BEFORE THE ENVIRONMENT COURT AT AUCKLAND

I MUA I TE KŌTI TAIAO O AOTEAROA KI TĀMAKI MAKAURAU

IN THE MATTER of the Resource Management Act

1991(the **Act**)

AND

IN THE MATTER of appeals under clause 14 of the

First Schedule to the Act

BETWEEN BAY OF ISLAND MARITIME

PARK INCORPORATED (ENV-2019-AKL-000117)

ROYAL FOREST AND BIRD PROTECTION SOCIETY OF NEW ZEALAND INCORPORATED (ENV-2019-AKL-000127)

Appellants

AND NORTHLAND REGIONAL COUNCIL

Respondent

STATEMENT OF REBUTTAL EVIDENCE OF JONATHAN CLIVE HOLDSWORTH ON BEHALF OF THE NEW ZEALAND SPORT FISHING COUNCIL INC (MARINE & FISHERIES SCIENCE) Dated 22 June 2021

BROOKFIELDS LAWYERS

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1. INTRODUCTION

- 1.1 My full name is Jonathan Clive Holdsworth.
- 1.2 My rebuttal evidence is given on behalf of the New Zealand Sport Fishing Council (NZSFC).
- 1.3 My qualifications and experience are set out in my statement of evidence in chief dated 14 June 2021.
- 1.4 I have read the Code of Conduct for Expert Witnesses outlined in the Environment Court's Practice Note (2014) and have complied with it in preparing this evidence.

2. ECOSYSTEMS BASED FISHERIES MANAGEMENT

- 2.1 My evidence in chief discussed the need to move to a wider Ecosystem Based Fisheries Management (**EBFM**) approach that would take account of interconnections between species and the environment and better reflect Te Ao Māori.
- 2.2 The question of whether, and if so how, the Fisheries Act 1996 (**FA96**) adopts an EBFM approach was on the agenda for the fisheries expert joint witness conference. In the Fisheries Expert Joint Witness Statement dated 11 June 2021 (**Fisheries JWS**), it was noted that this matter is addressed in the experts' respective evidence. There was agreement that the FA96 has provisions that enable an ecosystem approach to fisheries management and a number of examples were given. However, some of the differences in the expert evidence were not recorded in the Fisheries JWS due to time constraints. My rebuttal evidence focuses on these differences.

Evidence Jacob Hore in relation to Fisheries Management

- 2.3 Mr Hore's evidence in relation to Fisheries Management discusses at paragraphs 48 51 management measures under the FA96 designed to avoid, remedy, or mitigate adverse effects of fishing on the aquatic environment.
- 2.4 Mr Hore notes that fishing can affect aquatic life and their habitats through incidental capture of untargeted species, competition effects (disturbing the balance of ecosystems), habitat modification, and other indirect effects. Mr Hore also notes that mobile bottom-contact fishing methods such as bottom

trawl, Danish seine and dredging impact the seafloor. The nature and extent of those impacts depends on a range of factors including seafloor type (e.g. mud, sand or rock), gear type, types of organisms encountered and the physical and oceanographic characteristics. Mr Hore also states that Fisheries New Zealand (**FNZ**) has established a comprehensive research programme to improve understanding of the distribution of benthic organisms, the impacts of bottom trawling on benthic habitats and organisms, including identifying potential expansion of the fishing footprint, and the potential for recovery of benthic habitats and organisms impacted by fishing.

- 2.5 In my opinion, these comments illustrate how slow FNZ have been in implementing EBFM. There is a wide body of international literature, spanning many decades, that describe the damage done to benthic communities by dragging heavy trawl gear or dredges across the seafloor. The adverse effects are well known.
- 2.6 Almost all the regulations prohibiting trawling, Danish seining and dredging in the territorial sea off Northland are legacy regulations that survived the transition to the QMS in 1986. It is one thing to have the functions, duties and power under the FA96 to avoid, remedy and mitigate adverse impacts of fishing the aquatic environment, and it's another to use them.
- 2.7 The only area in Northland inshore waters established for the express purpose of protecting benthic biodiversity since the FA96 was enacted is between North Cape and Cape Reinga in 30 to 80 metres of water. This area was surveyed by NIWA in 1999 and found to contain sponges (over 200 species) and bryozoans (over 300 species) in great diversity with very high rates of local endemism (i.e., many of the species are found nowhere else in the world).¹ There had been limited trawling in this area, unlike many other areas closer to ports, but the start of a dredge fishery for scallops drew attention to the rich benthic communities present.

