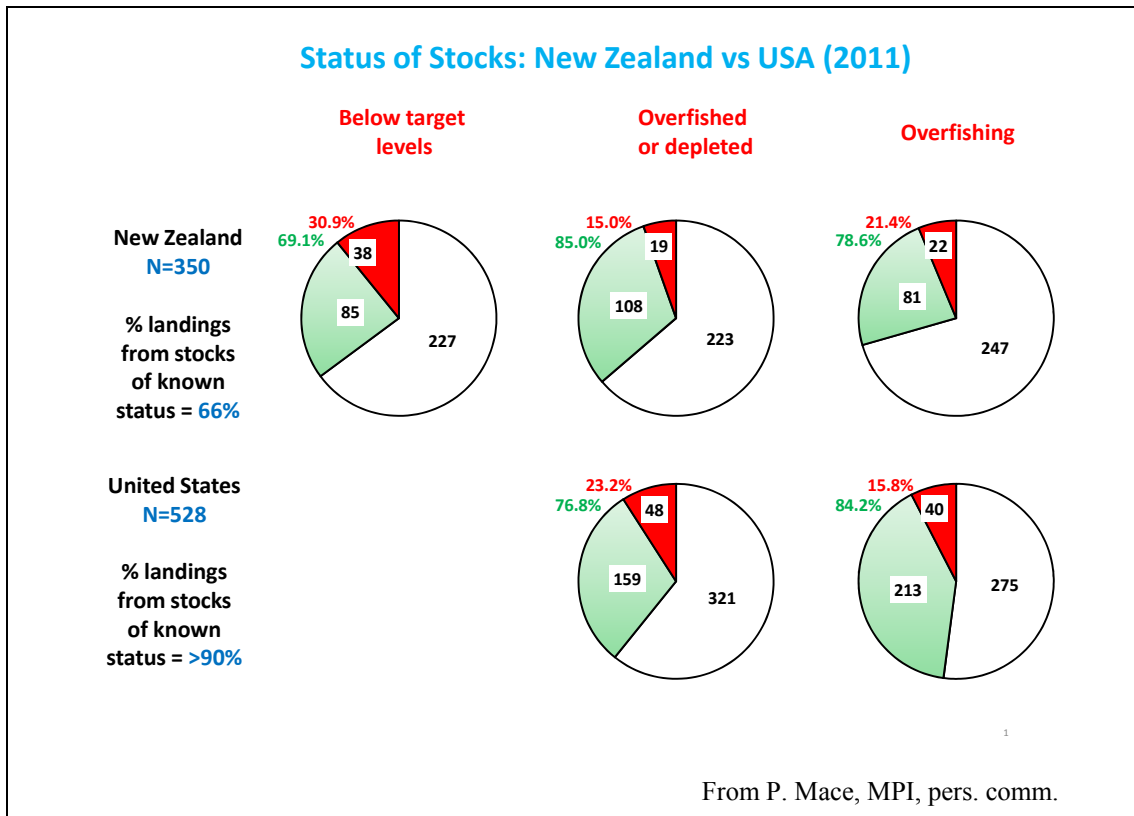
<sup>199</sup> Sixteen stocks, including southern scallops, green-lipped mussels and highly migratory species such as Pacific bluefin tuna, are managed under section 14. Schedule 3 to the Fisheries Act 1996.

<sup>200</sup> *Harvest Strategy Standard for New Zealand Fisheries* (2008) at 23-24



## 2011 Comparison Between New Zealand and the United States

Despite the differences in legislative approach, the overall status of fish stocks managed by New Zealand and the United States was comparable in 2011. In the below figure, the shaded areas represent landings of fish stocks of known status. The darker (red) areas represent stocks that are below target levels, overfished or depleted, or experiencing overfishing.



Of the stocks of known status, 15 per cent of New Zealand stocks and 23 per cent of United States stocks were classified as overfished.<sup>201</sup> Approximately 21 per cent of New Zealand stocks were experiencing overfishing versus 16 per cent of US stocks.<sup>202</sup>

## Environmental, Economic and Social Considerations

Utilisation of fishery resources is an important goal under New Zealand and US law, but sustainability of those resources is “the ultimate priority.”<sup>203</sup> This section describes how sustainability of fishery resources and other environmental considerations are addressed in fisheries management. It also describes how economic and social factors are taken into account.

<sup>201</sup> *The Status of New Zealand's Fisheries 2011* at 4

<sup>202</sup> *Ibid.* at 3

<sup>203</sup> *New Zealand Recreational Fishing Council Inc v Sanford Limited*, SC 40/2008 (28 May 2009) at para. 40. *See also* *Natural Resources Defense Council v Daley*, 209 F.3d 747, 753 (D.C. Cir. 2000) (holding that priority must be given to conservation requirements under the Magnuson-Stevens Act).

## **Magnuson-Stevens Act**

Conservation and management measures under the Magnuson-Stevens Act must be consistent with ten National Standards, mandatory requirements for FMPs and other relevant provisions of the Act.<sup>204</sup> The National Standards, 16 U.S.C. 1851(a), are:

- (1) Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.
- (2) Conservation and management measures shall be based upon the best scientific information available.
- (3) To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.
- (4) Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.
- (5) Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.
- (6) Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.
- (7) Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.
- (8) Conservation and management measures shall, consistent with the conservation requirements of this chapter (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirements of paragraph (2), in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.
- (9) Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.
- (10) Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

As reflected in the National Standards and other provisions, the Magnuson-Stevens

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<sup>204</sup> 16 U.S.C. 1851(a) (National Standards) and 1853(a) (mandatory FMP requirements) and 50 C.F.R. 600.310 et seq. (National Standard Guidelines)

Act's environmental mandates include preventing overfishing and rebuilding overfished stocks,<sup>205</sup> minimising adverse effects of fishing on essential fish habitat,<sup>206</sup> and minimising bycatch and bycatch mortality of fish and other species.<sup>207</sup> Additional protections for marine species come from the Marine Mammal Protection Act<sup>208</sup> and the Endangered Species Act.<sup>209</sup>

Key economic and social mandates of the Magnuson-Stevens Act include achieving on a continuing basis optimum yield from each fishery, minimising costs and adverse impacts on communities, and ensuring fair and equitable allocations (see National Standards 1, 4, 7 and 8). National Standard 5 requires consideration of efficiency, but this requirement is tempered: measures must consider efficiency "where practicable" and no measure "shall have economic allocation as its sole purpose." If a limited access system or LAPP is adopted, there are economic, social and cultural factors specific to those provisions that must be considered.<sup>210</sup>

Beyond the Magnuson-Stevens Act, there are procedural statutes that require analysis of the impacts of proposed actions. For major federal actions significantly affecting the quality of the human environment, the National Environmental Policy Act of 1969 (NEPA) and its implementing regulations require preparation of an environmental impact statement (EIS) analysing direct, indirect and cumulative effects; alternatives to proposed actions; and mitigation of adverse impacts.<sup>211</sup> The Regulatory Flexibility Act of 1980 requires evaluation of the economic impacts of proposed rules on small entities.<sup>212</sup>

NMFS, through authority delegated from the Secretary of Commerce, implements and provides guidance on the Magnuson-Stevens Act through regulations, guidelines, policies and other documents. The Secretary has general authority to carry out FMPs and promulgate regulations "as may be necessary to discharge such responsibility or to carry out any other provision of [the] Act."<sup>213</sup> In addition the Act requires the

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<sup>205</sup> 16 U.S.C. 1851(a)(1) (National Standard 1: overfishing and optimum yield), 1854(e) (rebuilding)

<sup>206</sup> Id. 1853(a)(7) (requiring description and identification of essential fish habitat, minimisation to the extent practicable of adverse effects on such habitat caused by fishing, and identification of other actions to encourage conservation and enhancement of such habitat). If other federal agencies may have an adverse effect on essential fish habitat, they must consult with NMFS. Id. 1855(b)(2).

<sup>207</sup> Id. 1852(a)(9) and 1853(a)(11) (requiring standardised bycatch reporting methodology in FMPs)

<sup>208</sup> The Marine Mammal Protection Act of 1972 prohibits "take" of marine mammals in US waters and has requirements pertaining to takes that are incidental to commercial fishing. Id. 1387.

<sup>209</sup> The Endangered Species Act provides for conservation of threatened and endangered species and their habitat and is jointly administered by the Fish and Wildlife Service, US Department of Interior, and NMFS. Id. 1531-1544. Under the ESA, a federal agency must consult with the aforementioned agencies to ensure that its actions are not likely to jeopardise the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species (referred to as "section 7 consultation"). Id. 1536(a)(2).

<sup>210</sup> As explained under note 172 and in its associated text, limited access systems and limited access privilege programmes are discretionary, but if used, must be consistent with requirements at 16 U.S.C. 1853(b)(6) and 1853a respectively.

<sup>211</sup> 42 U.S.C. 4332(2)(C) and 40 C.F.R. Part 1502. When a full EIS is not required, agencies prepare an environmental assessment that analyses alternatives to the proposed action and impacts of the proposed action and alternatives. 40 C.F.R. 1508.9. Some actions may be categorically excluded from NEPA requirements if they do not individually or cumulatively have a significant effect on the environment. Id. 1508.4.

<sup>212</sup> 5 U.S.C. 601-612

<sup>213</sup> 16 U.S.C. 1855(d)

Secretary to establish advisory guidelines for the National Standards but specifies that they “shall not have the force and effect of law.”<sup>214</sup> The guidelines are issued through public notice and comment processes and are influential in the development of FMPs and regulations. They are not subject to judicial review,<sup>215</sup> but courts look to them when determining whether agency action was arbitrary or capricious.<sup>216</sup>

## **Fisheries Act 1996**

The key sustainability mandate of the Fisheries Act 1996 is set forth in its TAC setting provisions.<sup>217</sup> Under section 13 of the Act, the Minister is required to set a TAC for each QMS stock that maintains the stock “at or above a level that can produce the maximum sustainable yield, having regard to the interdependence of stocks.”<sup>218</sup> Where the level of a stock is below that which can produce MSY, the Minister has significant latitude in taking action. The Minister must set a TAC that:

- (b) enables the level of any stock whose current level is below that which can produce the maximum sustainable yield to be altered—
  - (i) in a way and at a rate that will result in the stock being restored to or above a level that can produce the maximum sustainable yield, having regard to the interdependence of stocks; and
  - (ii) within a period appropriate to the stock, having regard to the biological characteristics of the stock and any environmental conditions affecting the stock...<sup>219</sup>

In addition to the mandatory TAC requirements, the Fisheries Act 1996 contains the following principles:

### Environmental Principles<sup>220</sup>

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

- (a) associated or dependent species should be maintained above a level that

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<sup>214</sup> Id. 1851(b)

<sup>215</sup> *Tutein v Daley*, 43 F.Supp.2d 113, 122 (D. Mass. 1999) (holding that national standard guidelines are not subject to judicial review even though they are developed and published like regulations).

<sup>216</sup> The Administrative Procedure Act at 5 U.S.C. 706 provides the scope of federal court review of federal agency actions. Review is based on the administrative record compiled by the agency. A court may set aside agency action for several reasons, most notably if the action is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” Id. 706(1)(A).

<sup>217</sup> *New Zealand Recreational Fishing Council v Minister of Fisheries*, SC 40/2008 (28 May 2009) (“Kahawai”) at para 41. Utilisation and sustainability policies under Section 8 of the Fisheries Act 1996 are to be “accommodated as far as is practicable” in the administration of QMS fisheries. Id at para 39-40. However, the “nature and scope of the Minister’s powers and the restrictions on them are as provided for in the operating provisions of the Act.” Id. at para 59.

