An overview of the Antarctic Treaty system and applicable New Zealand law

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Abstract

The Antarctic Treaty 1959 has now been in place for 60 years and is regarded by informed commentators as one of the most successful multi-party international treaty systems. This paper provides an opportunity to look back and take stock of previous success, and more importantly, an opportunity to assess the future prospects of the treaty system.

New Zealand has played a key role in the Antarctic Treaty system and has had a long involvement with Antarctica since accepting the transfer of sovereignty over the Ross Dependency in 1923. This paper therefore focuses on the effectiveness of the Antarctic Treaty system through a New Zealand lens.

Key words: Antarctica, future prospects, New Zealand.

Introduction

Antarctica is unique in public international law. Claimed by seven states but recognised by none as sovereign territory, the governance of the continent rests on the "without prejudice" clause in Article IV of the Antarctic Treaty 1959.[1] This device preserves the rights of claimants from potential competition while ensuring that other states are generally free to pursue activities without permission. This fragile compromise paradoxically provides stability for both scientific and tourist activities and the Antarctic governance system, and illustrates both the potential

[1] James Crawford, *Brownlie's Principles of Public International Law* (8th edn, Oxford University Press, 2012) 252.

weakness of the international arrangements that underpin these activities and their possibilities for future dynamic legal development.

While Article IV does not extinguish the territorial claims to Antarctica, the claims are suspended indefinitely because the Treaty does not provide for termination. Decision-making is by consensus via the annual consultative meeting but only the original parties (claimants) and other parties closely associated with substantial scientific research in the continent and surrounding seas are allowed to participate.[2]

The primary objectives of the Antarctic Treaty system are maintaining peace and security and promoting scientific research. Nuclear weapons are prohibited and military action is limited to peaceful purposes. The regime applies generally south of 60^0 S while reserving high seas rights for all states. These aspects of the system are illustrated by the "liberal" inspection provisions that allow parties to nominate observers who are given complete freedom of access across the continent at all times, by the implicit designation of the continent as the last terra nullis terrestrial area on the planet.[3] Notwithstanding these positive aspects of the regime, future problems abound in the shape of:

> Whaling disputes, continental shelf claims, prospecting for offshore hydrocarbon resources, and the effects of climate change …[4]

While other commentators also identify "the need to integrate oceans management across a range of sectors and institutions" as a future challenge facing Antarctica.[5]

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[2] Malcolm N Shaw, *International Law* (8th edn, Cambridge University Press, 2017) 399.

[3] James Crawford, *Brownlie's Principles of Public International Law* (8th edn, Oxford University Press, 2012) 346.

[4] James Crawford, *Brownlie's Principles of Public International Law* (8th edn, Oxford University Press, 2012) 346.

[5] Karen N Scott and David L VanderZwaag, "Polar Oceans and Law of the Sea" in Donald R Rothwell and others (eds) *The Oxford Handbook of the Law of the Sea* (Oxford University Press, 2015), 750.

To address these matters the original Treaty regime is supplemented by the Convention on the Conservation of Antarctic Seals 1972 (CCAS), the Convention on the Conservation of Antarctic Marine Living Resources 1980 (CCAMLR), and the Protocol on Environmental Protection to the Antarctic Treaty 1991 (Madrid Protocol).

Somewhat surprisingly the Antarctic Treaty system does not provide a comprehensive or omnibus definition of the Antarctic environment. The common denominator is that "dependent and associated ecosystems" clearly form part of the environment under the various instruments. For example, CCAMLR governs "the complex of relationships of marine living resources with each other and with their physical environment", while the Convention on the Regulation of Antarctic Mineral Resource Activities 1988 (CRAMRA) in terms of environmental damage (while not in force) pertains to "any impact on the living or non-living components of that environment or those ecosystems, including harm to atmospheric, marine or terrestrial life" and the Madrid Protocol also relates to "the intrinsic value of Antarctica, including its wilderness and aesthetic values".[6] Additionally, for the purposes of "protection" the Madrid Protocol designates the continent as a Special Conservation Area, and acknowledges the "intrinsic value" and "wilderness and aesthetic values" of Antarctica.[7] The regime protects Antarctica "in the interests of mankind as a whole".[8]

In particular, the strict controls put in place by CRAMRA (while now of largely historic interest as noted below) reflect both the divergent interests of the parties and the controversial nature of mineral exploitation. No

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6 Patricia Birnie and Alan Boyle, *International Law & The Environment* (2nd edn, Oxford University Press, 2002) 4; Philippe Sands and Jaqueline Peel, *Principles of International Environmental Law* (4th edn, Cambridge University Press, 2018) 15.

7 Patricia Birnie and Alan Boyle, *International Law & The Environment* (2nd edn, Oxford University Press, 2002) 46; Philippe Sands and Jaqueline Peel, *Principles of International Environmental Law* (4th edn, Cambridge University Press, 2018) 635.

8 Patricia Birnie and Alan Boyle, *International Law & The Environment* (2nd edn, Oxford University Press, 2002) 144.

mineral exploitation can take place under CRAMRA without approval from a committee established under the auspices of the Antarctic Mineral Resources Commission (AMRC) for the relevant area that can set binding regulations regarding (inter alia) environmental matters. The AMRC (assisted by a Scientific, Technical and Environmental Advisory Committee) has wide powers to determine what areas may be opened up for mineral exploitation, what regulations should apply to safeguard environmental protection, to ensure that environmental impact assessment occurs, and to keep mineral exploitation activities under review.[9] This model is similar to the International Sea-bed Authority.

However, CRAMRA has not entered into force as a result of opposition by Australia and France, and the Madrid Protocol that designates Antarctica as natural reserve and bans mineral exploitation for a period of 50 years has effectively superseded the arrangements described above.[10] Under the Protocol management is vested in the Committee on Environmental Protection that operates under the aegis of the Conference of Parties and thus requires unanimous decision-making. These arrangements can be viewed as a type of environmental "trusteeship" that overcomes the problem of state control of resources.[11]

The CCAS continues the theme of environmental protection and imposes restrictions on the numbers, species, gender, and location of seals that can be taken or killed annually. It also regulates hunting methods and establishes breeding and scientific reserves. Detailed provisions are included regarding the exchange of scientific information via annual

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9 Patricia Birnie and Alan Boyle, *International Law & The Environment* (2nd edn, Oxford University Press, 2002) 213; Philippe Sands and Jaqueline Peel, *Principles of International Environmental Law* (4th edn, Cambridge University Press, 2018) 637-638.