Evidence Thomas Clark

2.8 The evidence of Mr Clark also discusses the aspects of the FA96 designed to avoid, remedy, or mitigate adverse effects of fishing on the aquatic environment. Mr Clark states at paragraphs 24 and 25:

¹ Cryer et al. 2000. Distribution and structure of benthic invertebrate communities between North Cape and Cape Reinga

The Minister has and uses their powers under Part 3 of the Act to protect the aquatic environment.

.....That report indicates that, as at 31 August 2011, Fisheries Act regulations with provisions that restrict the use of bottom contacting fishing methods cover nearly 27,000 square kilometres. The areas protected include all estuaries, bays and harbours and a number of other significant ecological areas such as Separation Point in Golden Bay, and the Poor Knights Islands. These regulations were initiated and enacted as sustainability measures under the FA96.

- 2.9 It is incorrect that these regulations were initiated as sustainability measures under the FA96. Trawl and Danish seine closures for East Northland harbours and most bays were included in the Sea Fisheries Regulations 1939 (Danish seine Part IX, Trawl Part XIX) which revoked and replaced earlier regulations. Specific areas included Raungaunu Bay, Doubtless Bay, Whangaroa Harbour, Bay of Islands, Whangaruru Harbour, Tutukaka Harbour, Whangarei Harbour and Bream Bay.
- 2.10 Subsequently the Fisheries (General) Regulations 1947 revoked the 1939 regulations (Danish seine closures regulation 65, trawl regulation 75). The Fisheries (General) Regulations 1950 revoked the 1947 regulations. The (Danish seine closures regulation 72, trawl regulation 80) and the Fisheries Act 1983 revoked the 1950 regulations.
- 2.11 The Fisheries (Auckland Commercial Fishing Restrictions) 1983 includes trawl and Danish seine closures to the same areas, with the inclusion of Parengarenga Harbour and changes to the area closed to trawling in Bream Bay and Danish seine closure moved out to the trawl line in Bay of Islands and Bream Bay.

Evidence Kim Drummond

2.12 The evidence of Mr Drummond also discusses the aspects of the FA designed to avoid, remedy, or mitigate adverse effects of fishing on the aquatic environment. Mr Drummond states at paragraph 15:

> New Zealand has a comprehensive and integrated fisheries management framework that applies to all aquatic life in the aquatic environment. That framework protects and gives effect to Treaty rights and interests, and has tools required to respond appropriately to the effects of fishing and address

concerns for ensuring sustainability of aquatic life, including protecting indigenous biodiversity.

- 2.13 Mr Drummond notes that the FA96 also provides a suite of tools that work in with management under the QMS to ensure sustainability. These tools are largely set out in s 11 and include area and method restrictions, seasons, size limits (minimum and/or maximums) and in specified circumstances the spatial separation of fishing sectors. Mr Drummond goes on to state that the FA96 does not establish a single species approach to fisheries management. Rather, it provides for the integrated management of fisheries where explicit obligations define how aquatic biodiversity and its key components (including habitat) are to be managed. These are all aspects of EBFM.
- While I agree that this is the intent of the FA96, I do not consider that the environment principles in section 9 FA96 are integrated into to most fisheries management decisions under the QMS. The primary management tool is an output control via changes to the Total Allowable Catch (TAC) applied to large quota management areas. FNZ advice to the Minister when setting or varying the TAC is primarily based on fisheries stock assessments which are all single species models, or based on trends in trawl survey abundance estimates for a species.
- 2.15 The research and conservation of interdependent species in the marine environment has primarily been for air breathing species such as seabirds, turtles, and marine mammals, many of which are listed as threatened. There are international obligations, focused research projects, and funding from institutions and government to mitigate threats to these species.
- 2.16 Marine ecosystems are complex and interconnected. The current state of fisheries science and fisheries management for the main commercial species has largely focused on maximum sustainable yield from single species stocks.
- 2.17 I have been an active member of FNZ science working groups and helped author submissions on fisheries management proposals for more than 20 years. In my experience, the environmental principles of the FA96 have had little influence on management decisions. I agree with the comment in the Prime Minister's Chief Science Advisors report on commercial fishing that:

The existence of legislative provisions that require or enable an Ecosystem Approach to Fisheries Management (EAFM) does not indicate the extent to which our fisheries management processes, policies and decisions reflect

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EAFM in practice – either generically or on a fishery by fishery basis. Much could be achieved in the short term by implementing the provisions already in the Act.²

Jonathan Clive Holdsworth Dated 22 June 2021

 $^{^2}$ The Future of Commercial Fishing in Aotearoa New Zealand A report from the Office of the Prime Minister's Chief Science Advisor (2021)