<sup>218</sup> Section 13(2)(a) of the Fisheries Act 1996

<sup>219</sup> Id. s 13(2)(b). Section 13(c) prescribes how to set the TAC when the level of a stock is above the level that can produce MSY. Section 2A addresses how to set a TAC when it is not feasible to make a reliable estimate of the current level of the stock or the level that can produce MSY.

<sup>220</sup> Id. s 9

ensures their long-term viability:

- (b) biological diversity of the aquatic environment should be maintained:
- (c) habitat of particular significance for fisheries management should be protected.

#### Information Principles<sup>221</sup>

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

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

The Act does not have measures on discards or bycatch, as ACE, deemed values and a no-dumping provision were intended to discourage such practices.<sup>222</sup> Despite these provisions, there has been concern regarding discards in the commercial fisheries. In 2009, the Ministry and industry initiated a “Discarding at Sea Strategy” to analyse issues relating to the policy, management and practice of discards; define management policy objectives; and develop options for addressing gaps between the issues and objectives.<sup>223</sup> Work on this initiative is ongoing.

Associated or dependent species, habitat and biodiversity must be taken into account per the Act’s “environmental principles,” and adverse effects of fishing are included in the Act’s definition of “sustainability.”<sup>224</sup> The Act does not require that specific regulatory actions be taken to address these issues. New Zealand’s Marine Mammals Protection Act 1978 provides for the development of population management plans (PMPs) for marine mammals,<sup>225</sup> but no PMPs have been developed yet. In the absence of PMPs, the Minister has exercised authority under the Fisheries Act 1996 to implement protective measures.<sup>226</sup> With regard to other effects of fishing, the Ministry

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<sup>221</sup> Id. s 10

<sup>222</sup> Dumping of fish is prohibited for QMS stocks, unless they are subject to minimum size requirements or fall under other exceptions. Section 72 of the Fisheries Act 1996

<sup>223</sup> *Discarding at Sea Strategy, Terms of Reference* (2009)

<sup>224</sup> Section 8(2) of the Fisheries Act 1996. See note 112 and associated text.

<sup>225</sup> Section 3E of the Marine Mammals Protection Act 1978. In addition, the Wildlife Act 1953 protects wild animals and birds and authorises, among other things, population management plans for species. Section 14F of the Wildlife Act 1953. Only a small number of marine species are covered under the Act. Id. at Schedule 7A.

<sup>226</sup> Whether a plan exists or not, the Minister is authorised to take measures “necessary to avoid, remedy, or mitigate the effect of fishing-related mortality on any protected species,” including setting limits on fishing-related mortality. Section 15(2) of the Fisheries Act 1996. In the absence of a marine mammal plan, the Ministry has established a fisheries-related mortality limit for New Zealand sea lions in the squid trawl fishery (SQU6T) off the south coast of the South Island. *Aquatic Environment and*

initiated development of a Benthic Impact Standard and a Seabird Standard<sup>227</sup> but progress has been slow. The Ministry also developed a draft Seabird Policy that aims to reduce fishing-related mortality and sought public comment on it in 2011.<sup>228</sup>

The Act only refers to economic and social considerations in a few places. “Utilisation,” one of the purposes of the Act, is defined to mean “conserving, using, enhancing, and developing fisheries resources to enable people to provide for their *social, economic, and cultural well-being*.”<sup>229</sup> In addition, the Act provides that the Minister “shall have regard to such *social, cultural, and economic factors* as he or she considers relevant” when making certain TAC decisions.<sup>230</sup>

The Minister and chief executive take actions as specified in the Act. For example, the Minister sets a TAC or TACC through notices in the *Gazette*.<sup>231</sup> The Act does not authorise rulemaking to establish environmental or other standards as is the case under New Zealand’s Resource Management Act 1991.<sup>232</sup> Instead the Ministry uses standards, strategies and policy documents to provide for “best practices” related to statutory requirements.<sup>233</sup> For example, the 2008 Harvest Strategy Standard is “a policy statement of best practice in relation to the setting of fishery and stock targets and limits.”<sup>234</sup> It is considered a “core input” with regard to the setting of TACs under sections 13 and 14 of the Act.<sup>235</sup>

## Summary

There is a marked contrast between how New Zealand’s Fisheries Act 1996 and the U.S. Magnuson-Stevens Act express environmental, economic and social objectives for fisheries management. The Fisheries Act 1996 mandates how to set TACs with reference to MSY but does not specify regulatory actions that must be taken to

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*Biodiversity Review* (2011) at 15-16, 26-27. Sea lion mortalities in excess of the limit have resulted in seven closures of the fishery since 1993. *Id.* at 27.

<sup>227</sup> *Standards*

<sup>228</sup> *Draft Seabird Policy*

<sup>229</sup> Section 8(2) of the Fisheries Act 1996 (*emphasis added*)

<sup>230</sup> *Id.* s 13(3) (*emphasis added*). Section 13 requires consideration of the above-described factors when setting a TAC where the stock is below or above a level that can produce MSY or when a reliable estimate of the stock level or MSY level is unavailable). *Id.*

<sup>231</sup> *Id.* ss 13, 20. The Minister also provides notice in the *Gazette* when taking sustainability measures, addressing fishing-related mortality of marine mammals and other wildlife, determining that stocks should be subject to the QMS and setting deemed value rates. *Id.* ss 11, 15, 18, 21 and 75. The chief executive has responsibility for administering ACE, issuing permits and administering registries. *Id.* ss 66-67, 91, 98 and 124.

<sup>232</sup> Section 43 of the Resource Management Act 1991 authorises the Governor-General, by Order in Council, to make regulations prescribing “national environmental standards,” including technical standards, methods and requirements. National environmental standards may, among other things, prohibit, allow or restrict activities. Section 43A of the Resource Management Act 1991.

<sup>233</sup> In addition to the 2008 Harvest Strategy Standard, the Ministry has a Stakeholder Consultation Process Standard to address minimum requirements for consultations with stakeholders under section 12 of the Act, and a QMS Introduction Process Standard that sets forth the process for identifying stocks to be considered for QMS introduction under section 17B. *Fisheries Standards*. The Ministry also has a Research and Science Information Standard for New Zealand Fisheries (April 2011), discussed at notes 399-400 and associated text.

<sup>234</sup> *Harvest Strategy Standard* at 1

<sup>235</sup> *Ibid.*

address adverse effects of fishing. As explained in the prior chapter, adverse effects of fishing are included as part of the definition of “sustainability,”<sup>236</sup> but the operative provisions of the 1996 Act only state that such effects need to be “take[n] into account.”<sup>237</sup> The 1996 Act is prescriptive with regard to administration of the QMS but says little about social, economic and cultural objectives.

The Magnuson-Stevens Act, on the other hand, is prescriptive about such objectives and generally says little about administration of management programmes. The Act allows for a variety of management tools to be used, but requires that all FMPs must prevent overfishing while achieving optimum yield on a continuing basis, use the best scientific information available, minimise bycatch and bycatch mortality, minimise to the extent practicable adverse impacts on communities, and minimise adverse effects on essential fish habitat, among other things. These mandates are reflected in ten National Standards and in other statutory provisions with which all FMPs and regulations must be consistent.

There are strengths and weaknesses to the approaches taken under both statutes. A pivotal provision of the Magnuson-Stevens Act is its authorisation of agency-promulgated guidelines for the National Standards. This authority enables NMFS to flesh out and provide guidance on the National Standards and gives those guidelines legal weight beyond policy or strategic documents.

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<sup>236</sup> Section 8(2) of the Fisheries Act 1996. See note 112 and associated text.

<sup>237</sup> Section 9 of the Fisheries Act 1996 (environmental principles)





### 3 SERVICE PROVIDERS AND DELIVERY MODELS

*States and users of living aquatic resources should conserve aquatic ecosystems. The right to fish carries with it the obligation to do so in a responsible manner so as to ensure effective conservation and management of the living aquatic resources.*

– *Code of Conduct for Responsible Fisheries*<sup>238</sup>

Achieving the purposes of fisheries management described in Chapter 2 requires resources for a variety of services including fisheries research, compliance (monitoring and enforcing rules) and policy.<sup>239</sup> Legal and policy frameworks must be effective at implementing and enforcing science-based measures while affording transparency in management processes and opportunities for interested parties to engage in them.<sup>240</sup> The list of needs is long and continues to increase as fisheries management becomes more complex domestically and internationally.

Government in many countries typically assumes the responsibilities described above but, for nearly thirty years, New Zealand has repeatedly re-looked at the question of who – Government or other entities – should be “up and doing.” This Chapter explains the policy and legal reasons why the question is asked, describes potential service providers and gives examples of service delivery models. A variety of factors contribute to the success or failure of service delivery approaches.

#### **Incentives for Fishing Industry Engagement**

In line with free-market, small government reforms of the 1980s; the QMS was “sold” with the idea of “more responsibility to the fishers and less government intervention.”<sup>241</sup> The vision was to move toward “devolution of management:” a shifting of management duties (and associated costs) from Government to quota holders, who enjoy benefits from and thus should bear responsibilities for their ITQs.<sup>242</sup> Fishery participants often assert that ITQs are property rights. Like land, they may be sold, transferred and subject to mortgages and transactions must be recorded in a register.<sup>243</sup> The Court of Appeal of New Zealand has described them as a “species of property:” valuable but not absolute rights as they are susceptible to changes in legislation,<sup>244</sup> increases or decreases in TACC and other factors.

Regardless of the label, ITQs were expected to foster a stewardship ethic in quota holders, a desire to explore better and more efficient approaches to long-term

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<sup>238</sup> UN Food and Agriculture Organization (1995) at Article 6.1

<sup>239</sup> Bruce Shallard & Associates and Deloitte (2008) at V, 1 (describing strategic policy as setting the foundation for management of fisheries and operational policy as transforming strategic policy to rules under which stakeholders operate)

<sup>240</sup> UN Food and Agriculture Organization (1995) at Articles 6.13 and 7.1.9 and 7.1.2

<sup>241</sup> Hersoug (2002) at 139

<sup>242</sup> *Ibid.* at 147-8

<sup>243</sup> Sections 136-146 and 155-160 of the Fisheries Act 1996

<sup>244</sup> *New Zealand Fishing Industry Association (Inc) v Minister of Fisheries (CA 82/97, 22 July 1997)* at 16. See also *New Zealand Federation of Commercial Fishermen Inc v Minister of Fisheries (CP 237/95 and CP 294/96, 24 April 1997)* at 90 (noting that ITQ is “a form of property right...a right to harvest a quota” but when it became proportional in 1990, it became “a right subject to over-ride”).

management of fisheries.<sup>245</sup> Cost recovery, which has the premise that the beneficiary of a service or the person who exacerbates a problem should pay,<sup>246</sup> provided a way for commercial stakeholder organisations to “lobby against inefficiencies.”<sup>247</sup> The consultation process for cost recovery levies gives transparency in the accounting of Crown-provided services and costs and an opportunity for input into proposed services and costs.<sup>248</sup> Environmental and other interests opposed the current cost recovery regime, expressing concern that it would give too much influence – “user pays, user says” – to commercial interests.<sup>249</sup> Another concern was that it would constrain scientific research to stock-specific assessments and discourage inquiry into multi-species and ecosystem areas.<sup>250</sup>

While there was a strong, initial push for devolution when QMS was implemented, National Government in the 1990s did not proceed with devolving management to industry. Instead the law was amended to allow for contracting/outourcing,<sup>251</sup> make fisheries research competitive and contestable, and authorise transfer of registry and administrative services to an approved service delivery organisation (ASDO).<sup>252</sup> The Commodity Levies Act 1990 also became available to the fishing industry.<sup>253</sup> Under that Act, commodity-producing industry organisations may apply for compulsory levies – based on, for example, production or value of a commodity – to finance industry activities.<sup>254</sup>

In the 2000s, Government has looked more towards co-management, partnership and self-governance models for fisheries management. The first two terms refer generally to alternatives to traditional command-and-control regulations, “a meeting point between overall government concerns for efficient resource utilization and protection, and local concern for equal opportunity, self-determination, and self-control.”<sup>255</sup> Self-

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<sup>245</sup> See Pearse (1991) at Chapter 5 (Managing Fisheries: The Role of Resource Users and Exploration, Research and Enhancement)

<sup>246</sup> Sections 261-262 of the Fisheries Act 1996 (purposes of cost recovery and cost recovery principles)

<sup>247</sup> Townsend (2010) at 308

<sup>248</sup> See Fisheries (Cost Recovery) Rules 2001 (SR 2001/229) (setting forth formulas for apportionment of costs of fisheries and conservation services) and *Consultation on Proposed Fisheries and Conservation Services Cost Recovery Levies – 2012-13* at 23

<sup>249</sup> Hersoug (2002) at 125

<sup>250</sup> Ibid.