10 New Zealand is a signatory to CRAMRA (25 November 1988). But CRAMRA has not been ratified by any one of the 19 signatories, and is not expected to enter into force.

11 Patricia Birnie and Alan Boyle, *International Law & The Environment* (2nd edn, Oxford University Press, 2002) 214; Malcolm N Shaw, *International Law* (8th edn, Cambridge University Press, 2017) 400; Philippe Sands and Jaqueline Peel, *Principles of International Environmental Law* (4th edn, Cambridge University Press, 2018) 637-638.

reports prepared by the parties that are submitted to the Scientific Committee on Antarctic Research (SCAR).[12]

The Madrid Protocol also establishes a sophisticated dispute settlement process under the Antarctic Treaty. In particular, it provides for compulsory arbitration where conciliation and negotiation attempts have been exhausted. The arbitration process is novel and also provides for third parties to be involved in the process where they have a legal interest that could be "substantially" affected by the arbitral award.[13] Alternatively, parties can accept the jurisdiction of the International Court of Justice.

Beyond that, Article 8 and Annexe I of the Protocol make detailed provision for environmental impact assessment of activities. These arrangements are described below in the context of the Antarctica (Environmental Protection) Act 1994. Annex III of the Protocol prohibits waste disposal onto ice-free areas, and generally requires all other solid and liquid waste generated in Antarctic base camps to be stored prior to removal from the continent by the generator.[14] Additionally, Annexes IV, V, and VI of the Protocol respectively impose obligations on flagged ships of the parties consistent with MARPOL, provide for management plans to be prepared regarding the designated Antarctic Specially Protected Areas and the Antarctic Specially Managed Areas that prohibit or restrict or manage activities in these areas, and address liability arising from environmental emergencies by requiring the parties to take preventive measures to reduce risk (including having contingency plans in place for prompt clean-up and remediation) and imposing strict liability to repay costs incurred by other parties.[15]

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[12] Philippe Sands and Jaqueline Peel, *Principles of International Environmental Law* (4th edn, Cambridge University Press, 2018) 635. New Zealand has signed, but has not ratified CCAS.

[13] Patricia Birnie and Alan Boyle, *International Law & The Environment* (2nd edn, Oxford University Press, 2002) 229.

[14] Philippe Sands and Jaqueline Peel, *Principles of International Environmental Law* (4th edn, Cambridge University Press, 2018) 618.

[15] Philippe Sands and Jaqueline Peel, *Principles of International Environmental Law* (4th edn, Cambridge University Press, 2018) 641-642.

As noted above, the ecosystem-based approach in CCAMLR is dynamic and innovative. For example, the CCAMLR preamble emphasises the need to protect both the terrestrial continent and the surrounding marine environment as an integrated ecosystem (based on increased scientific knowledge), and the substantive treaty provisions build on this complex web of relationships and extend protection to all living resources within the marine areas including birds,[16] and the Madrid Protocol provides a mechanism for applying the Convention on Biological Diversity 1992 (CBD) across the Antarctic environment.[17] Notwithstanding the fact that the CCAMLR preamble references environmental protection as the "prime responsibility" of the parties and the fact that the Commission is given legal personality under Article VII and has the power to prepare conservation measures under Article IX, the parties have been unable to agree on any conservation measures regarding migratory species and biodiversity due the need for consensus (Article XII) and the provision made for objections (Article IX). As a result, compliance with the CBD has been left for the parties to pursue outside the Antarctic Treaty system.[18]

While CCAMLR enables the "rational use" of resources, any harvesting is required to be carried out in accordance with ecological principles that are designed to avoid population reduction and maintain stable population levels by ensuring that natural annual recruitment levels are (in particular) maintained. This approach is radically different from other management approaches (e.g. maximum sustainable yield), but nevertheless encounters practical difficulties in terms of implementation because the CCAMLR institutions (i.e. the Commission and the Scientific Committee) currently only meet annually and fishing interests frequently override

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16 Patricia Birnie and Alan Boyle, *International Law & The Environment* (2nd edn, Oxford University Press, 2002) 601; Philippe Sands and Jaqueline Peel, *Principles of International Environmental Law* (4th edn, Cambridge University Press, 2018) 635-637.

17 Patricia Birnie and Alan Boyle, *International Law & The Environment* (2nd edn, Oxford University Press, 2002) 601.

18 Patricia Birnie and Alan Boyle, *International Law & The Environment* (2nd edn, Oxford University Press, 2002) 606-607; Philippe Sands and Jaqueline Peel, *Principles of International Environmental Law* (4th edn, Cambridge University Press, 2018) 635-637.

ecological interests. This interaction makes it difficult for science based decision-making to prevail, and fishing by third party states has (in particular) been difficult to control.[19]

The concept of environmental trusteeship noted in relation to the CRAMRA regime above brings into sharp focus the legal issues associated with common areas or common resources where "collaboration is required because they lie beyond the jurisdiction of individual states".[20] Absent collaboration, "all states" would otherwise "have access to the commons, and no state" would be "legally in a position to impose a particular approach to their use or protection".[21] Overall, the Antarctic Treaty system presents a novel response to these issues of state responsibility, including, for example: the designation of Antarctica "exclusively for peaceful and scientific uses"; the interlocking instruments within the Treaty system and their focus on an ecosystem approach that embraces both "the Antarctic continent and associated marine ecosystems"; the focus in CCAMLR and the Madrid Protocol on "safeguarding the interests of humankind rather than merely those of the treaty parties"; the moratorium on all mineral resource activities, in particular, "the sweeping nature of the restriction that it places on the open access normally associated with common property"; and the attempts "made to establish an innovative environmental liability regime" (e.g. the provisions made in CRAMRA for the "restoration or compensation of damage to ecosystems").[22] However, notwithstanding the strong emphasis within the Antarctic Treaty system on the concept of "trusteeship" for the benefit of "humankind", this approach remains

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19 Patricia Birnie and Alan Boyle, *International Law & The Environment* (2nd edn, Oxford University Press, 2002) 552-553.

