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doi:10.1093/jel/eqs017

How the Law Lets Down the 'Down-Under Dolphin'— Fishing-Related Mortality of Marine Animals and the Law in New Zealand

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Abstract

Regulatory control of fishing in response to fishing-related mortality of endemic marine animals in New Zealand waters has been weak and slow. The handful of populations and species that have been 'protected' from fishing activities are still probably declining or are unlikely to recover without further protection. The government itself recognises the inadequacies of its measures for protecting seabirds. Some species directly affected by fishing receive no protection at all from this threat. I argue that a legal framework that is almost wholly discretionary, allows fisheries interests to dominate decision-making and obscures and nullifies the intended effect of the precautionary approach is to blame. It follows that when in 2009 Members of the New Zealand Parliament rejected off-hand simple legislative changes capable of addressing these problems, they belied their own expressions of concern for marine animals threatened by fishing.

Keywords: fishing-related mortality, bycatch, New Zealand, conservation, precaution

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1. Introduction

Commercial and recreational fisheries bycatch in New Zealand waters includes several endangered seabird species, the 'nationally critical' New Zealand sea lion (*Phocartos hookeri*) and Hector's dolphin (*Cephalorhynchus hectori*)—the 'down-under dolphin'. Hector's dolphin is itself an endangered species and includes the critically endangered subspecies, Maui's dolphin (*Cephalorhynchus hectori maui*).¹ Although these animals are fully protected by law in New Zealand, incidental 'takings' during the course of fishing are excused so long as they are reported. If fishing-related mortality² threatens to or does adversely affect a population or a species of marine wildlife or mammal, either or both of the Ministers of Fisheries and Conservation can take steps, including setting mortality limits and creating sanctuaries and reserves, to avoid or mitigate those effects. The Ministers' powers arise under the Fisheries Act 1996, the Conservation Act 1987, the Marine Animals Protection Act 1978, the Wildlife Act 1953 and the Marine Reserves Act 1971. To date, measures have been introduced to reduce fishing-related mortality in some areas; however progress has been very slow in many cases and the efficacy of other measures can be questioned.

This article argues that the failure to implement measures sufficiently robust to support the recovery of these species is attributable in three key ways to the law. First, although the legislation provides a range of measures to respond to fishing-related mortality, these have not been used 'sufficiently or effectively'³ for procedural and political reasons. 'The tools already exist to manage the situation', but there is a need 'to ensure that they are used'.⁴ Second, although the legislation appears to deliver an integrated approach to fisheries because, under it, fishing-related mortality is managed by the Minister of Fisheries as a fisheries issue,⁵ in reality this approach simply serves to disintegrate fishing-related mortality from the wider conservation management of the mammals and birds affected, and allows fisheries interests

- 1 The relevant New Zealand Threat Classification lists are published in C M Miskelly and others 'Conservation Status of New Zealand Birds' (2008) 55 *Notornis* 117 and C S Baker and others 'Conservation Status of New Zealand Marine Mammals (suborders Cetacea and Pinnipedia), 2009' (2010) 44 *NZJ Marine and Freshwater Research* 101, and should be read with Andrew J Townsend and others, *New Zealand Threat Classification System Manual* (Department of Conservation 2008).
- 2 The accidental or incidental death of a protected species that occurs 'in the course of' fishing, Fisheries Act 1996, s 2.
- 3 NZ Parliamentary Debates 'Marine Mammals Protection Law Reform Bill, First Reading' 29 July 2009, vol 656, 5283.
- 4 *ibid.*
- 5 'The concept of an ecosystem approach to fisheries has been widely accepted as a preferred manner of managing fisheries', S Petersen and others (eds), *Towards an Ecosystem Approach to Longline Fisheries in Benguela: An Assessment of Impacts on Seabirds, Sea Turtles and Sharks* (WWF South Africa Report Series 2006) 82; R T Kingsford and others 'Major Conservation Policy Issues for Biodiversity in Oceania' (2009) 23 *Conservation Biology* 834, 838.

to dominate decision-making about fishing-related mortality. Third, although the idea of precaution is present in the legislation, it has been framed and applied in a way that compromises the very policy preference for environmental conservation that this principle was designed and adopted to secure.

As well as commenting on existing law, this article considers proposals made to strengthen the law in the Marine Animals Protection Law Reform Bill.⁶ This Bill sought to ensure that more protective fishing-related mortality measures are implemented, to strengthen the role of the Minister of Conservation in fishing-related mortality management, and generally to promote the sounder management of marine mammals.⁷ Described in Parliament as ‘one of the most robust pieces of legislation on marine protection to come before the House’,⁸ the Bill was defeated on its First Reading. Its opponents claimed it would ‘tip the scales’ too far in favour of conservation and result in increased litigation spurred by a polarised industry intent on protecting its commercial interests.⁹

2. Fishing and Fishing-Related Mortality in New Zealand Waters

New Zealand is a group of islands with a total coastline some 15,000 kilometres long, and 4.4 million square kilometres of marine fisheries waters. Around 16,000 marine species have been identified in these waters and 130 of these are harvested commercial species. About 600,000 tonnes of fish are harvested from wild fisheries and aquaculture each year.¹⁰ Ninety percent of the harvested fish goes to the export market, and seafood ranks consistently within the top five sectors contributing to the economy.¹¹ Recreational fishing is also important; 20–30% of the population participates in the estimated annual take of 25,000 tonnes of fish.¹² Expenditure by fishers on catching the five major recreational species is estimated to contribute annually over £472 million to the domestic economy.¹³

6 Marine Animals Protection Law Reform Bill (2009) No 54-1.

7 NZ Parliamentary Debates (n 3) 5273; B Louise Chilvers, ‘New Zealand Sea Lions *Phocarcetus hookeri* and Squid Trawl Fisheries: Bycatch Problems and Management Options’ (2008) 5 *Endangered Species Research* 193, 202: ‘better utilisation of . . . current legislation . . . should enable concurrent species conservation and resource utilisation.’

8 NZ Parliamentary Debates (n 3) 5276.

9 *ibid* 5278.

10 Ministry of Fisheries, ‘Commercial Fishing’ <<http://www.fish.govt.nz>> accessed 30 June 2010.

11 Food and Agriculture Organization of the United Nations, ‘Fishery and Aquaculture Country Profiles New Zealand’ <<http://www.fao.org/fishery/countrysector/FI-CP.NZ/en>> accessed 3 March 2011.

12 *ibid*.

13 *ibid*, converted into sterling from a figure of US\$728 million.