<sup>251</sup> Section 294 of the Fisheries Act 1996. Before deciding to use an outside entity to perform functions, the chief executive shall take into account whether such action might be more efficiently provided by his or her own employees; the desirability of retaining institutional knowledge within the Ministry; and whether such action will limit his or her ability to adequately meet statutory obligations. Id. s 294(2).

<sup>252</sup> Id. at Part 15A. Before making a recommendation on a proposed ASDO, the Minister must be satisfied that it is an incorporated company that will be representative of the quota owners or fish farmers with an interest in the services to be transferred. The ASDO must have financial, management and other resources to assume responsibilities and ensure they are carried out. Id. s 296B(3)(c).

<sup>253</sup> The Commodity Levies Act 1990 applies to any fish, aquatic life, or seaweed, and any other commodity, to which the Fisheries Act 1996 applies. Section 305 of the Fisheries Act 1996.

<sup>254</sup> Section 5 of the Commodity Levies Act 1990. Before making a recommendation on a levy request, the Minister must find that, among other things, the organisation represents adequately the views and interests of persons who would be primarily responsible for paying the levy and a support referendum had been held. Id. s 5(2). Levy orders expire after six years unless revoked or extended. Id. ss 4, 13. If a person avoids or attempts without reasonable excuse to avoid paying a levy, the person is liable on summary conviction to a fine not exceeding \$10,000. Id. s 24.

<sup>255</sup> Yandle (2008b) at 132 (quoting Sven Jentoft and noting that he first coined the phrase “co-management” over twenty years ago)

governance refers to fishery participants taking on management decision responsibilities.<sup>256</sup>

## Service Providers

Executive government historically was *the* provider of fisheries management and scientific services in New Zealand. Now potential service providers include Crown Research Institutes (CRIs), a type of “quango” (quasi-autonomous national (or non-) governmental organisation),<sup>257</sup> commercial stakeholder organisations and other companies and entities. This section provides a description of the first three types of providers.

### Government: Departments and Ministries

Government departments, the core of the state sector, face the challenge of delivering services while continually reinventing themselves.<sup>258</sup> For ninety-five years, fisheries regulation was handled by one government department. As summarised below,<sup>259</sup> a series of reorganisations and realignments took place beginning in the early 1970s, with five of these changes occurring within the first nine years of the QMS.

- Marine Department (Fish Protection Act 1877)
  - Separate Fisheries Management and Fisheries Research Divisions established (Fisheries Amendment Act 1963)
- Ministry of Agriculture and Fisheries (MAF, 1972) – Marine Department Fisheries Divisions moved into MAF
  - Fisheries divisions consolidated as part of reorganisation of Ministry’s nine divisions into four business units (1987)
  - Fisheries enforcement group restructured to shift from “game warden” to auditing, monitoring and analysis approach (1988)
  - MAF policy unit formed (1990)
  - Fisheries policy broken out into separate group (1994)
- Ministry of Fisheries (MFish, 1995)
  - Fisheries management operational functions separated from policy development (2000)
  - Restructuring created new Fisheries Management Group, Fisheries Science Group, Field Operations Group (surveillance and enforcement), office of the chief executive (strategic projects and risk management and evaluation), Aquaculture Unit, and a function to

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<sup>256</sup> Townsend and Shotton (2008) at 1-2

<sup>257</sup> Palmer and Palmer (2004) at 112-113 (explaining that quangos cover a range of state sector agencies including Crown entities set up by statute and subject to accountability requirements in the Public Finance Act 1989 to statutory tribunals, professional organisations and producer boards to informal advisory committees and other bodies established by government under Royal Prerogative)

<sup>258</sup> Ibid. at 95-96

<sup>259</sup> Information for this summary comes from Bess (2012) at 553-556 and Hersoug (2002) at 143-144

assist in meeting Crown obligations from the Māori fisheries settlement (2009)

- Ministry of Agriculture and Forestry (MAF) and Ministry of Fisheries (MFish) merge (1 July 2011)<sup>260</sup>
- Ministry for Primary Industries (MPI, 30 April 2012) – rebranding of merged MAF and MFish

### **National Institute of Water and Atmospheric Research**

The National Institute of Water and Atmospheric Research (NIWA) is the main provider of fisheries, atmospheric and freshwater and marine research in New Zealand.<sup>261</sup> Scientific services used to be considered a core government responsibility<sup>262</sup> until they were moved into CRIs beginning in 1992. CRIs are Crown-owned companies that were established under the Crown Research Institutes Act 1992 to undertake research for the benefit of New Zealand.<sup>263</sup> In 1995 the Ministry of Agriculture and Fisheries' Fisheries Research Division was transferred to NIWA<sup>264</sup> and fisheries research was made contestable. CRIs must compete for government funds along with other potential providers, which the proponents of this approach believed would reduce costs and encourage high performance.<sup>265</sup> This approach failed to recognise that New Zealand has a very small population, fisheries research is highly specialised, and only one or a small number of providers may be available for particular types of work.<sup>266</sup>

A CRI Taskforce in 2010 expressed concern with the profit focus of CRIs, their heavy dependence on competitive contracts, and ways in which the competitive environment undermines or inhibits strategic action, partnerships and best-practice research management.<sup>267</sup> According to the Taskforce, the “company model” has created a perception that CRIs are focused on their own economic returns, as opposed to benefits to New Zealand overall from their research.<sup>268</sup> Noting that CRIs have the potential to be even more “powerful engines of economic growth, forging national and international collaborations at the cutting edge of research and science,” the Taskforce recommended, among other things, that the core purposes of CRIs be clarified to include furtherance of the wellbeing and prosperity of New Zealand.<sup>269</sup> The Taskforce also recommended that a significant portion of CRI funding be

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<sup>260</sup> *About MPI*

<sup>261</sup> *Statement of Corporate Intent*

<sup>262</sup> Harte (2008) at 330

<sup>263</sup> Sections 4 and 5(a) of the Crown Research Institutes Act 1992

<sup>264</sup> *Our Company*

<sup>265</sup> *Report of the Crown Research Institute Taskforce* at 21 (explaining that CRIs were established in response to market failure and lack of private sector activity in research areas) and 17 (noting belief that company model would encourage efficient, client-focused delivery of research services)

<sup>266</sup> *Fisheries Research Services Strategy Review* (2010) at v-vi (stating that New Zealand's small economy has limited capacity to support competition in markets for most types of fisheries research). Hersoug (2002) at 149-150, 189. MartinJenkins (2011) at 26.

<sup>267</sup> *Report of the Crown Research Institute Taskforce* (2010) at 7-9, 26-27. The Taskforce was established to recommend ways for CRIs to respond strategically to the needs of end-users and drive economic growth. *Ibid.* at 15.

<sup>268</sup> *Ibid.* at 21

<sup>269</sup> *Ibid.* at 7, 8

allocated directly from Government on a long-term basis to support delivery of CRI core purposes.<sup>270</sup> In 2010, Cabinet endorsed the recommendations on core funding.<sup>271</sup>

## Industry Organisations

Quota holders have organised themselves in several ways to assume greater management responsibilities. Commercial stakeholder organisations (CSOs) are the backbone of the fishing industry. Typically they represent and are owned by quota holders in a fishery or geographic area or by quota holders who have quota for particular stocks.<sup>272</sup> Examples of CSOs include the Area 2 Inshore Finfish Management Company Ltd, which represents fishers and quota owners involved in inshore fisheries within Quota Management Area 2,<sup>273</sup> and Deepwater Group Limited, which is owned by quota holders in the deepwater EEZ fisheries.<sup>274</sup> CSOs have different organisational structures, including limited liability companies, incorporated societies and informal associations, and their ability to engage in scientific and management activities varies considerably.<sup>275</sup> While this chapter provides examples of CSOs taking on some delivery of services, CSOs in many fisheries, including inshore finfish, have not been able to assume similar responsibilities.<sup>276</sup> The last section of this chapter discusses the factors that affect the success and failure of CSO initiatives.

The twenty-five CSOs are shareholders in the New Zealand Seafood Industry Council Ltd (SeaFIC), an umbrella organisation that provides training, policy, trade, science, and communications expertise and services across the seafood industry.<sup>277</sup> Under the New Zealand Seafood Industry Council Commodity Levy,<sup>278</sup> all quota owners pay compulsory levies to SeaFIC to be used for its general work<sup>279</sup> or for projects that individual CSOs might execute.<sup>280</sup>

Industry is currently undergoing a significant reorganisation or “implosion,” as one interviewee referred to it. According to interviewees, SeaFIC, which used to drive industry-wide initiatives, is being recast into a consulting role. Five sector representative entities (SREs) – rock lobster, paua, aquaculture, inshore finfish and deepwater – will assume responsibility for sector-specific and industry-wide issues. The reason for the change appears to be quota holders’ perception that their levies do not result in direct benefits back to their fisheries. Interviewees noted that some SREs may be well positioned to assume SeaFIC-like responsibilities but others are not. It remains to be seen whether the new model will result in efficiencies for quota owners and also for the Ministry and fisheries stakeholders who benefited from the whole-of-

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<sup>270</sup> Ibid.

<sup>271</sup> *How We Invest*

<sup>272</sup> *Industry Organisation*

<sup>273</sup> Ibid.

<sup>274</sup> *About Us*

<sup>275</sup> See e.g. Yandle (2008) at 300-301 (describing different organisational structures and activities of rock lobster regional CSOs)

<sup>276</sup> Townsend (2010) at 304

<sup>277</sup> *Industry Structure*

<sup>278</sup> Commodity Levies (Fish) Order 2002 (SR 2002/50) extended to 10 March 2013 by clause 4 of the Commodity Levies (Fish) Amendment Order 2006 (SR 2006/374).