20 Jutta Brunee, "Common Areas, Common Heritage, and Common Concern" in Daniel Bodansky, Jutta Brunee, and Ellen Hey (eds) *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007) 554.

21 Jutta Brunee, "Common Areas, Common Heritage, and Common Concern" in Daniel Bodansky, Jutta Brunee, and Ellen Hey (eds) *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007) 554.

22 Jutta Brunee, "Common Areas, Common Heritage, and Common Concern" in Daniel Bodansky, Jutta Brunee, and Ellen Hey (eds) *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007) 561.

distinctively different from the "common heritage of mankind" promoted via the United Nations Convention on the Law of the Sea 1982 (Article 136) in relation to the management of the deep seabed.[23]

Some commentators have, however, observed that international governance systems for common areas or common resources (including Antarctica) are sometimes justified by the fact that "economic exploitation of these areas was not yet feasible due to lack of appropriate technology".[24] Despite this economic justification for the Antarctic Treaty system, trusteeship has been a common theme since 1945. For example, placing Antarctica under the supervision of the United Nations Trusteeship Council (normally reserved for former colonies in transition toward independence) was mooted in 1947 but rejected because the Trusteeship system "applied only to people not to penguins".[25] While other scholars have argued that environmental trusteeship is required to regulate non-state actors, because the international treaty regimes "lack overarching objectives, are full of loopholes and have virtually no effect in preventing continued degradation", and because there is "no functioning governance of the global commons".[26] As a result, they have proposed the establishment of a "World Environment Organization" or "UN Trusteeship Council" to govern common areas including Antarctica.[27] The concept of trusteeship has also been suggested given the "glaring misfit" between sovereign authority and the inability of states to govern common areas

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[23] Carina Costa de Olivera and Sandrine Maljean-Dubois, "The contribution that the concept of global public goods can make to the conservation of marine resources" in Ed Couzens and others (eds) *Protecting Forest and Marine Biodiversity: The Role of Law* (Edward Elgar Publishing, 2017) 305-307.

[24] Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing, 2015) 72.

[25] PJ Beck, *The International Politics of Antarctica* (Croom Helm, 1986) 271; Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing, 2015) 231-232.

[26] Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing, 2015) 245.

[27] Peter H Sand, "The Concept of Public Trusteeship in the Transboundary Governance of Biodiversity" in Louis J Kotze and Thilo Marauhn (eds) *Transboundary Governance of Biodiversity* (Brill, 2014) 51-52; Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing, 2015) 251-252.

beyond national jurisdiction.[28] Several factors may encourage states to become trustees. First, using trusteeship to define community interests, political ambitions, and the right to "freely dispose of natural wealth and resources".[29] Second, viewing states "as agents for humanity as a whole" in order to legitimize the exercise of sovereignty over common areas or common resources.[30] Third, basing the power to exclude others from access to common areas or common resources on property concepts that included a moral dimension to exercise such powers for the benefit of humankind.[31] Beyond that, viewing states as trustees can result in more effective national implementation of international law obligations.[32] But some institutional oversight of state exercise of trusteeship functions is considered appropriate to avoid "democratic failure" by ensuring that states are subject to more than merely "minimal obligations".[33]

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[28] Eyal Benvenisti, "Sovereigns as Trustees for Humanity: On the Accountability of States to Foereign Stakeholders" (2013) 107 (2) AJIL 295, 301; Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing, 2015) 169.

[29] Eyal Benvenisti, "Sovereigns as Trustees for Humanity: On the Accountability of States to Foereign Stakeholders" (2013) 107 (2) AJIL 295, 301; Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing, 2015) 175.

[30] Eyal Benvenisti, "Sovereigns as Trustees for Humanity: On the Accountability of States to Foereign Stakeholders" (2013) 107 (2) AJIL 295, 305; Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing, 2015) 175-176.

[31] Eyal Benvenisti, "Sovereigns as Trustees for Humanity: On the Accountability of States to Foereign Stakeholders" (2013) 107 (2) AJIL 295, 308-310; Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing, 2015) 176.

[32] Eyal Benvenisti, "Sovereigns as Trustees for Humanity: On the Accountability of States to Foereign Stakeholders" (2013) 107 (2) AJIL 295, 316; Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing, 2015) 179.

[33] Eyal Benvenisti, "Sovereigns as Trustees for Humanity: On the Accountability of States to Foereign Stakeholders" (2013) 107 (2) AJIL 295, 300, 303; Klaus Bosselmann, *Earth Governance: Trusteeship of the Global Commons* (Edward Elgar Publishing, 2015) 202.

The Antarctic Treaty system (notwithstanding the strengths noted above) will nevertheless rely in part on the national implementation of international law. For example:[34]

> Legislative implementation of a state's international obligations performs a 'delegated normativity' function, conditioning not only state but also non-state actors' behaviour.

This paper will therefore consider next the vertical implementation of the Antarctic Treaty system via New Zealand statute law.

New Zealand: Antarctic governance

New Zealand has enjoyed a long period of engagement with Antarctica.[35] According to Maori tradition, the Polynesian chief, Ui Te Rangiora, was the first person to see the icebergs of Antarctica during a voyage from New Zealand across the Southern Ocean in 650 AD,[36] and archaeological evidence has been found of Maori settlement (reputedly) from that time on the Antipodes Islands and later Maori settlements from the 13th and 14th centuries on the Auckland Islands.[37] In modern times, the New Zealand whaler Tuati (alias John Sac) was part of the United States Exploring Expedition to the Southern Ocean led by Captain Charles Wilkes during the period 1838-1842 and was reputed to be the first New Zealander to sight the west coast of Antarctica in 1840, while Alexander von Tunzelmann became the first recorded New Zealander to land on the Antarctic continent in 1895 as part of a Norwegian whaling and sealing

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[34] Catherine Redgwell, "National Implementation" in Daniel Bodansky, Jutta Brunee, and Ellen Hey (eds) *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007) 929.