All this fishing takes its toll on marine animals, especially since common fishing methods include trawling, set netting and long-lining.¹⁴ More than 3,000 birds are killed in the course of fishing every year in New Zealand waters.¹⁵ These include three endangered species: Black-browed albatross (*Thalassarche melanophrys*), Northern Royal albatross (*Diomedea sanfordi*) and Yellow-eyed penguin (*Megadyptes antipodes*).¹⁶ 736 New Zealand sea lions are estimated to have been drowned in the squid fishery in the 10 years since this species was officially recognised as 'threatened' in 1997.¹⁷ Fishing is the main threat facing Hector's dolphin,¹⁸ which was declared to be a threatened species over a decade ago.¹⁹ Fishing is also attributed with having 'the greatest human impact' on the native New Zealand fur seal (*Arctocephalus forsteri*).²⁰

Although measures have been installed to mitigate fishing-related mortality in some fisheries, they have been difficult²¹ and slow to obtain,²² and fishing interests have been protected to the detriment of species conservation.²³ Worse still, the efficacy of the measures that have been made is questionable. The Ministry of Fisheries itself acknowledges the inadequacy of existing

- 14 Ministry of Fisheries, 'New Zealand Fisheries at a Glance' <<http://www.fish.govt.nz>> accessed 30 June 2010.
- 15 Marina Skinner, 'New Zealand's Dirty Little Secret' (August 2009) 333 *Forest and Bird* 30, 31; Ministry of Fisheries, *Proposals for Managing the Fishing-related Mortality of Seabirds: Draft for Public Consultation* (Ministry of Fisheries 2007) 50.
- 16 Ministry of Fisheries (ibid) 41; Ministry of Fisheries, 'Briefing Paper on Summer Observer Programme Results' (20 March 2009) <<http://www.fish.govt.nz/NR/rdonlyres/092B0E3A-C341-4939-AFC4-027A76B7B06C/0/Ministers.briefing.observer.programme.pdf>> accessed 7 December 2011.
- 17 Department of Conservation, *New Zealand Sea Lion Species Management Plan* (Department of Conservation 2009) 13; Marine Mammals Protection Act 1978: Declaration of Species of Marine Mammal to be a Threatened Species Notice, NZ Gazette (31 July 1997) G05218, 1917.
- 18 Department of Conservation and Ministry of Fisheries, *Hector's and Maui's Dolphins Threat Management Plan: Draft for Public Consultation* (Department of Conservation and Ministry of Fisheries 2007) 21–22.
- 19 Marine Mammals Protection Act 1978: Declaration of Species of Marine Mammal to be a Threatened Species Notice, NZ Gazette (16 December 1999) G0 9226, 4590.
- 20 New Zealand Seal Lion Trust, 'New Zealand Seals' <<http://www.sealiontrust.org.nz/nzseals.htm>> and Department of Conservation, 'Marine Mammals' <<http://www.doc.govt.nz/conservation/native-animals/marine-mammals/docs-role/>> both accessed 2 December 2010.
- 21 S M Dawson and E Slooten, 'Conservation of Hector's dolphins: The Case and Process which Led to Establishment of the Banks Peninsula Marine Mammal Sanctuary' (1993) 3 *Aquatic Conservation* 207.
- 22 Skinner argues that the government has responded 'at a glacial pace' to seabird mortality (n 15) 32.
- 23 Two examples are that the zero bycatch option of allowing only jigging for squid in the sea lion foraging area (Chilvers (n 7)) is ignored, according to then Minister of Fisheries Hon Jim Anderton, due to advice that conditions in the area 'can be both difficult and hazardous for squid jigging vessels' (NZ Parliamentary Debates 'Questions to Ministers' 4 May 2006, vol 630, 2764 and 2772); and that the northern boundary of the dolphin sanctuary was determined by the economic impact on one fisher (Dawson and Slooten (n 21)).

measures protecting seabirds.²⁴ Ministry-commissioned research published in 2011 indicates that the viability of eight seabird species, including the endemic and endangered light-mantled albatross (*Phoebastria palpebrata*) 'may be threatened' by commercial fishing in New Zealand waters.²⁵ Measures to protect New Zealand sea lion in the Auckland Islands squid fishery were introduced in 1992/3, but estimates indicate that pup production in this location has nevertheless decreased by 40% since 1995.²⁶ Although the Ministry of Fisheries insists that the 'research strongly suggests that the direct effect of fishing-related mortality on the New Zealand sea lion population is minimal',²⁷ the most recent independent review concludes that 'the two most parsimonious hypotheses for the decline seen at the Auckland Islands are indirect effects of fisheries in the form of resource competition and direct effects of fisheries in the form of by-catch mortality'.²⁸ While fishing controls designed to protect Hector's dolphin were significantly extended in 2009, population projections to 2050 'predict that the total population is likely to continue declining' even under the new regime.²⁹

These findings raise legitimate concerns about New Zealand's record in managing fishing-related mortality, including whether New Zealand may be

- 24 There has been 'widespread non-compliance' with existing measures and in response the Ministry first proposed a non-statutory cap on fishing-related mortality across all species in all fisheries, but now proposes an approach targeted on the species most at risk from fishing-related mortality. The Ministry will first identify those species, and then will decide whether additional management actions are required. Ministry of Fisheries, *Draft Policy for Addressing the Fishing-Related Mortality of Seabirds in New Zealand Fisheries Waters* (Ministry of Fisheries 2011).
- 25 Yvan Richard, Edward R Abraham and Dominique Filippi, 'Assessment of the Risk to Seabird Populations from New Zealand Commercial Fisheries' (unpublished report held by the Ministry of Fisheries 2011) 30 <<http://www.fish.govt.nz/NR/rdonlyres/6A38D8A4-6AE7-473B-AC94-BE59B1B3E79C/0/FRR.Seabird.risk.assessmen.2011t.pdf>> accessed 12 December 2011.
- 26 Bruce C Robertson and B Louise Chilvers, 'The Population Decline of the New Zealand Sea Lion *Phocarctos hookeri*: A Review of Possible Causes' (2011) 41 *Mammal Rev* 253, 254: 'For pinnipeds, estimates of pup production are the best index of relative population status and overall population size . . . Therefore, the decline in pup production at the Auckland Islands probably reflects a decline in overall population; however, this relationship is hard to confirm as estimation of pinniped population size directly is difficult.'
- 27 Ministry of Fisheries, *SQU6T Operational Plan: Initial Position Paper* (Ministry of Fisheries 2011) <<http://www.fish.govt.nz/NR/rdonlyres/AF0DAB4C-524B-4881-A57A-A2EB90A767EA/0/SQU6TIPP201112FINAL.pdf>> accessed 14 December 2011, 11.
- 28 Robertson and Chilvers (n 26) 269.
- 29 Elisabeth Slooten and Stephen M Dawson, 'Assessing the Effectiveness of Conservation Management Decisions: Likely Effects of New Protection Measures for Hector's Dolphin (*Cephalorhynchus hectori*)' (2010) 20 *Aquatic Conservation: Marine and Freshwater Ecosystems* 334, adding: 'this is driven mainly by continuing bycatch due to the much weaker protection measures on the South Island west coast' (334); E Slooten and N Davis 'Hector's Dolphin Risk Assessments: Old and New Analyses Show Consistent Results' (2012) 42 *J Royal Society NZ* 49, 49: 'All risk analyses indicate that populations have declined substantially due to fisheries mortality and recovery is unlikely under the current protection measures'.

risking some of the economic benefit to be gained from its valuable seafood export³⁰ and nature tourism industries,³¹ and whether New Zealand may be failing to meet its international obligations, especially under the Agreement on the Conservation of Albatrosses and Petrels (ACAP)³² and the Convention on Biological Diversity (CBD).³³ The parties to ACAP agree to take measures to achieve and maintain a favourable conservation status for listed endangered albatross and petrel species.³⁴ Populations should be self-maintaining, and the species' range should not be reduced and its distribution and abundance should be approaching historic coverage and levels.³⁵ Article 8 of the CBD obliges its parties to do what is possible and appropriate to manage activities with significant adverse effects on biodiversity conservation and to promote the recovery of threatened species through plans and management strategies. Although the New Zealand government has responded to fishing-related mortality, it is clearly arguable whether it has done enough. But to what extent and how do these concerns result from the legal framework for decision-making on fishing-related mortality? What changes might be made to produce a system that delivers stronger measures at least where the environmental consequences may be irreversible?