<sup>279</sup> *The Commodity Levy*

<sup>280</sup> *Industry Structure*

industry interface point with SeaFIC.<sup>281</sup>

## Service Delivery Examples

As described above, full devolution of management has not occurred in New Zealand commercial fisheries. This section provides examples of devolution of services and co-management, partnership and self-governance initiatives that have been adopted.

### Devolution of Registry Services: CFS/FishServe

Commercial Fisheries Services (CFS), which trades as “FishServe” and is one hundred per cent owned by SeaFIC, provides commercial fisheries registry and administrative services. Some services were devolved to SeaFIC under the ASDO provision of the Fisheries Act 1996,<sup>282</sup> and SeaFIC contracts with CFS to deliver them.<sup>283</sup> Other services are delivered pursuant to a contract between CFS and the Ministry. Devolved services include record keeping and administration of quota transactions, ACE transactions, clients, ACE balancing, Licensed Fish Receiver (LFR) licensing, fishing vessel registrations and caveats and mortgages.<sup>284</sup> The Ministry contracts with CFS to handle quota allocation, fishing permits, crown revenue management (cost recovery and deemed value payments), special approvals, foreign licensed access, high seas fishing permits, catch effort returns and fish farmer registry management.<sup>285</sup> For the devolved services, the ASDO steps into the shoes of the chief executive and is directly responsible to the Minister for delivering the services consistent with applicable standards and specifications.<sup>286</sup>

The Ministry previously delivered the above services and recovered its costs from industry. Industry criticised the services as overpriced, inefficient, inward focused and poor quality.<sup>287</sup> The Ministry, saddled with outdated registry systems and confronted with strict controls on Government expenditures, had strong incentives to devolve

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<sup>281</sup> See Yandle (2008b) at 136 (noting that, in a 2005 survey regarding trust between CSOs and other fisheries actors, SeaFIC received the highest trust score, followed by environmentalists, customary Māori interests, the Ministry, recreational fishers and the general public)

<sup>282</sup> Transfer Order (1 October 2001)

<sup>283</sup> Section 296C(5) of the Fisheries Act 1996 provides that an ASDO may perform transferred services itself or contract with others to perform them.

<sup>284</sup> *About FishServe* at Slide 5

<sup>285</sup> *Ibid.* Pursuant to Ministry regulations there are three sets of reporting requirements intended to capture the movement of fish from the fisher to first point of sale (referred to as a “product flow system”). When fish are caught, vessel operators must complete a Catch Effort Return that documents fish caught and landed. Catch and effort information is supposed to be recorded tow-by-tow and catch information is identified by latitude and longitude coordinates or by statistical areas. Fish may only be sold to licensed fish receivers, who must complete Licensed Fish Receiver Returns that document the dealer receiving the fish, the fisher and the fish (species, weight, etc). Once a month, a permit holder must fill out a Monthly Harvest Return stating all landings from his vessels by quota management area. *Quota Management System: Reporting.*

<sup>286</sup> Section 296O of the Fisheries Act 1996. The Act explicitly states that the chief executive must not perform or exercise, and is not responsible for performance or exercise of, any functions transferred to an ASDO. *Id.* s 296C(3). Failure of an ASDO to comply with standards, specifications or directions of the Minister could result in civil penalties. *Id.* s 296R.

<sup>287</sup> *About FishServe* at Slide 1-2

services.<sup>288</sup> CFS has reduced costs and, according to a review in 2008, there did not appear to be deterioration of the quality of services.<sup>289</sup> The 2008 review noted that CFS had incentives for innovation, efficiency and continuous improvement, given the direct link to the customer and the fact that its sole focus is on the registry services.<sup>290</sup>

Considerable resources went into developing the registry programme. The process, which took over five years, required the Ministry to create new standards and specifications to be met by the ASDO, run a competitive process for selection of the ASDO, provide resources for project governance and management, and restructure and reorganise itself to establish the Ministry's contract management capability and to prepare CFS for delivery of services.<sup>291</sup> In addition, in settlement of an unrelated claim, the Ministry gave industry NZ \$10 million, which went towards development, acquisition and implementation of a computer registry system.<sup>292</sup> The Ministry also transferred about 85-90 publicly employed staff to CFS.<sup>293</sup>

### **Co-Management, Partnership and Self-Governance: Rock Lobster**

Rock lobster CSOs have engaged in a range of science and management activities through contracts with the Ministry, collaboration with the Ministry and other service providers, mandatory levies under the Commodity Levies Act, voluntary actions and a national management group.

The rock lobster (crayfish) industry has nine regional organisations called CRAMACs, a term that is derived from crayfish (CRA) and "management area council."<sup>294</sup> CRAMACs are composed of quota owners, processors, exporters and fishers and are shareholders in a national organisation called the New Zealand Rock Lobster Industry Council (NZ RLIC).<sup>295</sup> NZ RLIC provides advocacy for and technical assistance to the CRAMACs and is funded primarily through statutory levies.<sup>296</sup> CRAMACs contribute levies in proportion to their TACC<sup>297</sup> and also voluntarily fund regional research programmes.<sup>298</sup>

In 1997, NZ RLIC became an accredited research provider.<sup>299</sup> It has successfully tendered for stock assessment contracts with the Ministry and undertakes them in collaboration with NIWA, other research service providers, and SeaFIC's science unit.<sup>300</sup> NZ RLIC also runs an industry logbook programme that supplements data from mandatory catch and effort reporting requirements. For CRA 2 (Bay of Plenty), CRA 5 (Marlborough/Kaikoura) and CRA 8 (Stewart Island/Fiordland),<sup>301</sup> fishers

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<sup>288</sup> *IIFET Conference Paper: Devolution of Fisheries Administrative Services in New Zealand*

<sup>289</sup> *About FishServe* at Slides 6-7. Shallard & Associates and Deloitte (2008) at 23-24.

<sup>290</sup> Shallard & Associates and Deloitte (2008) at 31-32.

<sup>291</sup> *Ibid.* at 28

<sup>292</sup> *Ibid.*

<sup>293</sup> Interviews

<sup>294</sup> *CRAMACs*

<sup>295</sup> *Ibid.*

<sup>296</sup> *About NZ RLIC*

<sup>297</sup> Yandle (2008) at 301

<sup>298</sup> *About NZ RLIC*

<sup>299</sup> *NRLMG 2010 Annual Report* at 17

<sup>300</sup> *Ibid.*

<sup>301</sup> The CRA 2 fishery extends from Waipu through the Hauraki Gulf and Bay of Plenty to East Cape.

record all rock lobsters caught in four designated pots every day; some CRA 2 fishers began using electronic logbooks in 2010.<sup>302</sup> The catch sampling programmes were designed per Ministry-agreed standards and specifications and are supervised by contracted technicians.<sup>303</sup> These logbook data are routinely used in the stock assessment process. Fishers in CRA 4 (Wairarapa), CRA 6 (Chatham Islands) and CRA 9 (Westland, Taranaki) also provide logbook data voluntarily.<sup>304</sup> In addition NZ RLIC coordinates and manages a New Zealand Rock Lobster Tag and Release Programme that collects information on recaptures of lobsters to be used in stock assessments.<sup>305</sup>

Some CRAMACs have adopted voluntary management measures. In 1993, the CRA 3 (Gisborne/East Coast) fishery worked with amateur and customary interests to develop a harvest strategy that included a three-month closure for all fishing, a decreased minimum size, increased enforcement and “shelving” of fifty per cent of the TACC.<sup>306</sup> In 2007 and 2008, there was ACE shelving in CRA 4.<sup>307</sup> “Shelving” refers to voluntary action by quota holders to set aside a portion of their ACE due to biological or other reasons.<sup>308</sup>

Since 1992, the National Rock Lobster Management Group (NRLMG), which is composed of the Ministry, representatives from the fishing sectors (commercial, customary and amateur) and environmental interests, has served as the primary source of advice to the Minister on the rock lobster fishery.<sup>309</sup> While NRLMG’s advice is not binding, the Ministry considers it to have a “good track record in providing robust advice on sustainability measures.”<sup>310</sup> Interviewees noted that decisions regarding TAC and sustainability measures routinely are made consistent with NRLMG advice.

The NRLMG is currently in a state of transition. In 2009, the Minister requested a review of the group’s role, function and membership.<sup>311</sup> Concerns have been raised regarding the group’s mandate, representation (particularly for *tangata whenua* and the amateur sector), accountability and ability to address inter-sector allocations and spatial issues.<sup>312</sup> The Ministry evaluated five different models of co-management<sup>313</sup>

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The CRA 5 fishery extends from the western side of the Marlborough Sounds across to Cape Jackson and then southwards to Banks Peninsula. The CRA 8 fishery extends from Long Point south to Stewart Island and the Snares, the islands and coastline of Foveaux Strait, and then northwards along the Fiordland coastline to Bruce Bay. Ibid. at 53, 59, 65

<sup>302</sup> Ibid. at 22, 18

<sup>303</sup> Ibid. at 18

<sup>304</sup> Ibid.

<sup>305</sup> *Research*

<sup>306</sup> Yandle (2008) at 298

<sup>307</sup> *Report from the Fisheries Assessment Plenary* (2011) at 138. The CRA 4 (Wairarapa) fishery extends from the Wairoa River on the east coast down the Hawkes Bay, Wairarapa and Wellington coasts and through Cook Strait and north to the Manawatu Rivers.

<sup>308</sup> *Managing ACE*

<sup>309</sup> *Review of the Rock Lobster Management Group* (2011) at 2

<sup>310</sup> Ibid.

<sup>311</sup> Ibid.

<sup>312</sup> Ibid. at 2-4, 11.

<sup>313</sup> The five models are instructive, consultative, cooperative, advisory and informative management. The traditional centralised government approach is at one end (instructive model) and delegated decision making to stakeholders is at the other end (informative management). Under the advisory model, stakeholders would provide advice directly to the Minister for approval. Ibid. at 10 and 19



and recommended that NRLMG's role be redefined as a cooperative-consultative one.<sup>314</sup> NRLMG would continue to be the primary advisor where rock lobster is the only species/fishery affected by a decision and would be an expert advisory group on wider issues.<sup>315</sup> Commercial members of the NRLMG do not view the consultative role as offering any advantages over standard government-management approaches.<sup>316</sup> Customary members supported use of the cooperative model with an eye towards self-management in the future while recreational members did not express a preference.<sup>317</sup>

### **Co-Management, Partnership and Self-Governance: Deepwater**

The Deepwater Group Limited represents a significant portion of quota in deepwater fisheries<sup>318</sup> and is a merger of the former Orange Roughy Management Company, Squid Management Company and Hoki Management Company.<sup>319</sup> Industry pays for virtually all deepwater research under cost recovery,<sup>320</sup> and quota owners have invested in additional research through direct purchase.<sup>321</sup> Interviewees noted that orange roughy quota holders took the first industry collective action in the early 1990s by paying for research for exploratory fisheries.<sup>322</sup> The Deepwater Group has continued taking an active role in scientific and management processes.

New Zealand's deepwater fisheries are managed collaboratively by the Ministry and the Deepwater Group Ltd. This collaboration has been formalised in three Memoranda of Understanding; the first signed in 2006 and the most recent in 2010.<sup>323</sup> The latest Memorandum of Understanding established a formal relationship between industry and the Ministry. Among other things it created a Deepwater Management Forum, which includes representatives from the Ministry and member companies of the Deepwater Group.<sup>324</sup> The Forum is tasked with setting the strategic direction for deepwater fisheries and is based upon a "partnership approach to fisheries management."<sup>325</sup> While there is collaboration in fisheries management, the Ministry still retains core responsibility for delegated statutory decision-making and functions,

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(adapted from Berkes 1994).