[35] Antarctica is defined by s 2(1) of the Antarctica Act 1960 as "the area south of 60^0 south latitude, including all ice shelves in that area".

[36] www.history.govt.nz.

[37] GL Pearce, "Nga-Iwi-O-Aotea", Te Ao Hou The Maori Magazine (No 59, June 1967) 43; Atholl Anderson, "Subpolar settlement in South Polynesia", Antiquity Magazine (Volume 79, Issue 306, December 2005), 791. The first modern recorded discoveries of Antarctica were the sightings by Fabian Gottleib von Bellingshausen and Mikhail Lazarev (27 January 1820), Edward Bransfield and William Smith (30 January 1820), and Nathaniel Palmer (17 November 1820).

voyage.[38] During the first half of the 20th century a number of New Zealanders were members of the Antarctic expeditions led by Captain Robert Falcon Scott, Sir Ernest Shackleton, Douglas Mawson, and Richard Byrd,[39] and Dunedin and Lyttelton became established as gateway ports to the Antarctic. However, the most intensive period of New Zealand activity in the Antarctic was 1955-1958 as a result of the Commonwealth Trans-Antarctic Expedition (that saw Sir Edmund Hillary reach the South Pole overland by tractor in 1958), the focus on the International Geophysical Year 1957-1958, and the opening of Scott Base in 1957.[40]

The Order in Council made by King George V on 30 July 1923 defined the Ross Dependency as "that part of His Majesty's Dominions in the Antarctic seas which comprises all the islands and territories between the 160th degree of east longitude and the 150th degree of west longitude which are situated south of the 60th degree of south latitude".[41] The decision by the New Zealand Government to accept the offer of the transfer of sovereignty to the Ross Dependency from the United Kingdom was made "on behalf of the Empire as a whole, and not specially in the interests of New Zealand".[42]

Pursuant to the British Settlements Act 1887 that enabled the Sovereign to establish the governance arrangements for any British settlement, the Order in Council appointed the Governor-General of New Zealand for the

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38 www.history.govt.nz.

39 Discovery Expedition 1901-1904 (Scott); Nimrod Expedition 1908-1909 (Shackleton); Australasian Antarctic Expedition 1911-1914 (Mawson); Endurance Expedition 1914-1917 (Shackleton); British, Australian and New Zealand Antarctic Research Expedition 1929-1931 (Mawson); Byrd Antarctic Expedition (BEA2) 1933-1935 (Byrd); www.history.govt.nz.

40 www.history.govt.nz.

41 Order in Council Providing for Government of Ross Dependency 1923 (*Gazette* 1923, vol II, No 63 (16 August) p2211) cl I. The Dependency was discovered by Captain James Clark Ross in 1841 who explored and named the Ross Sea, Victoria Land, Mount Erebus, Mount Terror, the Great Ice Barrier (now known as the Ross Ice Shelf), and McMurdo Sound, and subsequently visited New Zealand.

42 Sir Francis Bell, Attorney-General, *New Zealand Parliamentary Debates* 202 (15 August 1923), p81.

time being as the Governor of the Ross Dependency,[43] and empowered the Governor to make such laws as may be required "for the peace, order, and good government" of the Dependency (subject to any instructions received from any Ministers of the Crown) and authorised the Governor to grant and dispose of any lands within the Dependency.[44]

Subsequently, Viscount Jellicoe (the newly appointed Governor) made the Ross Dependency Regulations 1923. They provided that all New Zealand laws in force on 14 November 1923 should apply within the Ross Dependency in so far as they were applicable to the conditions of the Dependency, and that any statutes enacted subsequently by the New Zealand legislature should "as far as applicable" have the same force and effect within the Dependency unless disallowed or modified by the Governor.[45] Thus any New Zealand statutes enacted after 14 November 1923 will only be law within the Ross Dependency where they expressly provide for such extraterritorial effect. Increasingly, the New Zealand Parliament has legislated for the Ross Dependency after becoming a party to the Antarctic Treaty on 1 November 1960.

Section 2(1) of the Territorial Sea, Contiguous Zone, and Exclusive Economic Zone Act 1977 defines New Zealand as including the Ross Dependency, except for the purposes of pt 2 that established the exclusive economic zone (EEZ) of New Zealand. Accordingly, the provisions in pt 1 of the statute that establish the 12nm territorial sea of New Zealand and beyond that the 12nm contiguous zone of New Zealand also apply to the Ross Dependency and establish these zones in the waters around the Dependency. Subsequently, the legal status of the Ross Dependency as part of the realm of New Zealand was confirmed in 1983 when the Letters Patent Constituting the Office of Governor-General

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[43] Order in Council Providing for Government of Ross Dependency 1923 (*Gazette* 1923, vol II, No 63 (16 August) p2211) cl II.

[44] Order in Council Providing for Government of Ross Dependency 1923 (*Gazette* 1923, vol II, No 63 (16 August) p2211) cl IV, cl V.

[45] The Governor also made the Ross Dependency Whaling Regulations 1926 and 1929 to prohibit whaling operations within the boundaries of the Ross Dependency unless expressly allowed by licence, but no whaling licences were issued under the regulations.

of New Zealand were updated and replaced.[46] The Ross Dependency is defined as including "all islands and ice shelves with the Dependency, and the continental shelf of the Dependency".[47] Accordingly, there is a potential discrepancy between these legal provisions that on the one hand include the continental shelf, but on the other hand fail to include the Dependency within the New Zealand EEZ.

