

WILDERNESS PROTECTION IN THE CANADIAN ARCTIC UNDER THE
WETLANDS CONVENTION: THE SIGNIFICANCE OF CONNECTING
TRADITIONAL ECOLOGICAL KNOWLEDGE WITH WISE USE

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Abstract:

This article will focus on international law and policy in the Canadian Arctic under the *Wetlands Convention*. It has been asserted that the legal reach of this treaty in Australia has been underestimated. Taking a comparative approach, the article will examine this claim with reference to Canadian wilderness protection, analysing designated Arctic sites that may meet definitions of wilderness. It will also specifically compare “wilderness criteria” in European contexts to criteria for the site inscription to ascertain to what extent the *Wetlands Convention* is capable of, and actually achieves, Arctic wilderness protection. The “wise use” management arrangements, and the role of Indigenous peoples in relation to them, will be a particular focus, because traditional ecological knowledge is a key element in them and contributor to wilderness protection. It will finally draw conclusions as to the extent to which wilderness criteria are satisfied both under the substantive law and guidance of the treaty, and also in context and practice. It will furthermore briefly comment on whether other factors may also influence wilderness protection, especially isolation from major population centres and absence of economic development.

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I. INTRODUCTION

The general focus of this article is on wilderness protection in the Canadian Arctic, and the role of traditional ecological knowledge (TEK) in achieving it. In a significant paper published fifteen years ago, Watson, Alessa and Glaspell link TEK with wilderness protection in emphasising the “continued need to understand how wilderness designation interacts with ... indigenous activities in wildlands and the meanings attached to them.”¹ They highlight that “very little research has been conducted on the interaction between subsistence uses and other wilderness uses ... or the values associated with the relationship between wilderness and indigenous people. [Furthermore] the role of TEK in wilderness stewardship ... has not been adequately addressed.”² In adding to this existing scholarship, the specific focus of the present article is on the potential for wilderness protection and role of TEK under the *Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Wetlands Convention, or Ramsar Convention)*.³

One of the oldest multilateral environmental treaties, it has been asserted in Australia that the legal reach of this has been underestimated.⁴ This claim is considered in Canada by analysing the international legal protection for designated sites in the Arctic that may meet definitions of wilderness. Taking a comparative approach, it will answer the following specific research questions. First, what exactly is wilderness, and can it be protected by legal

¹ Alan Watson, Lilian Alessa & Brian Glaspell, “The Relationship between Traditional Ecological Knowledge, Evolving Cultures and Wilderness Protection in the Circumpolar North” (2003) 8:1 Conservation Ecology 1-13, 1.

² *Ibid.*

³ *Convention on Wetlands of International Importance Especially as Waterfowl Habitat*, 2 February 1971, 996 UNTS 245 (entered into force 21 December 1975). The convention entered into force in Canada on 15 May 1981; Canada currently has 37 sites.

⁴ Jamie Pittock, “More than Water Birds: Application of the Ramsar Convention on Wetlands in Australia” (2015) 30:6/7 Australian Environment Review 153.

means? Second, does international environmental law, and the *Wetlands Convention* in particular, provide for this? Third, what is the connection between TEK and the central concept of “wise use”, and does this ensure that appropriate weight is given to Indigenous rights-holders? Fourth, what are the implications that flow from the answers to the second and third questions for wilderness protection?

The *Wetlands Convention* was adopted in 1971, came into force in 1975, and has 169 Parties. Scholars have since asked if it made a difference to the protection of wetlands,⁵ and international courts and tribunals have examined various aspects of the Convention and its implementation.⁶ Importantly, in recent years other conservation treaties have incorporated the needs of Indigenous peoples directly; does the *Wetlands Convention* make similar provision? For example, the *Convention on Biological Diversity* (CBD) includes goals regarding the protection of biodiversity and “traditional knowledge, innovations and practices”.⁷ The *Convention Concerning the Protection of the World Cultural and Natural*

⁵ Michael Bowman, “The Ramsar Convention on Wetlands: Has it Made a Difference?” (2002/2003) *Yearbook of International Cooperation on Environment and Development* 61; see also Michael Bowman, “The Ramsar Convention Comes of Age” (1995) *XLII Netherlands International Law Review* 1.