<sup>314</sup> Under cooperative management, the Ministry and stakeholders are partners in the decision making process and provide advice where there is consensus. Under the consultative model, there is consultation between stakeholders and the Ministry with the Ministry making recommendations to the Minister. Ibid.

<sup>315</sup> Ibid. at 3.

<sup>316</sup> Ibid. at 11.

<sup>317</sup> Ibid.

<sup>318</sup> Ninety-five per cent of hoki quota owners are represented by the Deepwater Group. *National Fisheries Plan for Deepwater and Middle-depth Fisheries: Part 1B Hoki Fisheries Plan* at 9. The Group also represents, among other interests, orange roughy quota owners. Approximately eighty per cent of orange roughy quota is owned by three companies. Ibid. at 8.

<sup>319</sup> Townsend (2010) at 306

<sup>320</sup> See Fisheries (Cost Recovery) Rules 2001 (SR 2001/229) at 12 (providing that industry bears cost of stock assessment research based on the percentage of the TACC/TAC). TACC is set after accounting for mortality from customary fishing, amateur fishing and other sources. There is little customary or amateur fishing in deepwater fisheries. *National Fisheries Plan for Deepwater and Middle-depth Fisheries: Part 1A* at 49

<sup>321</sup> Clement, Wells and Gallagher (2008) at 286

<sup>322</sup> Ibid. at 282, 286

<sup>323</sup> *DeepWater Group and Ministry of Fisheries Memorandum of Understanding* (2010) at 2

<sup>324</sup> Ibid. at 6-7

<sup>325</sup> Ibid. at 2, 6

developing standards for the fishery, statutory consultations with stakeholders and other interested parties (s 12 of the Fisheries Act 1996), enforcement and delivering Treaty of Waitangi commitments.<sup>326</sup>

On the research side, industry and the Ministry developed a “10 Year Deepwater Research Programme” which has the long-term goal of increasing the information available to manage deepwater fisheries in a manner that is efficient and cost-effective.<sup>327</sup> Instead of tendering annually for scientific work, the Ministry is specifying research ten years in advance with the aim of increasing certainty and reducing cost. To date contracts have only covered an initial four to five years. Interviewees noted that, while this approach generated some interest from outside New Zealand, distribution of contracted work largely reflected that which existed before the 10 Year Programme. The bulk of work will be delivered by NIWA. Other research will be provided by those closely associated with the fishing industry and there will be increased use of commercial fishing vessels as the platform for acoustic research.

There have been several self-governance initiatives in the deepwater fisheries. Quota owners have agreed to close areas to targeted hoki fishing to protect juvenile hoki (referred to as “hoki management areas”).<sup>328</sup> In 2001, hoki quota owners agreed to manage TACC according to percentage allocations for the western and eastern stocks.<sup>329</sup> These catch-spreading methods are actively monitored by the Ministry and adjusted as needed. While the measures are generally adhered to, some members have not fully complied with them.<sup>330</sup>

Another key industry initiative is Marine Stewardship Council (MSC) certification of the hoki fishery. The MSC is an international non-profit organisation that provides an “ecolabel” for fisheries that meet its sustainable fishing and seafood traceability standards.<sup>331</sup> In 2001, hoki was the first large whitefish fishery to achieve MSC certification. Environmental organisations opposed and criticised its recertification in 2007 due to concerns about potential stock collapse.<sup>332</sup>

### **Other Self-Governance Initiatives: Paua**

The Paua Industry Council Ltd (PICL) is an umbrella organisation for five regional PauaMACs whose members include fishing and non-fishing quota owners, ACE holders, permit holders, processors and exporters from seven management areas.<sup>333</sup> PauaMACs are shareholders in PICL which provides technical, administrative,

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<sup>326</sup> Ibid. at 5

<sup>327</sup> *10 Year Deepwater Research Programme*

<sup>328</sup> Ibid.

<sup>329</sup> *National Fisheries Plan for Deepwater and Middle-depth Fisheries: Part 1B Hoki Fisheries Plan* at 8. Between 2004 – 2007, 60% of the TACC was to be taken from the eastern stock and 40% from the western stock. As of October 2010, within a TACC of 120,000 tonnes, 50% is allocated to each stock. Ibid.

<sup>330</sup> Townsend (2010) at 306

<sup>331</sup> *What we do*

<sup>332</sup> *Hoki fishery doesn't deserve its “sustainability tick”*

<sup>333</sup> *About The Paua Industry Council*. The term PauaMAC is derived from paua and “management area council.”

research, management and other services to them.<sup>334</sup> Funding for the operational budgets of the PauaMACs and PICL comes through second tier levies per agreements between the PauaMACs and SeaFIC.<sup>335</sup>

The paua industry has voluntarily adopted management measures, including larger minimum sizes and ACE shelving. The current minimum legal size is 125 mm but it does not work throughout the country where paua may be larger or smaller when they reach maturity.<sup>336</sup> Industry voluntarily implemented larger minimum size measures in southern quota management areas in order to allow paua to spawn twice before being harvested.<sup>337</sup> Since 2006, PauaMAC 5 has voluntarily reduced catch by thirty per cent through ACE shelving.<sup>338</sup> In addition it subdivided a quota management area into sub-zones with harvest caps to spread catch across the fishery in proportion to stock abundance.<sup>339</sup> As another example, PauaMAC 4 agreed to reduce catch levels by shelving twenty per cent of the ACE for 2010/2011.<sup>340</sup>

To provide more fine-scale data collection, the paua industry invested in the development of electronic GPS data loggers for divers and boats. Seafood Innovations Ltd contributed fifty per cent funding to this project.<sup>341</sup> The diver units record the diver's fishing effort, i.e., time and location while a diver is on the surface and date, time, depth and temperature when the diver is under water. The boat units record the date, time and location and diver identification when a catch bag is landed.<sup>342</sup> PICL also has a re-seeding project under way in which juvenile paua are grown in hatcheries then "out-planted" onto the coast.<sup>343</sup> Trials are being run in several of quota management areas.

## Challenges to Industry Service Delivery

Whether a CSO or other entity can assume service delivery responsibilities depends to a large extent on "skill" and, for the organisation and the Ministry, "will."<sup>344</sup> Other things that affect the success of co-operative and self-governance initiatives are the availability of resources to support action long-term, the efficacy of existing legal tools to address collective action problems and other stakeholder interests.

Looking first at industry "will," an important ingredient for co-operative agreement is commonality of purpose, something that is easier to achieve with smaller numbers of quota owners.<sup>345</sup> As described above, PauaMACs have proceeded with several self-

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<sup>334</sup> Ibid.

<sup>335</sup> Ibid.

<sup>336</sup> *Managing our own Ship* at 5

<sup>337</sup> Ibid.

<sup>338</sup> *Annual Operating Plan 2010/2011*. PauaMac 5 at 4

<sup>339</sup> Ibid. at 5

<sup>340</sup> *Annual Operating Plan 2010/2011*. PauaMac 4 at 5.3

<sup>341</sup> *Logging On*

<sup>342</sup> Ibid.

<sup>343</sup> *Fisheries management tools. Reseeding*.

<sup>344</sup> The "Skill/Will" Matrix is used in employment settings to determine how best to manage an employee towards success. Skill refers to experience with a task, knowledge, training and natural talents. Will refers to the desire to achieve, incentives to do a task, security surrounding a job, confidence in abilities and feelings or attitudes about a task. *The Skill/Will Matrix*.

<sup>345</sup> Hersoug (2002) at 188 (citing Ostrom (1988) and noting that the relative success of quota owner

governance initiatives. They “have a small number of participants whose self-interests are well aligned and they recognize their joint self-interest.”<sup>346</sup> Inshore finfish fisheries have not had as much success with self-governance initiatives. A few large companies hold most of the quota, but the fisheries have a large geographic range, cover a large number of species and are fished using a variety of gears.<sup>347</sup> In addition there are active customary and amateur fishing sectors<sup>348</sup> and significant spatial conflicts between all the fishing sectors and other marine interests.<sup>349</sup>

While commercial fisheries have become more vertically-integrated and quotas have become highly concentrated, there is still a culture of “coopetition:” cooperation when there is a congruence of interests but otherwise a struggle for competitive advantage.<sup>350</sup> Interviewees noted that a crisis such as a stock sustainability concern can be a trigger for collective action. Otherwise, working collectively takes practise and CSOs need to develop a track record to show their members that collective action reaps benefits. There are significant transaction costs incurred in setting up CSOs, self-organising, and negotiating with the Ministry and other stakeholders.<sup>351</sup> The question is whether the benefits outweigh the costs and whether there are resources (financial, administrative, technical, etc) to put towards proposed actions and sustain them long-term. The Ministry’s incentives for exploring different service delivery models are included in the discussion of Crown roles and risks in the next Chapter.

Interviewees emphasised that fisheries initiatives, including examples in this Chapter, would never have occurred without “catalysts.” The catalysts were individuals within CSOs and the Ministry with strong leadership and problem-solving skills who could propel change within their organisations. Several interviewees stated that government restructures have resulted in loss of institutional knowledge (a negative or positive result depending on the issue). After the 2009 Ministry restructure, only a few people remained who had been involved in development and early implementation of the QMS.<sup>352</sup> CSOs and their members retain considerable institutional knowledge, but industry interviewees commented that they generally do not have the same management and policy expertise or whole of industry perspectives as their Ministry counterparts.

Collective action has its limitations, even for well-resourced CSOs. In some fisheries CSOs, quota owners, permit holders and others enter into contracts to bind themselves to agreed-upon measures. However, in the event of a breach, contracts only provide for “specific performance” or damages, and it can be difficult to detect violations and

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associations seems to be due to economic resources (i.e., high value fisheries), qualified leadership, small numbers, limited space and commonality of purpose)

<sup>346</sup> Townsend (2010) at 307

<sup>347</sup> *Draft National Fisheries Plan for Inshore Finfish* (July 2011) at 40 (noting that fleet includes independent fishers contracted to large quota owning companies and also small owner-operators and that fishers have homeports all around the New Zealand coasts)

<sup>348</sup> *Ibid.* at 38-40

<sup>349</sup> Yandle (2008b) at 137

<sup>350</sup> *Coopetition*

<sup>351</sup> Townsend (2010) at 309 and 311-312 (commenting that quota owners have incentives to solve pool fisheries externalities but not downstream externalities, such as protected species issues; noting that it is not clear with whom they would negotiate)

<sup>352</sup> Bess (2012) at 555-556

prove actual damages.<sup>353</sup> Free-riders are also a problem. To address this, a fisheries expert reviewing the QMS in 1991 recommended that Government authorise quota holder associations to make rules, undertake projects and levy assessments on themselves subject to a high voting threshold based on quota holdings.<sup>354</sup> SeaFIC elaborated on this concept in its “Managing our own Ship” (MOOS) framework (August 2011). Under MOOS, Government would retain existing authorities, including setting the TAC and TACC, but industry could develop fine-scale measures that would be legally binding on fishery participants. To protect minority interests, MOOS provided for a high voting threshold: quota owners of 75% of quota shares for each affected stock would have to ratify proposed measures.<sup>355</sup>

Although some sectors of the industry continue to promote MOOS, recent restructuring of SeaFIC has left a vacuum in terms of coordinated industry advocacy for it. Even with strong industry support, this proposal and other similar proposals relating to increased self-governance are likely to trigger concern because they would grant “quota owners the power to impose non-unanimous decisions and to enforce regulations on each other and also on [other] users of their stocks.”<sup>356</sup> This wariness is likely to be shared by Government, smaller quota owners and other stakeholders. As noted earlier, in many fisheries, quota is highly concentrated in a few hands. Some CSOs have found ways to give “small guys a say” by establishing different voting rules for financial, operational and other decisions.<sup>357</sup> Beyond small quota holders, other fishery stakeholders have expressed concerns with industry self-governance initiatives. Amateur fishing and environmental organisations, for example, have opposed ACE shelving in rock lobster fisheries, asserting that it circumvents the statutory process for setting TAC, cannot be enforced and allows “catching rights to exist for fish that do not exist.”<sup>358</sup>

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<sup>353</sup> Townsend (2010) at 314

<sup>354</sup> Pearse at Chapter 5 (Managing Fisheries: The Role of Resource Users)

<sup>355</sup> *Managing our own Ship* at 6

<sup>356</sup> Townsend (2010) at 318

<sup>357</sup> Interviews

<sup>358</sup> *Submission in response to the review of management measures for CRA (Gisborne), CRA4 (Wellington/Hawke Bay) and CRA7 (Otago) and CRA8 (Southland) rock lobster fisheries for 1 April 2010* at 11-12. *SUBMISSION ON: the review of management measures CRA (Gisborne), CRA4 (Wellington/Hawke Bay) and CRA7 (Otago) and CRA8 (Southland) rock lobster fisheries for 1 April 2010* at 6.