3. The Law and Fishing-Related Mortality in New Zealand

Most marine animals are absolutely protected by law in New Zealand. The Marine Mammals Protection Act provides for the 'protection, conservation,

30 In 2009, the total value of seafood exports was NZ\$1.42 billion (around £692 million) and over five and a half thousand people were directly employed full-time in the fishing industry. Ministry of Fisheries 'New Zealand Fisheries at a Glance' (n 14). The *New Zealand Herald* has reported: 'British supermarket chain, Waitrose, is refusing to stock New Zealand-caught hoki ... because bottom trawling is used in the fishery, NZPA, 'UK Stores Reject NZ Hoki' *The New Zealand Herald* (Auckland, 21 July 2009) <<http://www.nzherald.co.nz/nz/news/article.cfm?cid=1&objectid=10585702>> accessed 2 April 2012.

31 1.6 million international tourists and 11.1 million domestic tourists took part in nature-based activities in 2008, see Ministry of Economic Development, 'Tourist Activity Profiles' <<http://www.med.govt.nz/about-us/publications/publications-by-topic/tourism-publications/tourism-sector-profiles/tourist-activity-profiles#Nature-based.Tourism>> accessed 14 December 2010.

32 Agreement on the Conservation of Albatrosses and Petrels 2258 UNTS ref I-40228 (opened for signature 19 June 2001, entered into force 1 February 2004) (ACAP).

33 Convention on Biological Diversity 1760 UNTS p 79 ref I-30619 (opened for signature 5 June 1992, entered into force 29 December 1993). New Zealand is also party to the Convention for the Conservation of Southern Bluefin Tuna 1819 UNTS ref I-31155 (opened for signature 10 May 1993, entered into force 20 May 1994) and has obligations under the UNFAO, *International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries* UNFAO/CDR ref 283720 (1999). Ministry of Fisheries states that New Zealand's international obligations are expressed in existing controls and plans (Ministry of Fisheries, 'Seabirds' <<http://www.fish.govt.nz>> accessed 30 June 2010). See also the discussion accompanying nn 126–128 below.

34 ACAP (n 32) art II.2.

35 *ibid* art I.2.

and management' of marine mammals by prohibiting all unauthorised 'takings' in New Zealand waters.³⁶ Similarly, the Wildlife Act establishes a presumption that all 'wildlife' is absolutely protected throughout New Zealand waters.³⁷ Breaches of these bans are punishable by prison terms up to 6 months long, or fines of up to NZ\$250,000 plus NZ\$10,000 for each animal affected, and for each day on which the offence continues.³⁸ However, both of these Acts also provide complete defences for all 'accidental or incidental' takings, including fishing-related mortality, provided that these are reported.³⁹ Nevertheless, most fishing-related mortality has not been reported.⁴⁰ Monitoring and enforcement are problematic as the Ministry employs just 51 observers to cover the 1,278 commercial fishing vessels operating in New Zealand fisheries waters.⁴¹

In order to address fishing-related mortality, legislation provides for measures to be implemented by the Minister of Fisheries under the Fisheries Act, or the Minister of Conservation under the Marine Mammals Protection Act, the Marine Reserves Act, or the Wildlife Act.⁴² Crucially, the Minister of Fisheries' powers arise as part of a wider function of managing commercial, recreational and customary fisheries so as to 'provide for the utilisation of fisheries resources while ensuring sustainability',⁴³ while the Minister of Conservation's functions are generally to manage natural resources for the purposes of preserving and protecting them and maintaining their intrinsic values.⁴⁴ The introduction of fishing-related mortality measures is almost never mandatory even if the species affected is critically endangered. Although both ministers have at times exercised their discretionary powers to introduce them, the Minister of Fisheries has the final say on which measures are implemented, and so the responsibility of managing fishing-related

36 Marine Mammals Protection Act, Long Title and s 4.

37 Wildlife Act, ss 2 and 3; 'wildlife' excludes marine mammals but includes birds.

38 Marine Mammals Protection Act, ss 4(1)(b) and 9; Wildlife Act, ss 63 and 67.

39 Marine Mammals Protection Act, s 26(4) and Wildlife Act, s 68B(4).

40 Former Minister of Fisheries Jim Anderton, 'Former Minister of Fisheries Explains Himself' *The National Business Review* (Wellington, 11 February 2009) <<http://www.nbr.co.nz/article/former-minister-fisheries-explains-himself-49049>>, accessed 12 December 2011; 'Does the Law Support Sustainability of our Fisheries?' (Law, Policy and Science Symposium, Wellington, November 2009) <<http://www.progressive.org.nz/latestnews/files/c531b19eb4c5f56d4791cd35ed3c45e2-92.html>> accessed 30 November 2010.

41 As of May 2010, see Ministry of Fisheries 'New Zealand Fisheries at a Glance' (n 14).

42 Note no single Act covers the environmental effects of all activities in New Zealand's exclusive economic zone. The option of replacing existing legislation with one such Act has been rejected by government: 'overhauling existing laws for the sake of consistency would involve large transaction costs and would not necessarily lead to better environmental outcomes', Ministry for the Environment, *Improving Regulation of Environmental Effects in New Zealand's Exclusive Economic Zone Discussion Paper* (Ministry for the Environment 2007), 10 <<http://www.mfe.govt.nz/publications/oceans/nz-exclusive-economic-zone-discussion-paper-aug07/nz-exclusive-economic-zone-discussion-paper-aug07.pdf>> accessed 14 December 2011.

43 'Ensuring sustainability' includes 'avoiding, remedying, or mitigating any adverse effects of fishing on the aquatic environment', Fisheries Act, s 8(2).

44 Conservation Act, ss 2 and 6.

mortality today largely resides with this Minister acting under the Fisheries Act. No measures other than emergency measures can be made unless certain statutory procedures have been complied with, including both direct consultation with fishing and environmental interests as well as wider public consultation.⁴⁵ These processes may take years. They also provide an opportunity for New Zealand's powerful fishing industry to influence decisions, especially those of the Minister of Fisheries whose statutory role includes safeguarding fishing interests. Once made, decisions to implement measures amount to exercises of statutory power and are subject to judicial review in the High Court. As the cases discussed in Sections 3.2.2 and 3.2.4 show, the fishing industry has consistently challenged the decisions behind fishing controls made to protect New Zealand sea lion and Hector's dolphin.

3.1 Conservation Measures

Measures available to the Minister of Conservation are population management plans, marine mammal sanctuaries and marine reserves.

3.1.1 Sanctuaries and reserves

Despite their impressive name, marine mammal sanctuaries are simply areas where fishing activities can be regulated. Two sanctuaries have been established to protect marine animals from fishing:⁴⁶ the first in 1988 around Banks Peninsula on the east coast of the South Island. Seasonal bans on set netting were applied in this sanctuary to help protect the Hector's dolphin population there.⁴⁷ The second sanctuary was established in 1993 around the Auckland Islands to protect the marine animals breeding there—including sea birds and sea lions—from the adverse effects of fishing. The three New Zealand sea lion colonies protected in the sanctuary represent the last stronghold of this species that 'once occupied sites scattered around New Zealand'.⁴⁸ This sanctuary was incorporated into the Motu-Maha Marine Reserve in

45 Fisheries Act, s 12; Marine Mammals Protection Act, ss 3H and 22(1); Wildlife Act, s 14I; and Marine Reserves Act, s 5(1)(b).