⁶ See *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v Costa Rica) - Proceedings joined with Certain Activities carried out by Nicaragua in the Border Area (Costa Rica v Nicaragua)* on 17 April 2013 – Judgment 16 December 2015 (although provisional measures were initially issued, the judgment - para 112 - finally held there were no procedural obligations owed under the *Wetlands Convention*), online: < <http://www.icj-cij.org/docket/index.php?p1=3&p2=3&code=ncr2&case=152&k=7f>>. For discussion, see Yoshifumi Tanaka, “Case Note *Costa Rica v Nicaragua* and *Nicaragua v Costa Rica*: Some Reflections on the Obligation to Conduct an Environmental Impact Assessment” (2017) *26:1 Review of European, Comparative & International Environmental Law* 91, 95-96. See also the Danube Delta case, discussed in Mari Koyano, “The Significance of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) in International Environmental Law: Examining the Implications of the Danube Delta Case” (2008) *26:1 Impact Assessment & Project Appraisal* 299.

⁷ *Convention on Biological Diversity*, 22 May 1992, 31 ILM 822 (entered into force 29 December 1993). See in particular COP Decision VI/10 on the “Outline of the composite report on the status and trends regarding the knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity, and the plan and timetable for its preparation”; and “on Recommendations for the conduct of cultural, environmental and social impact assessment regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities.” Note also the ‘Aichi Biodiversity Targets’ in the global *Strategic Plan for Biodiversity 2011-2020* (Convention on Biological Diversity COP Decision 33

Heritage (World Heritage Convention or WHC) has furthermore explored the need for changes to be made to this aspect,⁸ together with links with wilderness.⁹

The international law relevant to Indigenous peoples in general is also relevant to this article.¹⁰ With some provisions reflecting customary international law,¹¹ the *United Nations Declaration on the Rights of Indigenous People* (UNDRIP) has steered support for these rights in international and domestic law,¹² which has led to the general recognition that

X/2, 2010). Only one of the Aichi Targets refers to culture, namely Target 13 which refers to maintenance of the genetic diversity of plants and animals “including culturally valuable species”. As to the limitations of the CBD provisions, see: Patricia Birnie & Alan Boyle, *International Law & the Environment* (Oxford: Oxford University Press, 2002) 579-580. In relation to participatory rights, see Uzuazo Etemire, “The Convention on Biological Diversity Regime and Indigenous Peoples: Issues Concerning Participatory Rights and Impact Assessment” (2013) 4 City University of Hong Kong Law Review 1.

⁸ *Convention Concerning the Protection of the World Cultural and Natural Heritage*, 16 November 1972, 1037 UNTS 151 (entered into force 17 December 1975). For discussion, note: Leah Talbot, “Engaging Indigenous Communities in World Heritage Declarations: Processes and Practice” in P Figgis et al, eds, *Keeping the Outstanding Exceptional: The Future of World Heritage in Australia* (Australian Committee for IUCN, 2012) 134; and The International Work Group for Indigenous Affairs, *Report of International Expert Workshop on the World Heritage Convention and Indigenous Peoples*, 20-21 September 2012 (Copenhagen, 2013). Note also the close relationship between the Wetlands and World Heritage Conventions; see Robert McInnes, Mariam Kenza Ali & Dave Pritchard, *Ramsar and World Heritage Conventions: Converging Towards Success* (Ramsar Convention Secretariat, 2017).

⁹ Cyril F Kormos, Tim Badman, Tilman Jaeger, Bastian Bertzky, Remco van Merm, Elena Osipova, Yichuan Shi & Peter Bille Larsen, *World Heritage, Wilderness, & Large Landscapes & Seascapes* (Gland: IUCN, 2017); CF Kormos et al, “A Wilderness Approach under the World Heritage Convention” (2016) 9 Conservation Letters 228; and Simon Marsden “Wilderness Protection in Europe and the Relevance of the World Heritage Convention”, in CJ Bastmeijer (ed), *Wilderness Protection in Europe: The Role of International, European & National Law* (Cambridge: Cambridge University Press, 2016) 137-159.

¹⁰ For a useful overview of the issues, see René Kuppe, “The Three Dimensions of the Rights of Indigenous Peoples” (2009) 11 International Community Law Review 103. With reference to the Arctic context and Indigenous people, see Michael Byers, *International Law & the Arctic* (Cambridge: Cambridge University Press, 2015) 216-244; Canada is discussed at 220-221, 225. Environmental protection issues are also considered in this volume at 171, and eco-system management specifically at 213-215.

¹¹ Megan Davis, “To Bind or Not to Bind: The United Nations *Declaration on the Rights of Indigenous Peoples* Five Years On” (2012) 3 Australian International Law Journal 17, 40-44.