## 4 ROLE OF GOVERNMENT AND RISK ASSESSMENT

As described in the previous chapter, there are a number of potential service delivery providers in the commercial fisheries sector. The question is how to decide amongst them. For proponents of devolution of management, the answer is: “Within the limits of official conservation prescriptions, those who hold rights to fish should be encouraged to manage resources and their fishing operations, taking account of all the costs and benefits of their actions.”<sup>359</sup> Others disagree with devolving more responsibility to CSOs. There is a perception that the QMS and cost recovery created a “user pays, user says” mindset,<sup>360</sup> which affords industry greater influence and undermines the interests of Māori customary and amateur fishers and environmental groups.<sup>361</sup> Proposals have been made since 1991 to extend the rights-based approach beyond the commercial sector and clarify the rights and responsibilities of all stakeholders.<sup>362</sup> Most recently this recommendation was included in *Fisheries 2030*, which sets forth the long-term strategic direction and goal for the New Zealand fisheries sector.<sup>363</sup> An allocation scheme for “shared fisheries” is controversial and has yet to be developed.

So what is the “ever-fixed mark...the star to every wandering bark” that guides the devolution debate?<sup>364</sup> There is none. New Zealand’s unwritten “constitution” does not provide fixed compass points on what responsibilities government should retain or others could assume.<sup>365</sup> One might try to derive general guidance from constitutional and general principles underlying New Zealand’s Westminster-style government, e.g., democracy, rule of law, separation of powers, ministerial responsibility,<sup>366</sup> equity, transparency and accountability. But the decision is basically a policy call.

In making that call, the Government has sometimes used a risk assessment approach to evaluate service delivery models.<sup>367</sup> The most comprehensive example of this occurred when registry services were devolved (see Chapter 3 discussion of FishServe). Prior to and after adoption of that provision, Cabinet, Parliament and the Ministry scrutinised the question of the role of government and risks associated with devolution of services.<sup>368</sup> The same approach, although not always invoked explicitly,

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<sup>359</sup> Pearse (1991) at Chapter 5 (Managing Fisheries: The Role of Resource Users)

<sup>360</sup> Wallace and Weeber (2006) at 3.5, 3.11

<sup>361</sup> Ibid. at 3.5. Hersoug (2002) at 189.

<sup>362</sup> Pearse (1991) at Chapter 3 (Recreational Fisheries) and *Fisheries 2030* (2009) at 6, 8 (referring to rights and responsibilities of all stakeholders and the need for a “shared fisheries” allocation strategy)

<sup>363</sup> *Fisheries 2030* (2009) at 4

<sup>364</sup> Shakespeare Sonnet 116

<sup>365</sup> New Zealand does not have a written constitution, but the principles under which it is constituted and governed (i.e. its “constitution”) are derived from legislation, parliamentary law and procedures, Cabinet procedures, court judgments, the Treaty of Waitangi, international law, instruments of the royal prerogative, and broader constitutional principles, doctrines and conventions. Palmer and Palmer (2004) at 5. Key legislative enactments include the Treaty of Waitangi Act 1975, Official Information Act 1982, Constitution Act 1986, State Sector Act 1988 and Public Finance Act 1989. Ibid.

<sup>366</sup> Ibid.

<sup>367</sup> Bruce Shallard & Associates and Deloitte (2008) at 3, 6-12

<sup>368</sup> Cabinet agreed to devolution subject to the Crown’s ability to manage statutory risks and risks under its stewardship role for New Zealand fisheries, establish appropriate specifications and an effective monitoring and auditing regime, and manage any conflicts of interest. Ibid. at 7. When evaluating which services to devolve under the ASDO provision of the Fisheries Act 1996, the Ministry

continues to inform decisions about service delivery models. This Chapter describes the relevant roles and risks taken into consideration and examines two controversial areas for service delivery – fisheries research and observer services.

## Core Role of Government

Interviewees generally agreed that core Crown roles include criminal enforcement powers (arrest, search, seizure, prosecution and imposition of criminal penalties), delivering on Treaty of Waitangi commitments, setting standards and specifications for services, and monitoring and auditing performance and delivery of services. Other functions are subject to debate and different interpretations. The following list compiles interviewees' thoughts, in no particular order, on the roles of government. Not all interviewees were in agreement with all the items on this list.

- Criminal enforcement – coercive police powers, including imposition of criminal penalties and prosecution services<sup>369</sup>
- Setting governmental standards<sup>370</sup> and specifications for services
- Monitoring and auditing the delivery of services<sup>371</sup>
- Delivering on Treaty of Waitangi commitments<sup>372</sup>
- Providing statutory advice (policy and operational) to the Minister<sup>373</sup>
- Establishing policy and developing legal frameworks
- Meeting policy and legal goals
- Seeking cost effective delivery of services taking into consideration legal, financial and other factors<sup>374</sup>
- Prioritising use of Ministry resources and services<sup>375</sup>

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considered whether a service was a core component of the Government's stewardship role; establishes fisheries management policy; establishes a regulatory framework; or creates or allocates access rights. Ibid. at 12. It also considered whether the Crown can be assured that information required for policy development, rule setting, monitoring the effectiveness of policy settings, compliance with rules, service delivery and enforcement can be adequately managed and provided to the Ministry. Ibid.

<sup>369</sup> Pearse (1991) at Chapter 5 (Government Responsibilities) (noting that a strong Government enforcement role is important to the integrity of the QMS and for the protection of national interests within the EEZ). See also *DeepWater Group and Ministry of Fisheries Memorandum of Understanding* (2010) at 5.

<sup>370</sup> Pearse (1991) at Chapter 5 (Specifying Conservation Standards: The Role of Government) (stating that Government's role is to protect broader public interests in fishery resources through conservation prescriptions based on "clearly defined objectives and measurable standards of performance, with appropriate provisions for information gathering, monitoring, quality controls and auditing).

<sup>371</sup> Ibid. at Chapter 5 (Specifying Conservation Standards: The Role of Government and Government Responsibilities)

<sup>372</sup> Section 5(b) of the Fisheries Act 1996 (noting that all persons exercising or performing functions, duties or powers conferred or imposed by or under it shall act in a manner consistent with the provisions of the Treaty of Waitangi (Fisheries Claims) Settlement Act of 1992). See also *Our Strategy 2030: Growing and protecting New Zealand* (2011) at 1, 10

<sup>373</sup> Pearse (1991) at Chapter 5 (Government Responsibilities). *DeepWater Group and Ministry of Fisheries Memorandum of Understanding* (2010) at 5.

<sup>374</sup> Bruce Shallard & Associates and Deloitte (2008) at 7-8

<sup>375</sup> *DeepWater Group and Ministry of Fisheries Memorandum of Understanding* (2010) at 5



- Good of “New Zealand Inc”
  - Representing the interests of all New Zealanders
  - Seeking growth opportunities within and beyond particular sectors
- International obligations as a sovereign responsibility of the Crown<sup>376</sup>
- Stewardship of common resources<sup>377</sup>
- Governance: design, implementation and enforcement of institutions and rules
- Institutional knowledge<sup>378</sup>
- Stakeholder engagement – liaising and dispute resolution<sup>379</sup>
- Fisheries-specific roles
  - Setting fishery management standards and specifications for services
  - Setting Total Allowable Catch and Total Allowable Commercial Catch based on best scientific information available
  - Cost recovery<sup>380</sup>
  - Establishing sustainability measures
  - Permitting
  - Participating in scientific and peer review processes
  - Engaging in fisheries marketing and market access issues

In general, industry does not dispute government’s interest in looking after the “Good of New Zealand Inc.” However, if other fishery or ocean uses adversely impact quota rights, industry asserts that government must provide compensation. There is no express obligation for the Crown to provide such compensation,<sup>381</sup> but there is a statutory process for considering undue adverse effects on fishing of new aquaculture applications.<sup>382</sup> For many of the other areas noted above, disagreement about the role of government boils down to a governance and management distinction. The Crown has domestic and international obligations but arguably can fulfil these with greater or lesser engagement in day-to-day management.<sup>383</sup> Industry believes that, with the right tools, it can implement management measures faster and at a finer scale than Government can do or would want to do.<sup>384</sup> Other stakeholders, however, have raised

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<sup>376</sup> Section 5(a) of the Fisheries Act 1996 (noting that all persons exercising or performing functions, duties or powers conferred or imposed by or under it shall act in a manner consistent with New Zealand’s international obligations relating to fishing)

<sup>377</sup> See note 370

<sup>378</sup> Pearse (1991) at Chapter 5 (Government Responsibilities) (stating that Government responsibilities include “ensuring continuity and consistency in public administration over time, and continuing communication with resource users and interest groups”)

<sup>379</sup> Ibid.

<sup>380</sup> *DeepWater Group and Ministry of Fisheries Memorandum of Understanding* (2010) at 5

<sup>381</sup> See e.g. Bess and Rallapudi (2007) at 727 (noting that compensation is not a relevant consideration of Ministerial decisions on establishing marine reserves and customary fishing areas)

<sup>382</sup> Part 9A of the Fisheries Act 1996

<sup>383</sup> See McClurg and Arbuckle (2009) at 88 (distinguishing between governance and fisheries management roles)

<sup>384</sup> See *Managing our own Ship* at 5 (describing industry voluntary action to use larger minimum legal

concerns regarding the transparency of decision making processes under industry initiatives, as illustrated by the discussion on ACE shelving in the last chapter.