New Zealand's criminal jurisdiction in Antarctica

The Antarctica Act 1960 extends New Zealand criminal jurisdiction to offences committed in the Ross Dependency by any person, or in any other part of Antarctica by New Zealand citizens or permanent residents (except while on board any ship or aircraft).[48] Criminal offences committed in other parts of Antarctica by observers or exchanged scientists (who are New Zealand citizens) are deemed to have been committed in New Zealand, and the New Zealand courts have jurisdiction regarding such offences.[49] Civil and criminal jurisdiction over observers or exchanged scientists (who are foreign nationals of any contracting party to the Antarctic Treaty) is restricted regardless of whether any act or omission was done in the Ross Dependency or elsewhere in Antarctica, and the New Zealand courts have no jurisdiction over such persons unless jurisdiction is waived by the other contracting party.[50]

Antarctic Marine Living Resources Act 1981

The Antarctic Marine Living Resources Act 1981 was enacted to give effect to CCAMLR. The statute restricts the taking of marine organisms (whether dead or alive) and requires permits to be obtained from the Minister of Fisheries. When deciding a permit application, the Minister

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46 Letters Patent Constituting the Office of Governor-General of New Zealand (SR 1983/225), cl 1(e). The realm of New Zealand also comprises the Cook Islands, Niue, and Tokelau.

47 Antarctica (Environmental Protection) Act 1994, s 7(1).

48 Antarctica Act 1960, s 3.

49 Antarctica Act 1960, s 4.

50 Antarctica Act 1960, s 5.

must have regard to the objectives and principles of CCAMLR, and the need to conserve marine organisms in accordance with CCAMLR; and the Minister may attach such conditions as he or she thinks fit, including conditions that restrict what may be taken, the quantum that may be taken, where it may be taken from, the period when it may be taken, and the purposes for which it may be taken.[51]

Provision is made for criminal offences and penalties (fines up to $250,000), and a defence of prior authorisation under New Zealand or foreign law is available.[52] Leaving traps or substances where they may harm marine organisms is also an offence (subject to fines of up to $100,000), and provision is made for defences in circumstances of stress or emergency, or in cases where the act or omission was unavoidable and allowed by the permit or was necessary to prevent damage to equipment.[53]

Antarctica (Environmental Protection) Act 1994

The Antarctica (Environmental Protection) Act 1994 was enacted to give effect to New Zealand's international obligations under the Madrid Protocol. In particular, it: prohibits mineral resource activities; provides for environmental impact assessments; includes measures for the conservation of fauna and flora and protected areas; provides for waste disposal; and provides for the application of the Maritime Transport Act 1994 regarding marine pollution. Prospecting, exploration and mining of mineral resources is prohibited throughout Antarctica, its ice shelves, the islands south of 60 degrees south latitude, and the adjacent continental shelf.[54] Any person who contravenes this prohibition commits an offence, and on conviction may be sentenced to up to two years' imprisonment or a fine of up to $200,000. Additionally, New Zealand citizens and corporations also commit an offence when they carry out mineral resource activities elsewhere in Antarctica; and foreign nationals, who are members

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51 Antarctic Marine Living Resources Act 1981, s 5.

52 Antarctic Marine Living Resources Act 1981, s 7.

53 Antarctic Marine Living Resources Act 1981, s 13.

54 Antarctica (Environmental Protection) Act 1994, s 11, s 14.

of official expeditions, and New Zealand citizens and permanent residents on board any ship or aircraft supporting an official expedition, may also commit offences under this provision.[55]

The statute provides for a hierarchy of environmental evaluation regarding any proposed activities in Antarctica. A preliminary environmental evaluation is required to assess whether the proposed activity is likely to have less than minor or transitory impacts on the Antarctic environment. The evaluation must include: a description of the proposed activity; a statement about the anticipated environmental effects; whether another contracting party to the Antarctic Treaty has applied or is applying the environmental assessment procedures under the Protocol for the activity; New Zealand-based contact details for the application; the number of likely persons on any expedition; and the date and place of departure for Antarctica. Where the Minister of Foreign Affairs and Trade considers that any effects are likely to be less than minor or transitory, he or she must notify the applicant that the proposed activity may be carried out.[56]

An initial environmental evaluation is also required unless the Minister has determined that any effects will be less than minor or transitory, or the applicant proceeds to prepare a comprehensive environmental evaluation.[57] The initial environmental assessment is required to include sufficient detail to enable an assessment of the scale and significance of any potential effects on the Antarctic environment.[58] Where the Minister considers (after reviewing any comprehensive evaluation) that any effects are likely to be less than minor or transitory, he or she must notify the applicant that the proposed activity may be carried out subject to any directions made about the activity (which may include conditions, monitoring requirements or payment of a compliance bond).[59] A draft comprehensive environmental evaluation is required where the applicant

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55 Antarctica (Environmental Protection) Act 1994, s 12, s 13.

56 Antarctica (Environmental Protection) Act 1994, s 17.

57 Antarctica (Environmental Protection) Act 1994, s 18(1).

58 Antarctica (Environmental Protection) Act 1994, s 18(2).

59 Antarctica (Environmental Protection) Act 1994, s 18(3), s 10(1).

proceeds directly to prepare that evaluation, or where the Minister considers that the proposed activity is likely to have more than a minor or transitory effect on the Antarctic environment.[60]

Where a draft comprehensive environmental evaluation is required, it will be prepared in greater detail to cover the matters listed in Article 3(2) of Annex I to the Madrid Protocol, including consideration of alternatives, cumulative effects and accident responses.[61] Consultation is also required with the parties to the Madrid Protocol and the Committee on Environmental Protection established under Article 11 of the Madrid Protocol, together with public notification in New Zealand.[62] A final comprehensive environmental evaluation may be required: on the advice of the Committee on Environmental Protection, after the draft has been considered by the Consultative Meeting under Article IX of the Antarctic Treaty; or by the Minister where he or she thinks that there is unreasonable delay by the Consultative Meeting in considering the draft.[63] The final comprehensive environmental evaluation must address, and include summaries of, any comments received as a result of the consultation process.[64] After considering the final comprehensive environmental evaluation, the Minister is required to notify the applicant as to whether the proposed activity may be carried out, including any directions about the activity.[65]

Permits are required for: carrying out activities in any Antarctic Specially Protected Area;[66] removing any part of a Historic Site or Historic Monument;[67] taking any native birds or mammals in Antarctica;[68] removing or damaging native plants in Antarctica in a way that may