¹² *United Nations Declaration on the Rights of Indigenous Peoples*, GA Res 61/295, UN GAOR, 61st Sess, Supp No 49, UN Doc A/RES/61/295 (2007) 4, 32 (UNDRIP). See Nigel Bankes, “[The Status of the UN Declaration on the Rights of Indigenous Peoples in Canadian Law and Policy](#),” paper presented to the 9th Polar

Indigenous people are not just stakeholders in issues that affect them, but *rights-holders*. Of particular significance, a number of UNDRIP provisions are important for conservation efforts, for example Article 29(1) which states that “Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources.” The related Article 29(2) includes the very significant provision for Free, Prior and Informed Consent (FPIC), in this instance to be given to “storage or disposal of hazardous materials ... in the lands or territories of indigenous peoples.”¹³ Article 32 also fundamentally requires FPIC for “the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.”¹⁴ Resource development continues to be of major concern in Arctic Canada.

The *Convention Concerning Indigenous and Tribal Peoples in Independent Countries* (ILO Convention 169) contains similar, if weaker, provisions in respect of FPIC.¹⁵ In relation to the role of TEK in international law, it has been argued that the law can “provide an international framework of obligations that support the protection of traditional knowledge at the national, subnational and local levels, in line with best practices.”¹⁶ In Nunavut (where

Law Symposium, University of Akureyri, Iceland, October 5-9, 2016. And for an update, see online <<http://www.oktlaw.com/recent-supreme-court-decisions-fail-embrace-promise-undrip-renewed-nation-nation-relationship/>>.

¹³ This is of especially great concern to some Aboriginal communities in South Australia, given discussion about the siting of a global repository for high level nuclear waste. See Simon Marsden, “Commissions and Inquiries into the Nuclear Fuel Cycle: Public Participation and Attitudes to Risk and Process (2017) 34:1 EPLJ 24-34.

¹⁴ See also Articles 10 (forcible removal from lands or territories); 11(2) (taking cultural, intellectual, religious and spiritual property); 19 (consultation and cooperation through Indigenous representative institutions); adoption and implementation of legislative measures); and 28(1) (confiscation, taking, occupation, use or damage to lands, territories and resources).

¹⁵ *ILO Convention 169, Concerning Indigenous and Tribal Peoples in Independent Countries*, 27 June 1989, 28 ILM 1382 (entered into force 5 September 1991). Note Articles 6 and 16, with the absence of “prior” to the obligation. Article 15 provides for the right “to participate in the use, management and conservation of” natural resources.

¹⁶ See Annalisa Savaresi, “Doing the Right Thing with Traditional Knowledge in International Law: Lessons for the Climate Regime”, University of Edinburgh School of Law, Research Paper Series No 2016/16.

five of the designated wetlands considered in this article are located),¹⁷ and in the Yukon, Northwest Territories and in Alberta (where another three are found), this international legal framework is undoubtedly of major significance,¹⁸ together with the role of Indigenous legal traditions in environmental conservation.¹⁹ While further detailed analysis of UNDRIP and ILO Convention 169 is beyond the scope of this article, it will however emphasise the inclusivity of Indigenous peoples exercising traditional hunting and fishing practices with the protection of wilderness further to the “wise use” concept.

The structure is as follows. Section II will first define wilderness with reference to the historical use of the term in the colonised “New World” (with comparative Australian examples), the situation in the Arctic and globally, and the implications for Indigenous peoples. It will also examine the protected area categories which are the basis of international environmental law and the role of wilderness criteria in definition. Section III will next analyse the role of the *Wetlands Convention* specifically in wilderness protection. It will evaluate the extent to which wilderness is a focus under this treaty and related guidance, notably in connection with the principle of wise use. Evaluating the cultural relationship of Indigenous peoples with wetland protected areas is a key component of this, given the role of TEK in management approaches,²⁰ and its acceptance in much international environmental law; the emphasis given by the *Wetlands Convention* to this component will therefore be an essential consideration.

¹⁷ See Lorne Sossin, “Indigenous Self-Government and the Future of Administrative Law” (2012) 45 UBC Law Rev 595; for background on environmental law, see e.g. Simon Marsden, “Our Land, Our Way: The Administration and Management of Environmental Law and Policy in Nunavut” (1999) 2 Australian Environmental Law News 70-71, online: <<http://www.austlii.edu.au/au/journals/AUEnvLawNews/1999/29.html>>.

¹⁸ Note also the consideration of international human rights law in a Canadian context. See e.g. James Anaya, “Report of the Special Rapporteur on the rights of indigenous peoples” (July 2014), United Nations, General Assembly: Human Rights Council, 27th Session at para 9, online: <<http://unsr.jamesanaya.org/docs/countries/2014-report-canada-a-hrc-27-52-add-2-en.pdf>>.