46 Four more sanctuaries have been established for Hector's dolphins, but Departmental controls extend only to mining and acoustic seismic surveying activities in these areas; Ministry of Fisheries fishing controls apply instead (Department of Conservation, 'Hector's & Maui's Dolphins – Marine Mammal Sanctuaries' <<http://www.doc.govt.nz/getting-involved/consultations/closed/archive/hectors-and-mauis-dolphins-marine-mammal-sanctuaries>> accessed 10 December 2010).

47 Marine Mammals Protection (Banks Peninsula Sanctuary) Notice 1988, SR 1988/333, now revoked by Marine Mammals Protection (Banks Peninsula Sanctuary) Amendment Notice (No 2) 2008, SR 2008/429. Fishing controls were re-introduced via the Fisheries (South-East Area Amateur Fishing) Amendment Regulations (No 2) 2008, SR 2008/276 and (No 3) 2008, SR 2008/408 and Fisheries (South-East Area Commercial Fishing) Amendment Regulations (No 2) 2008, SR 2008/277 and (No 3) 2008, SR 2008/407.

48 Department of Conservation, *New Zealand Sea Lion Species Management Plan* (n 17) 8.

2003. Unlike sanctuaries, marine reserves are areas wherein marine life must be protected⁴⁹ and 'takings' are banned other than for specifically approved purposes.⁵⁰ The main purpose of reserves is to enable the scientific study of marine life.⁵¹ More than 30 marine reserves have been established.⁵²

Of course the protection offered by both sanctuaries and reserves applies only to the areas they cover, which must fall within 12 nautical miles of the coast.⁵³ Thus, while New Zealand sea lions are completely protected within the Motu-Maha Marine Reserve, research shows that female sea lion foraging locations 'overlap temporally and spatially' with the operation of the squid fishery⁵⁴ beyond its boundaries. There, sea lion mortalities have been allowed within limits set by the Minister of Fisheries under the Fisheries Act.

3.1.2 Population management plans

Population management plans present a more comprehensive option for managing fishing-related mortality than sanctuaries and reserves. They provide an opportunity for the Minister of Conservation, who manages other non-fishing threats to protected species, to respond to fishing-related mortality as part of the total human-induced mortality of the species concerned, and to set fishing-related mortality limits (MALFiRMs) for affected species.⁵⁵ If the minister does set such limits, the Minister of Fisheries is obliged to implement and monitor them to ensure that they are not breached.⁵⁶

Population management plans may be prepared for any species of marine mammal or wildlife,⁵⁷ but none has ever been made. A draft plan was prepared for New Zealand sea lion in 2007,⁵⁸ but was not implemented despite the

49 Marine Reserves Act, s 3(2)(b).

50 *ibid* ss 3(3) and 181.

51 *ibid* s 3(1).

52 Covering only 0.3% of New Zealand's total marine environment (Department of Conservation, 'Marine Reserves A-Z' <<http://www.doc.govt.nz/conservation/marine-and-coastal/marine-protected-areas/marine-reserves-a-z/>> accessed 10 December 2010).

53 This is clear for reserves (Marine Reserves Act, 'area', s 2). It is also what is said about sanctuaries (Ministry for the Environment, 'Marine Areas with Legal Protection' <<http://www.mfe.govt.nz/environmental-reporting/report-cards/marine-reserves/2008/index.html>> accessed 1 August 2011). However it is not clear from the Marine Mammals Protection Act, s 22. The Long Title of this Act says that it applies to New Zealand fisheries waters, which are defined in s 2 to extend to 200 nms offshore.

54 Chilvers (n 7) 197.

55 MALFiRMs may apply to New Zealand fisheries waters or to discrete populations, must allow threatened species to recover as soon as reasonably practicable but within 20 years and 'should neither cause a net reduction in the size ... nor seriously threaten the reproductive capacity of [the] population' of any non-threatened species (Wildlife Act, ss 14F-14H; Marine Mammals Protection Act, ss 3E-3G).

56 Fisheries Act, s 15(1).

57 Marine Mammals Protection Act, s 3E; Wildlife Act, s 14F.

58 Department of Conservation, *Draft New Zealand Species Management Plan: 2007 – 2017* (Department of Conservation 2007) <<http://www.doc.govt.nz/publications/getting-involved/consultations/closed/draft-nz-sea-lion-species-management-plan>> accessed 9 December 2010.

Department of Conservation's subsequent acknowledgment that 'significant numbers' of this nationally critical animal are caught and killed in fishing operations.⁵⁹ The department instead produced a *New Zealand Sea Lion Species Management Plan 2009-2014*. This supports the development of strategies and tools to mitigate fishing-related mortality,⁶⁰ but fails to propose any new measures to supplement existing controls. Similarly, no population management plan has been made for Hector's dolphin despite official acknowledgment that 'the effects of fishing are the greatest cause of human induced mortality' on this dolphin, which is listed as 'endangered' and 'critically endangered' by the International Union for the Conservation of Nature (IUCN).⁶¹ The most recent research estimates that just 55 Maui's dolphins over the age of one remain.⁶² Hector's dolphin has been the subject of a *Draft Threat Management Plan* produced by both the Department of Conservation and the Ministry of Fisheries,⁶³ but the Department's role in this is limited to non-fisheries issues.

3.1.3 Concurrence, consent and complexity

The Department of Conservation has indicated that population management plans have not been made owing to the 'complex' statutory procedure involved in developing them.⁶⁴ Departmental correspondence points to the legislative requirement for the Minister of Conservation to obtain the concurrence of the Minister of Fisheries in order to make a plan.⁶⁵ The Court of Appeal examined the meaning of 'concurrence' in the related context of the making of a marine reserve⁶⁶ in *CRA3 Industry Association Incorporated v Minister of Fisheries and Others*.⁶⁷ The Court stressed the importance of the Minister of Fisheries' role

59 Department of Conservation, *New Zealand Sea Lion Species Management Plan* (n 17) 13.

60 *ibid* 19.

61 Department of Conservation and Ministry of Fisheries, *Hector's and Maui's Dolphins Threat Management Plan* (n 18) 12; R R Reeves and others, (2008) 'Cephalorhynchus hectori' and (2000) 'Cephalorhynchus hectori ssp. Maui's' both in *The IUCN Red List of Threatened Species version 2011.2* <<http://www.iucnredlist.org/apps/redlist/details/4162/0>> and <<http://www.iucnredlist.org/apps/redlist/details/39427/0>> both accessed 3 April 2012.

62 Department of Conservation, 'Maui's Dolphin Abundance Estimate' <<http://www.doc.govt.nz/conservation/native-animals/marine-mammals/dolphins/mauis-dolphin/docs-work/mauis-dolphin-abundance-estimate/>> accessed 2 April 2012.

63 There is no final version of the Plan but controls it proposes have been implemented.

64 Department of Conservation, 'Population Management Planning Review – Stakeholder Consultation' (August 2010); Ministry of Fisheries, 'Precis on Stakeholder Consultation on Population Management Plan Proposals' Agenda Item B2 (23 August 2010). The department proposes that instead, the Ministers could 'jointly' make a decision to approve a plan. These documents were obtained from the Ministry of Fisheries under the Official Information Act 1982.