## **Benefits and Risks of Service Delivery Models**

Through the major legislative and public sector changes described in prior chapters, New Zealand has taken significant steps to address concerns about real or perceived inefficiencies in fisheries regulation and management. In addition, the Ministry continuously reviews services that it provides to find ways to minimise costs to industry.<sup>385</sup> The cost recovery consultation process ensures that there is annual scrutiny of and an opportunity for debate and dispute over proposed services and allocation of costs. Are there benefits to be gained from changing to new service delivery models or reverting to older ones? Do the benefits outweigh the risks? Interviewees identified the following factors, in no particular order, that should be taken into consideration when assessing the benefits and risks of different models:

- Interference with core Crown roles (see list above)
- Economic efficiency for industry, government and other stakeholders
- Streamlined processes and increased convenience
- Value for money
- Availability of buyer and seller of services
- Ability to deliver quality services consistent with statutory and other requirements, standards and specifications
  - Fiscal and human resources, including expertise
  - Capacity and maturity of organisation
  - Longevity - ability to maintain services over long-term
- Transaction costs of public versus private provision of services: administrative and other management costs of transferring services, implementation and long-term maintenance costs, etc
- Government ability to establish appropriate standards and specifications and effective monitoring and audit regime
- Government ability to provide contingencies in case of delivery failure
- Incentives of service provider to maximise social values versus private ones
- Complexity of issues, range of stakeholders, overlay of different legal regimes
- International Reputation of New Zealand<sup>386</sup>
- “Seafood Brand New Zealand”<sup>387</sup>

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sizes in paua fisheries)

<sup>385</sup> See e.g. *Observer Services Strategy Review* (2011) at i and MartinJenkins (2011) at 1

<sup>386</sup> See *Report of the Ministerial Inquiry into the use and operation of Foreign Charter Vessels* (2012) at 27-31 (discussing risks to New Zealand’s international reputation and the seafood industry’s ‘brand’ as a result of allegations concerning activities of certain foreign charter vessels).

<sup>387</sup> Ibid.

- Accountability (legal and political)
- Transparency in decision making, including access to information
- Public perception: credibility and trust
- Conflicts of interest
- Bias
- Independence
- Integrity
- Fairness and equity

Reducing industry costs and improving efficiency and effectiveness of services are often highlighted as reasons for considering different models. Control is another benefit, although interviewees did not explicitly mention it as such. As an example, industry interviewees consider that responsibility for issuing fishing permits should rest with industry. The argument is that ITQ holders have valuable rights and, in order to protect them, they should have control over those who can engage in commercial fishing activities. CSOs may be willing to support a service delivery approach with limited short-term efficiency and cost reduction benefits, if it enhances control over fishery resources, fishing activities and scientific and management processes.

## **Service Delivery Debate**

The fact that the QMS is recognised internationally as one of the best fisheries management systems in the world provides access to high-value markets.<sup>388</sup> Two services that are critical to the integrity of the QMS – fisheries research and observers – are areas in which there is significant and continuous Crown-industry engagement. As described in this section, for each of these services, public perception, integrity of data, conflicts of interest, and monitoring and auditing of services are particular risk concerns.

### **Fisheries Research**

Fisheries research is critical to the QMS, but there are ongoing debates on the funding and delivery of these services. To improve the economic performance of the seafood sector, the Ministry and industry undertook several initiatives including a Research Services Strategy Review that was completed in February 2010.<sup>389</sup> An external review of industry direct purchase of research was completed in April 2011.<sup>390</sup>

Research funding has gradually eroded over time so that, by 2008-2009, it had been reduced, in real terms, down to 53% of funding levels in 1991-1992 (\$22 million).<sup>391</sup> During that period, the number of species in the QMS increased more than threefold and the effects of fishing on marine mammals, seabird bycatch and seabed impacts

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<sup>388</sup> Ibid. at 53

<sup>389</sup> *Fisheries Research Services Strategy Review* (2010) at iv

<sup>390</sup> MartinJenkins (2011)

<sup>391</sup> P. Mace, MPI, pers. comm.

and international research obligations became new research needs.<sup>392</sup> Because research is cost-recovered from industry, high-value, high-volume or high-risk stocks are often prioritised. As a stock declines, there can be a pronounced divergence in incentives. From a scientific and management perspective, there is a greater need for research for a stock that has potentially declined to low levels, but industry may be reluctant to fund this given the “double whammy” of paying for the research and also facing a probable TACC reduction.

Interviewees commented that basic fish and ecosystem research are not seen as “applied” enough for cost recovery purposes, as any benefits from research are speculative. However, this type of research also tends to fall through the cracks for public good funding, as it is perceived by other research funders as a commercial fisheries matter. The previous competitive, contestable research model did not improve the situation, as a market for fisheries research never developed as expected (see NIWA discussion in Chapter 3).

There is significant use of commercial vessels for research already,<sup>393</sup> but industry asserts that costs can be reduced further through increased use of commercial platforms and direct purchase of research. Both approaches raise public perception concerns regarding the integrity of data and conflicts of interest.<sup>394</sup> With regard to commercial vessels, the challenge is obtaining high quality data collected under the same conditions over time consistent with a scientific sampling design.<sup>395</sup> Getting incentives aligned in this way is particularly difficult when research is conducted concurrently with commercial fishing.<sup>396</sup> According to the Research Services Strategy Review, joint research-commercial fishing proposals envision larger cost savings than proposals where fishing vessels go on dedicated research trips.<sup>397</sup> If the Ministry has to pay lost “opportunity costs” for a commercial vessel to forego fishing to conduct research, there would be even less cost savings.

Exploring different service delivery models for scientific research is challenging because it is difficult to develop standards and specifications for research services and to monitor them. In April 2011, the Ministry completed work on a Research and Science Information Standard for New Zealand Fisheries, which sets forth best practices for the delivery and quality assurance of research and science information intended or likely to be used for fisheries management.<sup>398</sup> It applies to research

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<sup>392</sup> Ibid. See also *Fisheries Research Services Strategy Review* (2010) at 39 (describing new demands for fisheries information and fact that funding for only 60-70% of high priority projects has occurred)

<sup>393</sup> *Fisheries Research Services Strategy Review* (2010) at 74

<sup>394</sup> Environmental organisations, for example, have expressed concern about industry-provided research and incentives for misreporting. Ibid. at 37.

<sup>395</sup> Ibid. at 75-76

<sup>396</sup> Ibid. (noting that it can be difficult to design a valid sample design around fishing activity and fishers’ incentive is to catch fish efficiently not to be precise in data collection)

<sup>397</sup> Ibid. at 75

<sup>398</sup> The Research and Science Information Standard provides that responsibilities of the Ministry, research purchasers and research providers include data collection and analysis, technical protocols and peer review. The Standard also outlines peer review processes; ranking of scientific information; data management and documentation of research. The Ministry’s responsibilities include implementing processes and procedures to ensure that the Standard is adhered to in planning and purchasing of research, evaluation of project proposals, ensuring Ministry-contracted research is cost effective, ensuring appropriate peer review and quality assurance, and other aspects related to ensuring integrity

purchasers, which may include the Ministry, industry or other stakeholders, and research providers.<sup>399</sup>

Even prior to the development of the Research Standard, several industry groups proceeded with direct purchase of research (see Chapter 3). Whether expanded use of this model would be beneficial is unclear. A 2011 review team stated that it was “not convinced that the benefits of direct purchase would be as significant as industry stakeholders appear to believe”<sup>400</sup> and noted that any benefits would have to be carefully weighed against risks. Those risks include bias, compromise of the integrity and quality of the science, and the concern that “commercial interests could dominate at the expense of environmental, social and other interests”<sup>401</sup> Existing “institutional arrangements” (i.e. Crown research and scientific processes) were developed “so as to enable the multiplicity of interests and perspectives to bear upon the management of the fisheries resources.”<sup>402</sup> The question is whether direct purchase and other industry research models can be designed to counter the above risk concerns.

For any industry research initiatives, a critical element is close coordination between industry, the Ministry, NIWA scientists, other research providers and other experts.<sup>403</sup> This ensures that the relevant users of the research agree with the design and implementation of the research plan and have confidence in the quality control and assurance to be applied. Fisheries Assessment Working Groups and Aquatic Environment Working Groups, chaired by Ministry scientists, play a crucial role in ensuring that the best available scientific information is available for management decisions. The Working Groups review fisheries research, regardless of who provided it, through a rigorous, public process and present their scientific input to the Minister and stakeholders through annual Plenary Reports.<sup>404</sup>

## Observers

Observers are an important source of fishery-dependent information. The Ministry’s Observer Services Unit currently runs the observer programme, providing services to client specifications and employing on fixed-term agreements approximately sixty-five individuals to provide them. The Ministry provides a three-week, multi-disciplinary training programme using trainers from inside and outside government. The programme is perceived as having a high degree of independence, as observers are not profit motivated, have no financial linkages to the fishing industry, and the incentives for bias or deliberate misreporting are low.<sup>405</sup> An external review concluded that the current programme works well and provides high quality services.<sup>406</sup> Costs of the programme are fully cost recovered, and industry considers

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of information provided to decision-makers. *Research and Science Information Standard* (2011) at 7.

<sup>399</sup> Ibid. at 8

<sup>400</sup> MartinJenkins (2011) at 1, 16

<sup>401</sup> Ibid. at 2, 18

<sup>402</sup> Ibid. at 17

<sup>403</sup> *Fisheries Research Services Strategy Review* (2010) at 38

<sup>404</sup> *Report from the Fisheries Assessment Plenary* (November 2011) at 16-19 (setting forth terms of reference for working groups) and *Aquatic Environment and Biodiversity Annual Review* (2011) at 181-185

<sup>405</sup> *Observer Services Strategy Review* (February 2011) at 28

<sup>406</sup> Ibid. (referring to Price Waterhouse Coopers review)

the costs to be too high.<sup>407</sup>

To reduce costs, industry proposed to purchase observer services directly. Several interviewees mentioned that this can result in “fox-guarding-the-henhouse” concerns, i.e. conflict of interest and independence/trust considerations. The Ministry is “ultimately accountable for the provision of quality, evidence-based fisheries management.”<sup>408</sup> If the checks and balances needed to ensure data quality and independent audits are too high, there will be no cost efficiency gains from alternative service delivery models regardless of who provides them.

In 2009, a joint Ministry-industry Observer Services Strategy Review was initiated to identify opportunities to reduce fishing industry costs.<sup>409</sup> In response to Review recommendations, the Ministry made changes to improve cost efficiency and internal processes and completed a Standards Manual that sets out best practices for managing and delivering observer services.<sup>410</sup> The Review also explored alternative service delivery approaches and identified a Shared Purchase and Shared Delivery model as its preferred alternative.<sup>411</sup> The Ministry is in the process of implementing Review recommendations regarding this model.

In considering service delivery models, the Review stated that the principles of any observer programme are independence/trust (credible monitoring and auditing of fisheries), integrity (accountability and transparency for all stakeholders), international commitments, value (service must represent value for money) and quality (high quality based on clear and agreed standards and specifications).<sup>412</sup> Interestingly, the Ministerial Review of Foreign Charter Vessels touched upon some of these areas and cautioned: “While conscious of the potential for a carefully designed outsourcing arrangement to provide better value for money, we stress the importance of adequate safeguards against possible conflicts of interest on the part of the contracting firms and of ensuring that the programme remains squarely under [the Ministry’s] control.”<sup>413</sup> Having an “independent” service provider may mitigate conflict of interest, trust and integrity concerns, but there are varied opinions on what “independent” means. Some industry interviewees suggested a CFS/FishServe model. Others noted that observer behaviour can be influenced by who is training, deploying, paying, and debriefing them, thus a Crown-owned company, joint company or

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<sup>407</sup> Ibid. at 5 (about 85% of costs are recovered via levies and the rest from transaction fees, which are direct fees that a vessel operator pays for observer services) and 30

<sup>408</sup> Ibid. at 28

<sup>409</sup> Ibid. at 2. Other objectives of the Review were to improve efficiency of the Ministry’s delivery of observer services, assist the economic development of the fishing industry and improve the contribution of observers to fisheries management. Ibid. Four workstreams were conducted under the Review: cost efficiency, process improvements, standards and specifications for observer services and observer-collected data, and alternative models for observer services. Ibid. at 2-4.