¹⁹ For an overview of this, relationship with the environment, and some recent examples, see Jessica Clogg, Hannah Askew, Eugene Kung & Gavin Smith, “Indigenous Legal Traditions and the Future of Environmental Governance in Canada” (2016) 29 JELP 227. In relation to the law / conservation connection, see Lynda Collins & Meghan Murtha, “Indigenous Environmental Rights in Canada: The Right to Conservation Implicit in Treaty and Aboriginal Rights to Hunt, Fish, and Trap” (2010) 47:4 Alta L Rev 959.

²⁰ See e.g. F Berkes, C Folke & M Gadgil, “Traditional Ecological Knowledge, Biodiversity, Resilience and Sustainability” in C Perrings et al, eds, *Biodiversity Conservation* (Kluwer, 1995) 281.

In order to explain how the wise use principle sits alongside wilderness protection, Section IV will focus on the Canadian Arctic, because of the number and scale of wetlands located there, the close links between Indigenous people and the land, and their role in wilderness protection. It will begin by providing an overview of the environmental issues that affect Arctic wetland properties and the attention given to the region under the *Wetlands Convention*; due consideration is also given to the role of the Arctic Council (AC) and the relationship of Indigenous groups with it. It will next direct attention to the Arctic inscriptions, analysing whether they meet the wilderness criteria, and how effective the treaty is in ensuring their protection. Section V will analyse the growing relationship between wise use management and the application of TEK, based on global experiences and the increased emphasis on the role of Indigenous peoples in managing inscribed properties that are their traditional homelands. The final section VI will draw conclusions, in part focusing on the implications of the Canadian experience of connecting TEK with wise use for wilderness protection.

II. DEFINING WILDERNESS AND ENSURING ITS PROTECTION

This section will define wilderness generally, note its global depletion, and consider the relationship between different protected areas types. It will then consider how these enable protection by management practices adhering to established criteria. As to general definitions, (and in connection with the first research question), because of the association with the forced removal of Indigenous people from the American West for the creation of national parks as pleasure grounds for white settlers,²¹ wilderness is a concept which defies acceptable definition. In the terrestrial context, it is however typically portrayed as an “incipient and pristine land free of human interference”.²² In comparative perspective, Callicot sums this up as follows:

²¹ Yellowstone National Park, the first of its kind is cited as an example, the legislative creation and implementation of which denied occupation to Native Americans. See Kees Bastmeijer, “Introduction: An International History of Wilderness Protection and the Central Aim of the Book”, in CJ Bastmeijer, ed, *Wilderness Protection in Europe: The Role of International, European & National Law* (Cambridge: Cambridge University Press, 2016) [Bastmeijer, *Wilderness*] 3, 12-14.

²² Phillip Vannini & April Vannini, *Wilderness* (Abingdon: Routledge, 2016) [Vannini, *Wilderness*] 11.

The English colonists called the new lands of North America and Australia ‘wilderness,’ an idea originally taken from the English translation of the Bible... This designation enabled them to see the American and Australian continents as essentially empty of human beings, and thus available for immediate occupancy. The Australian bureaucratic term for wilderness, *terra nullius*, a Latin phrase meaning ‘empty land,’ says it all quite explicitly... So does the U.S. Wilderness Act of 1964, ‘an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements *or human habitation*’” (emphasis added).²³

In contrast to the pervasiveness of these colonial perspectives which alienate the presence of humankind,²⁴ and despite the wilderness term not being used or recognised by Aboriginal people, wilderness is undeniably above all a homeland of Indigenous people.²⁵ Indigenous culture,²⁶ and the changes that traditional practices have made to natural environments, is therefore increasingly and explicitly recognised as part of wilderness.²⁷ In

²³ J Baird Callicott, “Contemporary Criticisms of the Received Wilderness Idea”, *USDA Forest Service Proceedings* RMRS-P-15-VOL-1. 2000 25, internal citations removed. Terra nullius in Australia was used as justification to apply English law to Australia. The doctrine was overturned in *Mabo v Queensland* [No 2] (1992) 175 CLR 1, 75–76. The US *Wilderness Act* 1964 is commonly pointed to as the first and most important domestic measure to legislate for wilderness protection. This provides the following definition: “A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain.” See: The Wilderness Act of 1964, s 2c, Public Law 88-577 (16 U.S.C. 1131-1136).

²⁴ RF Nash, *Wilderness and the American Mind* (Newhaven: Yale University Press, 2001). See also Richard West Sellars, *Preserving Nature in the National Parks: A History* (2nd ed., New Haven and London: Yale University Press, 2009); and John C Miles, *Wilderness in National Parks: Playground or Preserve* (Seattle: University of Washington Press, 2009). In relation to the continued use in contexts where Indigenous presence is and has never been recorded, note Antarctica below.