65 Marine Mammals Protection Act, s 3H(1); Wildlife Act, s 14I(m).

66 Marine Reserves Act, s 5(9).

67 [2001] 2 NZLR 345.

as 'part of the statutory safeguard provided . . . for commercial fishers',⁶⁸ and held that he 'must make his own decision'.⁶⁹ The same effectively applies to the making of sanctuaries,⁷⁰ so that whichever measure the Minister of Conservation pursues to address fishing-related mortality, he or she must obtain the independent agreement of a minister whose statutory role includes safeguarding fishing interests and who faces intense pressure from a powerful fishing industry.⁷¹ Official records show this concurrence role is one that the Minister of Fisheries is concerned to secure and retain.⁷² In comparison, the Minister of Fisheries is only ever required to *consult* the Minister of Conservation when implementing fisheries measures.

The practical effect of this has been that the Minister of Conservation, faced with the prospects of futility and wasted resources, has withdrawn from managing fishing-related mortality. This is sometimes presented as representing a more consistent or integrated approach to fisheries management.⁷³ But it also means that the Ministry of Fisheries plays the major role in managing fishing-related mortality. This is problematic for two reasons. First, this minister operates in a statutory context that balances the need to protect marine animals against the need to provide for the utilisation of fisheries. As it stands, fisheries legislation 'makes it almost impossible to come down on the side of sustainability'.⁷⁴ Second, the Fisheries Act's procedural provisions that mandate consultation with the industry and the simple fact that the Minister of Fisheries is also charged with managing access to commercial fisheries resource via the quota management system, both provide New Zealand's powerful fishing industry with opportunities to exert pressure directly on this minister. In the few instances where that pressure has failed to deliver fisheries sympathetic results, or a particular minister has tried to change the legislation to enable more precautionary decisions to be made, the industry has turned to the courts or used its influence to pressure other members of Parliament to block progress.⁷⁵

68 *ibid* [7].

69 *ibid* [29].

70 Marine Mammals Protection Act, s 22(2), the reference is to 'consent', but the effect is the same.

71 See nn 95–101 below.

72 Ministry of Fisheries, 'Precis of Oral Item on Population Management Plan Legislation Review' (28 June 2010). This document was obtained from the Ministry of Fisheries under the Official Information Act 1982.

73 Eg, the latest measures for Hector's dolphin were proposed in a plan divided into a Ministry of Fisheries part, concerning fishing-related mortality, and a Department of Conservation part, containing proposals to extend existing and make new sanctuaries without controlling fishing therein. The Department proposed to leave the Ministry to control fishing both within the sanctuaries and elsewhere for 'a more consistent approach', Department of Conservation and Ministry of Fisheries, *Hector's and Maui's Dolphins Threat Management Plan* (n 18) 208.

74 Anderton 'Does the Law Support Sustainability of our Fisheries?' (n 40).

75 See Sections 3.2.2 and 3.2.4.

3.2 Fisheries Measures

The Fisheries Act, section 15(1) provides that, if a population management plan is made by the Minister of Conservation, the Minister of Fisheries must take reasonable steps to ensure that any MALFiRM set in it is not exceeded. The minister is also able to take other 'necessary' measures to further avoid, remedy or mitigate the adverse effects of fishing on the species. Since no such plans have been made, this section has never been used and most of the fishing controls in place outside sanctuaries and reserves draw their authority from section 15(2). This authorises the Minister of Fisheries, after consultation with the Minister of Conservation, to 'take such measures as he or she considers are necessary to avoid, remedy, or mitigate the effect of fishing-related mortality on any protected species'. These measures may include setting a limit on fishing-related mortality (FRML).⁷⁶

Section 15(2) provides authority for the seasonal FRML that has been set for New Zealand sea lion in the Auckland Islands squid fishery beyond the boundaries of the Motu-Maha Marine Reserve. Since 1992–93 this FRML has ranged between 63 and 115 allowable mortalities. While some question why any mortalities of a 'nationally critical' species are allowed,⁷⁷ the Ministry now suggests that no mortality limit is necessary provided specially-developed sea lion exclusion devices (SLEDs) are properly used.⁷⁸ Over the years, the squid fishery has been closed several times when the FRML has been reached or exceeded. Predictably, setting the FRML has become a complex and fraught process.

Section 15(2) also authorised the netting and trawling restrictions made to protect Hector's and Maui's dolphin in areas around the coastline. At first these affected only the West Coast of the North Island, where the dwindling population of Maui's dolphin resides. Significantly expanded in 2009, these restrictions are now intended to apply to most of the range of the species. But recent research suggests that even under these new measures Hector's

76 Measures can be implemented in regulations (ss 15(5) and 298). The Minister of Fisheries can act to ensure that a MALFiRM or a FRML is not exceeded (ss 15(5) and (6) and 252(5)).

77 Television One, 'NZ Sea Lions at Risk of Extinction' (*One News*, 19 June 2010) <<http://tvnz.co.nz/national-news/nz-sea-lions-risk-extinction-3597861>> accessed 14 December 2011.

78 Ministry of Fisheries, *SQU6T Operational Plan: Initial Position Paper* (n 27). SLEDs are designed to enable sea lions to escape fishing nets. Other research questions their efficacy: Chilvers, (n 7) 198; S J Rowe, *A Review of Methodologies for Mitigating Incidental Catch of Protected Marine Mammals: Department of Conservation Research and Development Series 283* (Department of Conservation 2007) and the Ministry's science is contested (University of Otago, 'Expert Warns Government on Wrong Track with Sea Lions' (8 December 2011) <<http://www.otago.ac.nz/news/news/otago028986.html>> and Radio NZ, 'Outrage at Proposal to Remove Sea Lion Protection' (*Morning Report*, 9 December 2011) <<http://www.radionz.co.nz/national/programmes/morningreport/audio/2504457/outrage-at-proposal-to-remove-sealion-protection>> both accessed 14 December 2011).

dolphins will still drown in fishing nets at a rate that precludes 'meaningful population recovery'.⁷⁹

Finally, section 11 of the Fisheries Act authorises the Minister to introduce sustainability measures for 'stocks or areas' to address the effects of fishing on the aquatic environment. Regulations requiring larger long lining and trawling vessels to deploy bird scaring devices and fish at night have been made under this section.⁸⁰

3.2.1 Balancing utilisation and sustainability

The main problem with the fisheries measures is that they are made and operate under an Act, and within a political context, in which fisheries interests are strongly represented. Population management plans, MALFiRMs and sanctuaries, are administered by the Department of Conservation under the Conservation Act.⁸¹ This department and its minister exist to manage natural resources for preservation and protection purposes.⁸² In comparison, the Minister of Fisheries, however, must 'bear in mind and conform with'⁸³ the purpose of the Fisheries Act: to 'provide for the utilisation of fisheries resources while ensuring sustainability'.⁸⁴ The Act defines 'utilisation' as the conservation, use, enhancement and development of the fisheries resource, and 'ensuring sustainability' as both 'maintaining the potential of fisheries to meet the reasonably foreseeable needs of future generations' and 'avoiding, remedying, or mitigating any adverse effects of fishing on the aquatic environment'.⁸⁵ The Supreme Court (New Zealand's highest court) has held that section 8 implies a 'balance' between the two competing policies of utilisation and sustainability.⁸⁶

79 Liz Slooten, 'Effectiveness of New Protection Measures for Hector's Dolphin' in Research Cluster for Natural Resources Law, *Newsletter Three* (May 2010) <<http://www.otago.ac.nz/law/nrl/Newsletter3-v2.pdf>> accessed 15 December 2011; Slooten and Dawson, and Slooten and Davis (both n 29). There have been two recent fishing-related drownings of Maui's dolphins off Taranaki, outside the protected area. NABU International Foundation for Nature, 'Press Release: Government Inaction a Death Sentence for Maui's Dolphins' <<http://www.scoop.co.nz/stories/PO1202/S00101/government-inaction-a-death-sentence-for-mauis-dolphins.htm>> accessed 6 March 2012.