60 Antarctica (Environmental Protection) Act 1994, s 18(4), s 19(1).

61 Antarctica (Environmental Protection) Act 1994, s 19(2).

62 Antarctica (Environmental Protection) Act 1994, s 19(3).

63 Antarctica (Environmental Protection) Act 1994, s 20(1).

64 Antarctica (Environmental Protection) Act 1994, s 20(2).

65 Antarctica (Environmental Protection) Act 1994, s 20(3), s 10.

66 Antarctica (Environmental Protection) Act 1994, s 27(1), s 28(1)(a), s 30.

67 Antarctica (Environmental Protection) Act 1994, s 27(2), s 27(3).

68 Antarctica (Environmental Protection) Act 1994, s 28(1)(b), s 31.

significantly affect their local distribution or abundance;[69] and introducing non-indigenous animals, plants or microorganisms into Antarctica.[70] These activities are generally prohibited without a permit, and provision is made for offences and penalties in the event of any non-compliance (for example, sentences of up to six months' imprisonment or fines of up to $100,000 may be imposed).[71] Generally, waste disposal in Antarctica is unlawful.[72]

The Antarctica (Environmental Protection) Act 1994 was amended by the Antarctica (Environmental Protection: Liability Annex) Amendment Act 2012 to give effect to Annex VI to the Madrid Protocol regarding liability arising from environmental emergencies. But these amendments are not currently in force. An Order in Council is required to be made by the Governor-General setting the date for the commencement of these provisions.

Other relevant statutes

New Zealand has enacted a broad range of extraterritorial statutory provisions that apply to the Ross Dependency.

For example, tourism is regulated by the need for visas or permits to enter the Ross Dependency and tourist are required to pay a levy to contribute to the costs of conserving the unique Antarctic environment. Under the Immigration (Visa, Entry Permission, and Related Matters) Regulations 2010 members of scientific programmes or expeditions under the auspices of a Contracting Party to the Antarctic Treaty (or any person associated with such a programme or expeditions) are however exempted from the international visitor conservation and tourism levy,[73] and are entitled to the waiver of any transit visa requirement or the requirement for

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69 Antarctica (Environmental Protection) Act 1994, s 28(1)(c), s 31.

70 Antarctica (Environmental Protection) Act 1994, s 28(1)(e), s 28(2), s 31.

71 Antarctica (Environmental Protection) Act 1994, s 33.

72 Antarctica (Environmental Protection) Act 1994, s 34, s 35, s 36, s 37.

73 Immigration (Visa, Entry Permission, and Related Matters) Regulations 2010, s 26AAD(2)(e); Customs and Excise (Border Processing Levy) Order 2015, cl 11; Biosecurity (Border Processing Levy) Order 2015, cl 9.

a visa permitting travel to New Zealand (where a temporary entry class visa is sought).[74] Such persons are deemed to have been granted entry permission and hold a temporary visa where they enter the Ross Dependency from a foreign country (including where they subsequently travel to another part of New Zealand).[75]

The Marine Mammals Protection Act 1978 also has very broad territorial and extraterritorial application. It applies to acts and omissions that occur anywhere within New Zealand or within New Zealand waters,[76] acts and omissions that occur on any New Zealand ship or aircraft wherever it may be, and to acts and omissions carried out by New Zealand citizens wherever the person may be.[77] Under the statute holding marine mammals (e.g. seals, whales, dolphins, and porpoises)[78] in captivity or taking them from their natural habitat (whether alive or dead) is prohibited, unless a permit is obtained from the Minister of Conservation.[79] However, these provisions do not derogate from the provisions in pt 4 of the Antarctica (Environmental Protection) Act 1994 (that gives effect to Annexes II and V of the Madrid Protocol), or the Ross Dependency Whaling Regulations 1929 (that prohibit whaling operations within the boundaries of the Ross Dependency unless expressly allowed by licence).[80]

Beyond that, the functions of the Department of Conservation under s 6(c)(ii) of the Conservation Act 1987 also include promoting the benefits to present and future generations of the conservation of the natural and

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74 Immigration (Visa, Entry Permission, and Related Matters) Regulations 2010, sch 1, cl 6; sch 2, cl 3.

75 Immigration (Visa, Entry Permission, and Related Matters) Regulations 2010, sch 3, cl 11, cl 12.

76 New Zealand fisheries waters are defined by s 2(1) of the Fisheries Act 1996 as including all waters in the exclusive economic zone, all waters in the territorial sea, all internal waters, and all other fresh or estuarine waters where indigenous and acclimatised aquatic fauna and flora are found.

77 Marine Mammals Protection Act 1978, s 1.

78 Marine Mammals Protection Act 1978, s 2(1).

79 Marine Mammals Protection Act 1978, s 4.

80 Marine Mammals Protection Act 1978, s 20.

historic resources of New Zealand's sub-Antarctic islands (subject to the provisions of the Conservation Act 1987), and of the Ross Dependency and Antarctica generally (consistent with all relevant international agreements).

Antarctic science

The principal functions of the New Zealand Antarctic Institute include developing, managing, and executing New Zealand activities in Antarctica, the Southern Ocean, and the Ross Dependency in particular; maintaining and enhancing New Zealand Antarctic research; and cooperating with similar institutions and organisations within New Zealand and internationally.[81] The Institute is required under s 6 of the New Zealand Antarctic Institute Act 1996 to carry out its functions in a manner that is (inter alia) consistent with New Zealand's international obligations, and in particular with "the need to conserve the intrinsic values of Antarctica and the Southern Ocean" and "active and responsible stewardship of the Ross Dependency for the benefit of present and future generations of New Zealanders".

In particular, the New Zealand Strategy for the Future Management of the Marine Living Resources and Biodiversity of the Ross Sea (2006) seeks to balance "well managed sustainable harvesting" with "marine protection to safeguard the long-term ecological viability of marine systems and protect Antarctic marine biological diversity and areas potentially vulnerable to human impacts".[82] These objectives are to be achieved by: increasing marine research and ecosystem monitoring; improving fisheries management by establishing a catch allocation mechanism, and by permanently codifying non-catch and environmentally focused conservation measures; promoting the establishment of a high seas marine protected area; combating illegal unreported and unregulated fishing; and improving the effectiveness of the Antarctic Treaty system.[83]

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81 New Zealand Antarctic Institute Act 1996, s 5.