<sup>410</sup> Ibid. at 6-11, 12-14 (explaining that Standards Manual is to be used by Ministry observers and any outsourced observer services in future and it includes standards regarding governance and management, activities of observers, role of observer providers and collection and management of data)

<sup>411</sup> Ibid. at 42, 55. Under this model, the purchasers (the Ministry, Department of Conservation and industry) would provide timely and clear requirements for observer services and decide what needs to be procured. A small Observer Coordination Group would be responsible for procurement and performance auditing of delivered services, and there would be a Board with oversight over that Group. Members of the Board could include representatives from the purchasers. Ibid. at 55.

<sup>412</sup> Ibid. at ii, 16

<sup>413</sup> *Report of the Ministerial Inquiry into the use and operation of Foreign Charter Vessels* at 82-82

incorporated society would be a better option.

Quality and value are highly debatable areas. Industry interviewees asserted that just because the Government is running the observer programme does not mean it is run well. Industry perceives the current programme as lacking transparency and accountability, and some industry representatives criticise the quality of the data collected.<sup>414</sup> The Review recognised the different views on the current programme but stated that “it is difficult to logically argue that a third party provider or industry observer will be any better using the same standards (and potentially the same people) simply by virtue of outsourcing.”<sup>415</sup>

With regard to cost efficiencies, an external review commented that, while there are benefits to be gained from an outsourced model, the Ministry could achieve many of these results by addressing inefficiencies in the current programme.<sup>416</sup> The review considered that the greatest risk for an outsourced model is that it “does not address identified problems and realises minimal benefits while incurring inherent change management costs.”<sup>417</sup> The Ministry has worked assiduously to develop clear and transparent cost models that demonstrate why and where costs fall. Whether the benefits of an outsourced model outweigh its risks and costs remains to be seen.

Several interviewees pointed to observer programmes in the United States as examples of how outsourcing can work. However, the US approach, described below, is based on a considerable degree of government engagement, thus it may not be palatable from a devolution perspective.

Regional offices of the National Marine Fisheries Service (NMFS) generally work with private contracting companies to recruit and deploy observers.<sup>418</sup> To ensure impartiality, quality of data, mitigation of biases and conflicts of interest and the safety and well-being of observers, NMFS trains all new observers and contractors in species identification, sampling methods, safety and other areas.<sup>419</sup> After trips are completed, NMFS debriefs observers and quality checks the data before they are entered in the database and made available to agency biologists.<sup>420</sup> Sampling requirements are set forth in observer manuals that NMFS developed.<sup>421</sup>

The North Pacific groundfish fishery, Atlantic sea scallop fishery and Pacific Coast groundfish trawl rationalization fishery are examples of where industry contracts directly with service providers. Because it is not party to the contracts, NMFS uses regulations, promulgated through notice and comment rulemaking processes, to impose requirements on observers, service providers and fishing vessels. In addition,

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<sup>414</sup> *Observer Services Strategy Review* (February 2011) at 30

<sup>415</sup> *Ibid.* at 28

<sup>416</sup> *Ibid.* at 21-22 (noting major benefits as including a collaborative model, improved credibility with industry, improved buy-in from industry, improved assessment of cost from cost recovery purpose, variability of costs is understood and the Ministry is able to forecast actual cost of programme, and management can effectively make strategic decisions about the efficacy of programme)

<sup>417</sup> *Ibid.* at 22

<sup>418</sup> *National Observer Program Annual Report - FY 2011* (April 2012) at 1

<sup>419</sup> *Ibid.* at 2

<sup>420</sup> *Ibid.*

<sup>421</sup> See *National Observer Program – Observer Training Resources* (providing sampling and safety training materials for each region)

in the North Pacific groundfish fishery, NMFS has a certification process (referred to as a “permit”) that provides a way for sanctioning or removing observers or providers who fail to fulfil their responsibilities. In other regions NMFS approves observer providers if they meet certain standards.

Funding observer programmes at sufficient levels is an ongoing challenge. The Magnuson-Stevens Act requires all Fishery Management Plans to include standardised bycatch reporting methodology,<sup>422</sup> and for many fisheries, observer coverage is a critical part of that reporting. In FY 2011, total funding for federal observer programmes was approximately US \$70 million, with the industry portion for certain fisheries at \$18.6 million (approximately \$16 million was from the North Pacific groundfish fishery).<sup>423</sup>

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<sup>422</sup> 16 U.S.C. 1853(a)(11)

<sup>423</sup> *National Observer Program Annual Report - FY 2011* (April 2012) at 4-5 (providing observer budget line items and industry funding for North Pacific groundfish fisheries, West Coast groundfish trawl rationalisation programme, Atlantic sea scallop fisheries and other fisheries) and 12



## CONCLUSION

Benjamin Franklin's call – “Let us then up and be...doing to the purpose; so by diligence shall we do more with less perplexity” – captures key aspects of the devolution debate in New Zealand fisheries management. At the outset is the question of who the “us” is who should be doing fisheries management. There are strongly held and differing views on this issue. When the QMS was established, the “us” was Government and ITQ holders. The vision was that risks, costs and responsibilities would rest with the latter, and the Crown would retain the role of developing law and policy, issuing rules and enforcing them, developing standards and specifications for services and monitoring and auditing the delivery of services.

However, New Zealand's fishery management is not just about the QMS. The QMS exists within a larger regulatory framework whose stated purpose is to “provide for the utilisation of fisheries resources while ensuring sustainability.”<sup>424</sup> “Utilisation” includes non-commercial values: the social and cultural well-being of people.<sup>425</sup> There are significantly more people today than in 1986 who want to be involved in fisheries scientific and management processes, and they have very different reasons for wanting to do so. In addition, fisheries management is only one aspect of a larger and ongoing discourse on ocean use and governance.<sup>426</sup> As one commentator noted, “it is reasonable to suggest that commercial interests in the fisheries sector do not necessarily align with the interests of New Zealand as a whole.”<sup>427</sup> Within the fisheries space, interests of commercial, amateur and customary sectors and environmental groups do not align in many cases.<sup>428</sup> Thus, the issue of who is doing fisheries services is a controversial one. The fact that quota has become highly concentrated, with small numbers of owners, probably aggravates these concerns.

From the 1970s through the early 2000s, New Zealand made dramatic and frequent changes in fisheries management policies and legislation and government organisation. Most notably, New Zealand shifted from input controls to ITQs for most commercially-fished species, grappled with Māori Treaty claims that almost derailed the QMS,<sup>429</sup> and struggled with difficult QMS implementation issues. On the management side, registry services were devolved out of the Ministry to industry,<sup>430</sup> and CSOs have, with varying degrees of success, taken on some research and self-governance initiatives. Cost recovery consultations played a role in these changes, because they provided transparency in Crown services and costs and a way for CSOs

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<sup>424</sup> Section 8(1) of the Fisheries Act 1996

<sup>425</sup> Id. s 8(2)

<sup>426</sup> Peart (2005) at 25, 27 (noting challenges for ocean governance: large, interrelated and dynamic ecosystems, fragmented jurisdiction with different government bodies and legislation, multiple competing uses, lack of established property rights regime, rapid development of new uses and lack of scientific information upon which to make decisions regarding ocean ecosystems)

<sup>427</sup> MartinJenkins at 17

<sup>428</sup> Wallace and Weeber (2006) at 3.5, 3.11

<sup>429</sup> Hersoug (2002) at 68-72

<sup>430</sup> See Service Delivery Examples – Devolution of Registry Services in Chapter 3 (explaining that Ministry contracts with an industry-owned company to perform certain administrative functions and devolved or transferred to industry the responsibility for record keeping and administration of quota transactions, ACE transactions, clients, ACE balancing, LFR licensing, fishing vessel registrations and caveats and mortgages)

to debate and dispute proposed services and costs.

CSOs and the Ministry will likely continue their “more with less” dialogue over Crown services and costs. New Zealand is a small country with a small fishery in global terms, and cost recovery is the chosen means of funding services for commercial fisheries. In the absence of increased government or industry funding, the only way to do more is to maximise available expertise and resources and find innovative ways to deliver services. However, it is not clear that further, significant savings and efficiencies will be found. There are considerable risks associated with different service delivery models, thus it is important to ascertain that actual benefits will result from a proposed approach and that the benefits outweigh the risks.

As discussed in Chapters 3 and 4, when exploring ways to improve service delivery, there are key questions that need to be answered including, in no particular order:

- What are the Government’s ecological, economic, social and other objectives for fisheries?
- What institutional knowledge or in-house expertise does the Government need to retain? How would use of a model affect these interests?
- Would a proposed service delivery model interfere with the above Government priorities and interests?
- Will a proposed model actually result in cost reductions, taking into account all costs associated with moving to and sustaining the model?
- How will a model affect the quality of services? How far can costs be reduced before they start to impact quality of services?
- Are improvements in cost efficiencies and quality of services significant enough to warrant the time and resources (and potential legislative and regulatory amendments) needed to change to the new model?
- How significant are the risks (e.g. interference with core Crown roles, public perception, independence, trust, integrity) associated with a proposed service delivery model?
- Will a model raise concerns for customary and amateur fishing sectors, environmental organisations and other fisheries and ocean users? How will the model affect their ability to be informed about and have input into scientific and management processes?
- Can the Government adequately address the risks of a model and stakeholders’ concerns?
  - Will it be feasible for the Government to provide clear specification of services and robust performance standards?
  - How will the Government ensure that there is independence between those delivering services and those specifying services, setting performance standards, purchasing services and monitoring delivery of services?
  - Do the benefits of a model outweigh the costs of the above “checks and balances”?

While New Zealand and the United States have taken very different approaches in terms of the delivery of fisheries and conservation services, the above list is relevant to both countries. Regardless of who is providing the services, transparency in the specification and costs of services and clear performance standards will help facilitate improvements in service delivery.

Beyond alternative service delivery models, it may be worth reviewing existing legal frameworks to see how greater clarity could be brought to management processes. As described in Chapter 2, New Zealand has focused on economic efficiency, at least with regard to the QMS, whereas fishery management plans in the United States are developed based on a range of environmental, social and economic considerations. New Zealand's Fisheries Act 1996 has considerable flexibility in its sustainability provisions but is prescriptive with regard to how the QMS is to be administered. The US Magnuson-Stevens Act, in contrast, is more prescriptive with regard to sustainability measures and leaves administrative details to NMFS and to some degree the regional fishery management councils. There are strengths and weaknesses in both approaches.

One of the Magnuson-Stevens Act's strengths is its National Standards. The priority is on conservation of fish stocks but the National Standards also set forth other environmental, economic and social goals. The Act also authorises the promulgation of guidelines to clarify how to implement and address the Standards. New Zealand's Fisheries Act 1996 does not include similar standards or authority to promulgate standards. It may be worth considering whether an approach like the Magnuson-Stevens Act National Standards (see pages 24-25 and notes 214-216 and associated text) or the national environmental standards provisions of New Zealand's Resource Management Act 1991 (see note 232) would be helpful in the fisheries context. These approaches provide a mechanism for clarifying and giving legal weight to fisheries standards and objectives.



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