80 Ministry of Fisheries, *Seabird Action Plan* (Ministry of Fisheries 2011) <<http://www.fish.govt.nz/NR/rdonlyres/72852E40-2103-44A2-A057-AC04B27BC5F0/0/SeabirdActionPlan2011.pdf>> accessed 15 December 2011, 1.

81 Conservation Act, s 6 and First Schedule.

82 *ibid* ss 2 and 6.

83 *Westhaven Shellfish Ltd v Chief Executive of Ministry of Fisheries* [2002] 2 NZLR 158, 173; approved in *New Zealand Recreational Fishing Council Inc v Sanford Ltd* [2009] 3 NZLR 438 [59].

84 Fisheries Act, s 8(1).

85 *ibid* s 8(2).

86 *Sanford Ltd v New Zealand Recreational Fishing Council* [2008] NZCA 160, 47; *New Zealand Recreational Fishing* (n 83) [39].

The Fisheries Act's balancing approach leads to less protective decisions than would the application of an uncompromised policy of conservation.⁸⁷ For example, in its part of the most recent management plan for Hector's dolphins, the Department of Conservation supported proposed fishing controls to 'reduce the likelihood of fishing related mortality to the lowest level possible' because this would be 'most consistent' with its conservation objectives.⁸⁸ In line, however, with its less ambitious goals,⁸⁹ the Ministry of Fisheries announced subsequently that it would adopt less strict measures.⁹⁰

3.2.2 The 'necessary' test

The Fisheries Act authorises the Minister of Fisheries to take such measures as he or she considers are 'necessary'. The meaning and impact of the word 'necessary' in section 15(2) was discussed in *Squid Fishery Management Company v Minister of Fisheries*,⁹¹ a case about the 2003/4 sea lion FRML. The Court of Appeal held that in setting a FRML, the 'legislative framework required the Minister to form a view as to the extent to which (or perhaps the point at which) utilisation of the squid resource threatened the sustainability of the sea lion population'.⁹² This, it said, was 'implicit in [that] the Minister may only take such measures which he or she "considers necessary" in terms of avoiding, remedying or mitigating adverse effects of fishing on a protected species'.⁹³ *New Zealand Federation of Commercial Fishermen v Minister of Fisheries* emphasises that this does not mean that the Minister must necessarily adopt the highest FRML that will meet the relevant conservation criteria, because 'optimum utilisation does not equate to maximum usage'⁹⁴ and 'a precautionary approach to the required balancing exercise is open to the Minister' under the Act.⁹⁵ Nevertheless, this approach obliges the Minister to begin at the point at which the marine animal is threatened by fishing, and then set a lower limit if this is justified by a need to be precautionary. In this way, the

87 The Ministry of Fisheries expressly recognises that 'more conservative mortality limits' are likely to result if the Minister of Conservation is authorised to set MALFiRMs absent the concurrence of the Minister of Fisheries: Ministry of Fisheries, 'Briefing Paper – Population Management Plan Review' (H0655, 19 March 2010); Ministry of Fisheries, 'Briefing Paper – Population Management Plan Review' (H0759, 30 June 2010). These documents were obtained from the Ministry of Fisheries under the Official Information Act 1982.

88 Department of Conservation and Ministry of Fisheries, *Hector's and Maui's Dolphins Threat Management Plan* (n 18) 201 and 204.

89 *ibid* 60.

90 Ministry of Fisheries, 'Minister Announces New Measures to Protect Dolphins' <<http://www.fish.govt.nz/en-nz/Press/Press+Releases+2008/May08/hector.htm>> accessed 02 December 2010.

91 (New Zealand Court of Appeal, 13 July 2004).

92 *Squid Fishery* (n 91) [79].

93 *ibid*: the Minister had failed to understand that there was a good deal of room available to him to increase the FRML.

94 (High Court Wellington, 23 February 2010) [19].

95 *ibid* [19]; *Squid Fishery* (n 91) [79].

'necessity' standard used in section 15(2) favours the realisation of fishing interests.

3.2.3 The political context

'There is no Minister in any Cabinet who faces more litigation, legal challenges, or development of jurisprudence around the area of his or her portfolio than the Minister of Fisheries. That is the nature of the industry.'⁹⁶ The political strength of the industry derives both from the economic importance of commercial and recreational fishing,⁹⁷ and from how commercial fisheries are managed. Industry representatives have statutory rights of consultation on the introduction of fishing-related mortality measures, and standing to seek review of decisions affecting their interests.⁹⁸

Most of New Zealand's commercial fisheries are managed using a quota management system (QMS), which allocates quota holdings and catch entitlements to eligible fishers proportionately according to catch history.⁹⁹ Quota can be bought, sold or leased and are valuable assets.¹⁰⁰ That quota holders have developed a strong sense of entitlement to continuing undiminished enjoyment of the fisheries resource is clear from cases like *New Zealand Fishing Industry Association (Inc) v Minister of Fisheries* where it was argued that the Minister of Fisheries' decisions to reduce catches on sustainability grounds violated the 'integrity' of the system by failing to give 'proper respect to the property rights of those holding quota.'¹⁰¹ Under the QMS, it is quota holders who have 'accrete[d] power and control'.¹⁰²

The Marine Animals Protection Law Reform Bill proposed to respond to the need for faster and stronger fishing-related mortality measures by making some response to fishing-related mortality mandatory at least where imperilled species are involved, and by equalising the statutory relationship between the two Ministers of Fisheries and Conservation in order to give the Minister of Conservation a more independent role.¹⁰³ The Bill proposed that both Ministers should consult with each other before implementing fishing-related mortality measures, but did not propose that either should have to obtain the consent or concurrence of the other. Although the Bill was defeated, the

96 NZ Parliamentary Debates (n 3) 5278.

97 See nn 11 and 30 and accompanying text.

98 Fisheries Act, s 12; standing is not contentious.

99 Fisheries Act, ss 29A, 32 and 47.

100 Today's total quota value is NZ\$4.017 billion (around £1.976 billion) and 1,556 quota holders participate in the QMS (Ministry of Fisheries, 'New Zealand Fisheries at a Glance' (n 14).

101 (New Zealand Court of Appeal, 22 July 1997).

102 Cath Wallace, 'Environmental Justice and New Zealand's Fisheries Quota Management System' (1999) 3 NZJEL 33, 63.

103 Marine Animals Protection Law Reform Bill, cls 6, 7, 9, 16, 17 and 24. The Bill proposed to make monitoring, population management plans, MALFiRMs and s 15(2) Fisheries Act measures mandatory for threatened species.

Department of Conservation has pursued this change both through a governmental review of population management plans and in relation to marine reserves.¹⁰⁴ However, the Ministry of Fisheries is concerned that removal of the concurrence requirement will ‘impact on the ability to realise economic benefit from affected fisheries’ and ‘provoke an adverse response from industry stakeholders’.¹⁰⁵ The Bill also suggested changing the ‘necessary’ test in sections 11 and 15 to enable the Minister of Fisheries to make such measures as he or she thinks reasonable to avoid, remedy or mitigate the adverse effects of fishing on protected marine animals.¹⁰⁶ This would have made it easier for this Minister to act to protect marine animals from fishing activities, even if he or she were still operating within a statutory scheme that balances utilisation and conservation objectives.