82 www.mfat.govt.nz.

83 www.mfat.govt.nz.

The Antarctica Science Platform is currently funded by an appropriation of $36,549,000 during the period 1 July 2019 to 30 June 2024.[84]

Marine protected areas

New Zealand has also been committed to establishing a marine protected area (MPA) in the Ross Sea that balances marine protection, sustainable fishing and opportunities to pursue scientific research. Together with the United States, New Zealand presented a joint proposal to the meeting of the CCAMLR Commission in Hobart in 2012. The proposal was science-based and sought to protect a range of ecosystems and habitats. Following subsequent discussions at meetings of the Commission during 2013, the Commission adopted the Ross Sea MPA in 2016. This decision "signalled" a move from regulation over access to advancing conservation by establishing (what was then) the world's largest MPA covering 2,060,000 sq km, of which 1,120,000 sq km is fully protected.[85] The MPA designation will remain in place for a period of 35 years from 1 December 2017.

The MPA covers one of the world's most biologically diverse and pristine natural areas and provides a home to (inter alia) to 30% of all Adelie penguins, 30% of Antarctic petrels, 25% of all Emperor penguins, 50% of Ross Sea killer whales, and 50% of South Pacific Weddell seals, and protects critical habitats and foraging areas for these species. Overall, the MPA strikes a balance between environmental protection, sustainable fishing, and scientific research. To meet these general objectives the MPA comprises three zones: the General Protection Zone (GPA) where no commercial fishing is allowed; the Special Research Zone (SRZ) where limited krill and toothfish fishing is allowed for research purposes; and the Krill Research Zone (KRZ) where controlled fishing for krill is allowed for research purposes. The objectives of the MPA will be assessed by the

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[84] Appropriation (2019/20 Estimates) Act 2019, s 7, sch 2.

[85] J Jabour and D Smith, "The Ross Sea region marine protected area: can it be successfully managed?" Ocean Yearbook 32 (2018) 190. Subsequently, the Cook Islands Parliament enacted the Marae Moana Act 2017 that establishes the Marae Moana multiple-use MPA covering the whole Cook Island's exclusive economic zone (1,976,000 sq km).

Commission every 10 years to ensure that it continues to provide effective protection.[86] However, the MPA does not satisfy the IUCN definition of a marine protected area because the designation (35 years) is not permanent.

While the designation of the Ross Sea MPA is clearly significant, it should be considered in the context of the desire by CCAMLR to establish a representative system of MPAs in the Southern Ocean. Current proposed MPAs (at the time of writing) include: the Western Antarctic Peninsula MPA proposed by Argentina and Chile in 2018, the East Antarctica MPA (950,000 sq km) proposed by Australia, France, and the European Union in 2011; and the Weddell Sea MPA (2,000,000 sq km) proposed by the European Union and Germany in 2016 (including the 58 sq km Bouvet Island MPA designated by Norway in 1971). There are currently no proposals to establish MPAs in the Amundsen and Bellingshausen seas. Beyond that, existing CCAMLR MPAs designated by Antarctic Treaty consultative parties include: the South Georgia and South Sandwich Islands MPA (1,070,000 sq km) designated by the United Kingdom in 2012 (but contested by Argentina), the Weddell Sea MPA (2,000,000 sq km) proposed by the European Union and Germany in 2016 (including the 58 sq km Bouvet Island MPA designated by Norway in 1971), the Prince Edward Islands MPA (180,000 sq km) designated by South Africa in 2013, the Crozet Islands and Kerguelen Islands MPA (1,140,000 sq km) designated by France in 2017, and the Heard Island and McDonald Islands MPA (71,000 sq km) designated by Australia (as a World Heritage Site in 1997) and subsequently expanded in 2014. The first MPA was designated around the South Orkney Islands (94,000 sq km) in the Western Antarctic Peninsula domain in 2009. The overall picture is therefore one of gradually expanding protection of the fragile Southern Ocean environment via the CCAMLR negotiation process.[87]

Whaling, sovereignty, hydrocarbon resources, and climate change

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[86] www.mfat.govt.nz.

[87] www.pewtrusts.org.

New Zealand has enacted a broad range of legislation to give normative effect to the Antarctic Treaty system. In particular, these statutes will have an effect on the behaviour of non-state actors. There is however no standard approach in these statutes regarding how natural and juridical persons should be bound by these obligations. Accordingly, adopting a uniform approach whereby all New Zealand citizens, permanent residents, and registered aircraft, companies, and ships are bound by these obligations (regardless of whether any acts or omissions are carried out within the Ross Dependency or Antarctica generally) would be sensible in terms of ensuring that activities within New Zealand's jurisdiction or control do not cause damage to the environment.[88]

Prohibiting whaling has been a feature of the Ross Dependency legal regime since 1926. New Zealand's continued focus (together with Australia) on whaling in the Southern Ocean is not therefore surprising. For example, the decision of the International Court of Justice (ICJ) in *Whaling in the Antarctic* (*Australia v Japan: New Zealand intervening*),[89] focused on the legality of Japan's whaling programme in the Southern Ocean (JARPA II). Australia contended that JARPA II was unlawful and in breach of the provisions of the International Convention on the Regulation of Whaling 1946, and sought orders that Japan should cease the programme. New Zealand's intervention was limited to presenting its views on the interpretation of the Convention. In particular, the proceedings centred on Article VIII(1) of the Convention that allows the killing of whales for the purposes of scientific research under a special permit issued by a State party. Absent the issue of a valid permit under Article VIII whaling is generally prohibited under the Convention. A key submission made by New Zealand in its written observations was whether Article VIII was a "self-judging" provision to be determined solely by the State party concerned, or whether it should be determined objectively. The ICJ agreed with the position maintained by New Zealand, and

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88 Rio Declaration 1992, Principle 2.