3.2.4 Information principles and precaution

The crucial issue of precaution was inadequately addressed in the Marine Animals Protection Law Reform Bill. The New Zealand legislation is not deeply precautionary it allows reported incidental takings, and for measures to prevent or reduce fishing-related mortality provided a need is first established. This puts the burden on the proponents of conservation, whereas the precautionary principle ought to place the burden on fishers to establish the harmlessness of their activities before proceeding.¹⁰⁷

104 Marine Reserves Bill (2002) No 224-1, cls 3 and 67 propose to replace the requirement with a duty to consult. This Bill was introduced in 2002 and is due to be reported back from Select Committee on 14 December 2012.

105 Ministry of Fisheries ‘Briefing Paper – Population Management Plan Review’ (n 87).

106 Marine Animals Protection Law Reform Bill, cl 24.

107 Warwick Gullett ‘Environmental Protection and the “Precautionary Principle”: A Response to Scientific Uncertainty in Environmental Management’ (1997) 14 *Environmental and Planning LJ* 52; J Hunt, ‘The Social Construction of Precaution’ in T O’Riordan (ed), *Interpreting the Precautionary Principle* (Earthscan 1994) 117. Not that this principled approach to precaution has been readily adopted: one referee on this paper notes that ‘in the international fisheries context it was decided as early as 1994 during the negotiation of the 1995 UN Straddling and Highly Migratory Fish Stocks Agreement that the precautionary approach to fisheries does not shift the burden of proof’. Contra see Lawrence Kogan who argues that the recently issued advisory opinion of the Seabed Disputes Chamber of the International Tribunal on the Law of the Sea (Advisory Opinion in Case No. 17 – *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (1 February 2011) ‘confirms . . . that the [United Nations Convention on the Law of the Sea] incorporates within its provisions . . . perhaps even, EUROPE’S PRECAUTIONARY PRINCIPLE: ‘International Tribunal on the Law of the Sea Finally Renders Advisory Opinion Establishing that the Precautionary Principle is Incorporated Within UNCLOS Law’ (*ITSSD Journal on the UN Law of the Sea Convention Blog*, 22 March 2011) <<http://itssdjournalunclos-lost.blogspot.com/2011/03/international-tribunal-on-law-of-sea.html>> accessed 1 December 2011. Kogan has previously defined ‘Europe’s precautionary principle’ as ‘burden of proof-reversing’: Lawrence A Kogan, ‘What Goes Around Comes Around: How UNCLOS Ratification Will Herald Europe’s Precautionary Principle as US Law’ (2009) 7 *Santa Clara JIL* 21, 24.

Nevertheless, the New Zealand legislation does address precaution in section 10:

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.¹⁰⁸
- 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.

When the Act was enacted, paragraph (d) attracted all the attention.¹⁰⁹ However, paragraph (a) has been emphasised in litigation and section 10 has resulted only in 'precautionary decisions' made by the Minister being struck down by the courts.¹¹⁰

In *Northern Inshore Fisheries Company Ltd v Minister of Fisheries*,¹¹¹ the industry successfully challenged set net bans made to protect Maui's dolphin on the basis that the Minister had breached section 10(a) by failing to base his decision on the best available information. His information was found to be out-of-date as to the economic effects on commercial fishers.¹¹² Section 10(d) is not discussed, but the judge emphasised strongly the importance of the Minister's duty under section 10(a).¹¹³ In *Squid Fishery Management v Minister of Fisheries*¹¹⁴ the industry successfully challenged the Minister's decision to close the squid fishery for the season when the FRML was reached. The industry argued that a 'discount' for vessels using then newly developed SLEDs should be included in the Minister's calculations. The Minister refused, citing an 'absence of scientific or other information about the effectiveness of

108 'The best information that, in the particular circumstances, is available without unreasonable cost, effort, or time' Fisheries Act, s 2.

109 Marguerite Quin, 'The Fisheries Act 1996: Context, Purpose, and Principles' (1996-1999) 8 Auckland ULRev 503, 530.

110 Warwick Gullett, 'The Threshold Test of the Precautionary Principle in Australian Courts and Tribunals: Lessons for Judicial Review' in Elizabeth Fisher, Judith Jones and René von Schomberg (eds), *Implementing the Precautionary Principle: Perspectives and Prospects* (Edward Elgar 2006) 182; Dara Modeste, 'The Precautionary Principle and the Fisheries Act' (2011) NZLJ 179.

111 (High Court Wellington, 4 March 2002).

112 *Northern Inshore* (n 111) [42]-[68].

113 *ibid* [75].

114 (High Court Wellington, 11 April 2003).

SLEDs'.¹¹⁵ The industry, however, was able to point to available evidence showing that some 90% of sea lions entering nets were able to escape successfully though SLEDs, although up to 40% were likely to suffer life-threatening injuries in the process.¹¹⁶ The court found that this information did not reach the Minister and concluded that he had received 'misleading and inaccurate' advice¹¹⁷ and was therefore 'not in a position to make an informed decision' as required by section 10(a).¹¹⁸

Subsequently in *Squid Fishery Management v Minister of Fisheries*¹¹⁹ the industry successfully challenged the 2003–04 FRML of 62 sea lions on the basis that the Minister's decision involved a mistake of fact, or was irrational or unlawful because he had failed to base his decision on the best available information in accordance with section 10 and the purpose of the Act. The Court of Appeal held that the Minister had indeed set the FRML 'in substance on the basis' of one rule (the 'Wade' rule, a generic formula applied by the Minister since 1992) when all parties accepted that another rule (the 'Breen Kim' rule, devised in 2003 specifically for New Zealand sea lion) was the best available information.¹²⁰ The court held that the minister knew that the Wade rule 'did not accord' with the best available information, but still based his decision on it in breach of section 10(a).¹²¹ But it did not consider why the minister had done this. If he chose not to base his decision on the Breen Kim formula because it was uncertain due to it being new and returning results that were hugely different to those generated using the Wade formula,¹²² then he would surely have been justified under section 10(d) in being cautious and sticking with a lower FRML meanwhile. As France J in the High Court judgment under appeal observed, 'it was open to the Minister to take cognisance of the fact this was the first time the [Breen Kim] model was being used and so to query the degree of certainty associated with it.'¹²³

*New Zealand Federation of Commercial Fishermen Inc v Minister of Fisheries*¹²⁴ is the most recent relevant case and concerns the new and extended protection measures for Hector's and Maui's dolphin. In this case, Mallon J described the general effect of section 10:

In the usual course decisions are to be based on best available information (because they should be). Before making his or her decision the

115 *Squid Fishery* (HC, 2003) (n 114) [24].

116 *ibid* [25].

117 *ibid* [29] and [31].

118 *ibid* [35].

119 *Squid Fishery* (n 91) and the High Court's decision under appeal: *Squid Fishery Management Company Ltd v Minister of Fisheries* (High Court Wellington, 27 February 2004).

120 *Squid Fishery* (n 91) [34] and [103].

121 *ibid* [93].

122 *ibid* [41] and [63].

123 *Squid Fishery* (HC, 2004) (n 119) [161].

124 *New Zealand Federation of Commercial Fishermen* (n 94).