89 ICJ Reports 2014, 226.

recorded in the concession made by Japan during the oral proceedings that:[90]

> … the test … [is] whether a State's decision is objectively reasonable, or 'supported by coherent reasoning and respectable scientific evidence and … in this sense, objectively justifiable'.

Overall, the position adopted by New Zealand provided the catalyst for the ICJ to explore what the appropriate standard of review should be in relation to the exercise of discretionary powers. The judgment marks a transition from *Wednesbury* irrationality review to a much narrower margin of appreciation for decision-makers where the Court's objective view of the decision becomes paramount. This finding is important because it provides a handle to depart from deference in (potentially) all cases. Beyond that, the separate opinion of Judge Xue also clarified the standard of expert evidence required to support discretionary decision-making by importing the "best evidence" rule.[91] But the New Zealand concern with whaling discloses an anomaly in that while New Zealand actively protects marine mammals (including seals) by statute, it has not to date ratified the CCAS despite the significant population of South Pacific Weddell seals within the Ross Sea MPA.

Trusteeship for the benefit of humankind

These broad interests in Antarctica and the Southern Ocean are consistent with the theme of trusteeship for the benefit of humankind that is explicit in the Antarctic Treaty system and is reflected in the growing body of scholarly literature about the nature of sovereignty noted above. New Zealand's acceptance of the transferred claim to the Ross Dependency in 1923 also reflects these broad themes of trusteeship. This approach was also reflected in the New Zealand position at the Washington Conference in 1959 where the Prime Minister, Walter Nash,

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90 ICJ Reports 2014, 226 at 253-254.

91 For further discussion regarding the standard of review applied by the ICJ see: Trevor Daya-Winterbottom, "No deference", *The New Zealand Law Journal* (2017) 351-355.

stated in the context of discussions about surrendering territorial claims that he would "have wished to see the conference agree on more imaginative and a more adventurous approach to the problems arising from claims to sovereignty in Antarctica".[92] Against this background, extraterritorial legislation for the Ross Dependency (as a constituent part of the realm of New Zealand) and establishing maritime zones under UNCLOS are consistent with the concept of the "sovereign as trustee"[93] rather than advancing national populism.[94]

The extension of the sovereign right to legislate leads to the question of whether New Zealand should go further (like Australia) and establish a 200 nm EEZ adjacent to the Ross Dependency. It also leads to a secondary question as to whether New Zealand should designate marine protected areas across the whole EEZ around its sub-Antarctic islands in order to enhance environmental protection in the region. While this would be consistent with the approach adopted by the Cook Islands Parliament (and the designation of the Ross Sea MPA), this would require consultation with Maori given their historic connections with these islands and special purpose legislation to establish marine reserves beyond the territorial sea.[95] Additionally, this issue brings into play the indigenous concept of "kaitiakitanga" or the exercise of guardianship or stewardship in relation to natural or physical resources that has provided a basis for giving legal personality to geographic features (e.g. mountains and rivers),[96] and that could provide a (further) normative basis for translating

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92 Malcolm Templeton, *A wise adventure: New Zealand in Antarctica 1920-60* (Victoria University Press, Wellington, 2000), 265.

93 Eyal Benvenisti, "Sovereigns as Trustees for Humanity: On the Accountability of States to Foereign Stakeholders" (2013) 107 (2) AJIL 295

94 Roger Eatwell and Matthew Goodwin, *National Populism: The Revolt Against Liberal Democracy* (Pelican Books, 2018).

95 Ben France-Hudson, "The Kermadec/Rangitahua Ocean Sanctuary: Expropriation-free but a breach of good faith" [2016] Resource Management Theory & Practice 55.

96 Resource Management Act 1991, s 2(1), s 7(a); Rachael Harris, "A legal identity for Te Urewera: The changing face of co-governance in the central North Island" [2015] Resource Management Theory & Practice 148; Trevor Daya-Winterbottom, "Personality and representation in environmental law" [2018] NZLJ 130.

New Zealand sovereignty into trusteeship in relation to its marine and Antarctic interests.

Establishing an EEZ adjacent to the Ross Dependency would also be consistent with New Zealand's policy position against offshore hydrocarbon prospecting and the prohibition on mineral resource activities in the Antarctica (Environmental Protection) Act 1994. However, addressing the effects of climate change is more complex. For example, despite the success in *Thomson v Minister for Climate Change Issues*[97] where the New Zealand High Court held that the publication of a new assessment report by the International Panel on Climate Change required the Minister to consider whether existing greenhouse gas emissions targets should be reviewed, and that the effect of climate change on Tokelau (another constituent part of the realm of New Zealand) was also a mandatory consideration that would be relevant in relation to New Zealand's approach to climate change, these matters have subsequently been downgraded to become merely permissive considerations and the ability to seek certiorari or mandamus via judicial review have been removed.[98] Additionally, unlike Tokelau there has been no announcement by the Minister to bring the Ross Dependency into the United Nations Framework Convention on Climate Change 1992 or the Paris Agreement 2015,[99] notwithstanding the fact that Antarctica (like Tokelau) forms part of the realm of New Zealand.

Conclusions

Generally, the Antarctic Treaty system has enriched the development of international law, has encouraged domestic transposition of the Antarctic Treaty obligations, and the relative success in establishing an Antarctic MPA is encouraging. However, guardianship or stewardship concepts (as a foundation for the sovereign as trustee) could provide a catalyst for

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97 *Thomson v Minister for Climate Change Issues* [2018] 2 NZLR 160.

98 Climate Change Response Act 2002, s 5ZM, s 5ZN (as amended by Climate Change Response (Zero Carbon) Amendment Act 2019.

99 James Shaw, "Global climate change agreement extended to Tokelau" (14 November 2017).

broader conceptions of more extensive MPA designations in Antarctic marine zones, provide links to indigenous knowledge, enhance cooperation with stakeholders more widely, and overcome some of the problems currently inherent in Antarctic governance. But real commitments outside Antarctica to end fossil fuel exploration and development, set meaningful climate change targets, and allow public scrutiny via judicial review are required to protect the fragile continent.

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