Minister is required to consider this [and so] must know what information is available and at what cost and in what timeframe. If he or she decides not to base his decision on the best available information there would have to be a reason for not doing so . . . This does not mean that the Minister can only act when the information is certain and reliable . . . To achieve the purposes of the Act the Minister may need to act on uncertain information.¹²⁵

Although the minister retains the discretion not to use the best available information, he or she labours under a potentially heavy burden in having first to know about all the information that is reasonably available.

Because in all the cases deficiencies in the information, or minister's understanding of it, resulted in fishing controls not being applied and delays occurring in the implementation of measures to mitigate fishing-related mortality, Gullett argues that the New Zealand experience shows how best available information statements like paragraph (a):

can actually work against the [precautionary] principle with respect to [its] second application – whether to prohibit or restrict an existing activity before there is conclusive proof of harm. [T]he . . . best information requirement in the Act reduces the ability to make precautionary decisions because decisions to close fisheries due to concerns about unacceptable impact on threatened bycatch species cannot be made until all presently available relevant scientific information is considered and correctly understood.¹²⁶

The effect of including the best available information statement as the first information principle in section 10 and of the industry's focus on it and the general need for decisions to be based on the best information available has been that protective measures have been delayed and diminished. This is contrary to the very *raison d'être* of the precautionary approach, which is a policy choice that aims to resolve the paralysis that information uncertainty can create in favour of the environment.¹²⁷ '[W]here there is *existing* potential for environmental harm, the [precautionary] principle requires anticipatory remedial measures to undertaken.'¹²⁸ Thus, international agreements including the CBD, ACAP and the United Nations Straddling and Highly Migratory Fish Stocks Agreement, and international instruments including the *Rio Declaration* and the *FAO Code on Responsible Fisheries* all call on states to apply

125 *ibid* [39].

126 Gullett (n 110).

127 Gullett (n 107) 54: the principle 'is rooted in misgivings about scientific interpretations of environmental tolerance of human activities and accepts uncertainty regarding environmental outcomes as a sufficient reason for action, recognising that we should not wait for conclusive proof of environmental harm before adopting appropriate avoidance measures.'

128 Gullett (n 107) 55.

the precautionary principle to the effect that an absence of full scientific certainty should not be used to support a failure to take measures designed to protect the environment.¹²⁹ The over-emphasis on paragraph (a) duties has served to diminish the potential effect of paragraph (d). Paragraph (d) is the most important statement in section 10 and the structure of the section should reflect this. The wording of paragraph (d) itself should also be changed. By referring to utilisation as well as sustainability it currently 'extends beyond the scope of the precautionary principle' and 'prevent[s] the true meaning of the precautionary [principle] from emerging from the Fisheries Act'.¹³⁰

One attempt to amend section 10 to correct the over-reach of paragraph (d) (but not the over-emphasis on paragraph (a)) has already failed.¹³¹ Significantly, the change was proposed by the Minister of Fisheries who first introduced dolphin protection measures and was dubbed the Minister who 'took the fish out of fish and chips' for his efforts.¹³² Although this change seemed on its first reading to have the support of parliamentarians, 'between then and when the Bill was taken to Select Committee, something happened. The [other parties] all miraculously changed their minds. What happened? I'll tell you what happened – certain lobby groups in the industry spoke to those MPs. The industry got to them.'¹³³

4. Conclusion

The New Zealand law relating to fishing-related mortality has many deficiencies. The result is that populations of key marine species that currently may

129 CBD (n 33), Preamble; ACAP (n 32), art II.3; United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks 2167 UNTS ref I-379244 p 3 (opened for signature 4 August 1995, in force 11 December 2001), art 6.2; United Nations General Assembly, Report of the UN Conference on Environment and Development (Rio de Janeiro, 3–14 June 1992) Annex 1 'Rio Declaration on Environment and Development' UNGA A/CONF.151/26 (vol 1) (12 August 1992), Principle 15; UNFAO, *Code of Conduct for Responsible Fisheries* FAOCDR 283720 (1995).

130 Modeste (n 110) 182.

131 The Fisheries Act 1996 Amendment Bill (2007) No 109-1, cl 4 proposed amending s 10 by replacing paras (c) and (d) with: '(c) if information is absent or is uncertain, unreliable, or inadequate, decision makers – (i) should be cautious; and (ii) should not use any of those factors as a reason for postponing or failing to take measures to ensure sustainability. The Minister of Fisheries acknowledged that this was because 'the current information principles are not consistent with the international application of [the precautionary] approach' (Option 4, 'Fisheries Act Amendment Bill 2006 – 2007' <<http://www.option4.co.nz/FisheriesMgmt/fisheriesbill.htm>> accessed 2 October 2011); Anderton 'Does the Law Support Sustainability of our Fisheries?' (n 40). The Bill was introduced and subsequently referred to Select Committee wherein, however, it was refocused away from s 10. Modeste suggests an alternative drafting (n 110) 182.

132 Fairfax NZ News, 'Industry 'Death-Knell' *The Press* (Christchurch, 29 May 2008) <<http://www.stuff.co.nz/the-press/465062/Industry-death-kill>> accessed 11 April 2012.

133 Anderton 'Does the Law Support Sustainability of our Fisheries?' (n 40).

be adversely affected by fishing-related mortality are probably continuing to decline and are unlikely to recover. Stronger measures are needed, but do not appear forthcoming. This article has suggested several simple changes to the legislation that could make a big difference:

- (1) Make some measures mandatory for at risk species to reduce external pressure on (especially) the Minister of Fisheries. Also, make it easier for this minister to make discretionary measures under the existing scheme by authorising 'reasonable', not just 'necessary' measures to address the adverse effects of fishing on marine animals.
- (2) Equalise the statutory positions and influence of the two ministers involved in fishing-related mortality and strengthen the role of the Minister of Conservation by releasing this minister from the obligation to seek the consent or concurrence of the Minister of Fisheries to any measures he or she proposes to protect marine animals from fishing. Both ministers should be required to consult each other.
- (3) Re-structure and re-phrase section 10 so that it better reflects the true meaning and intent of the precautionary approach. The paragraph (a) duty to base decisions on the best available information, while not unreasonable in itself, should be subject to paragraph (d), which in turn should say that absences of and uncertainties in information should not be used as reasons for failing to take measures to ensure sustainability.

Some of these changes are based on reforms proposed in the Marine Animals Protection Law Reform Bill. Should they be adopted, fishing-related mortality would not be managed as a fisheries issue, the sustainability of marine animal populations would not always be balanced against utilisation of fisheries, the necessity of protection measures would not have to be established from a starting point where there is a threat to the sustainability of the affected marine animal populations, and measures designed to protect marine animals would not be able to be defeated by exploiting uncertainties in existing levels of information. Instead, fishing-related mortality would be managed as part of the overall conservation of threatened species and reasonable protection measures would be able to be implemented on a precautionary basis.

However, change seems unlikely: Parliament's debate on the introduction of the Marine Animals Protection Law Reform Bill was a 'farce'.¹³⁴ The Bill's proposals were rejected outright as too expensive and too likely to upset the fishing industry.¹³⁵ All Members of Parliament who took part in its first and only reading professed a desire to protect marine animals, but then failed to take the opportunity it presented to strengthen the law.

134 Metiria Turei, 'A Private Member's Bill for Marine Animal Protection' in Research Cluster for Natural Resources Law, *Newsletter Three* (n 79) 2.

135 Bruce Munro, 'Wildlife Tourism Endangered' *The Star* (Dunedin, 6 August 2009) 3; n 9.