²⁵ Mark David Spence, *Dispossessing the Wilderness: Indian Removal & the Making of the National Parks* (Oxford: Oxford University Press, 1999).

²⁶ The Tasmanian Wilderness World Heritage Area is a good example. The criteria for inscription of properties under the World Heritage Convention include both natural and cultural matters and the listing of this Australian property makes reference to both. See Simon Marsden, “The World Heritage Convention: Compliance, Public Participation and the Rights of Indigenous People” (2015) 32:6 EPLJ 534, 536-539.

²⁷ See e.g. “Tasmanian Aborigines Learn Traditional Methods of Fire Management: ‘Cool Burning’ Could Help Fuel Reduction” (29 September 2014), online: <<http://www.abc.net.au/news/2014-09-29/tasmanian-aboriginals-learn-ancient-methods-of-fire-management/5774708>>.

Australia, Parks and Wildlife Service Tasmania for example, comments “The use of fire as a tool to open up the country for hunting and ease of travel brought significant changes to the vegetation patterns of the [World Heritage Area] WHA.”²⁸

Callicot prefers use of the more neutral “biodiversity” in preference to wilderness; however this only partly addresses the absence of the word wilderness from the Aboriginal lexicon, and does little to avoid the added problem of introducing western science to the debate; this is a “problem” because of the denial by western science of explanations of the natural world which are not based on western recorded evidence. Because of this, the use of the word wilderness (such as in the Tasmanian context) which *does* acknowledge Aboriginal presence and environmental change is preferred. There are also difficulties with the word “homeland” in cases where land has been adapted significantly based on the introduction of 21st century non-subsistence lifestyles in Indigenous societies. Watson *et al* comment on the implications that flow from the different perspectives on wilderness:

It is easy to see how discussions about meanings associated with wilderness could produce currents of political conflict. Different cultures may easily hold different values for the same resource. This conflict can threaten wilderness protection though lack of consensus on management goals and, therefore, threaten the cultural meanings held by all people. With a dominant Euro-centric population in most circumpolar north countries, this political conflict is most threatening to indigenous people and the values they place on traditional lifestyles and continuity of TEK.²⁹

Whatever perspective is taken, wilderness is fast disappearing globally, exacerbated by a failure to increase protected areas sufficiently,³⁰ and due to the impacts of climate change; both also impact greatly upon Arctic wetlands, an important reason for the focus of this article on the Canadian Arctic. In relation to Arctic in general, and tundra wetlands, one author comments: “Climate models generally agree that the greatest warming due to the enhanced greenhouse effect may occur at northern high latitudes and in particular in the

²⁸ See e.g. “World Heritage Values, Aboriginal Heritage” (6 February 2012), online: <<http://www.parks.tas.gov.au/index.aspx?base=26355>>.

²⁹ *Supra* note 1, 5-6.

³⁰ James EM Watson et al, “Catastrophic Declines in Wilderness Areas Undermine Global Environment Targets” (2016) 26 *Current Biology* 1.

winter season.”³¹ The last decade has evidenced this clearly. It is also clear that there are few examples of unadapted natural environments remaining which are absent of human presence or past influence that may be classified as wilderness. Even Antarctica, often referred to as wilderness despite the absence of Indigenous people, is arguably no longer so.³² This is because of human induced climate change, ease of modern travel, scientific exploration, and, (in the sub-Antarctic Southern Ocean islands especially), invasive species, which have all impacted negatively upon once pristine nature.³³

The International Union for the Conservation of Nature (IUCN) and the World Commission on Protected Areas have dealt at length with the categorisation of protected areas and more recently the role of Indigenous people in relation to them at length. With regard to wilderness, “Category Ib protected areas are usually large unmodified or slightly modified areas, retaining their natural character and influence without permanent or significant human habitation, which are protected and managed so as to preserve their natural condition.” It is significant that there is no specific reference to Indigenous people in this definition, which Watson *et al* note “mostly focuses on the physical aspects of wilderness”.³⁴ An early study furthermore notes “Poor collaboration between communities and conservation agencies [which] is often rooted in the lack of supportive laws and policies, despite the existence of broad and vague intentions to ‘enhance community participation’”³⁵

³¹ See Kevin L Erwin, “Wetlands and Global Climate Change: The Role of Wetland Restoration in a Changing World” (2008) 17 *Wetlands Ecology & Management* 71, 76.

³² See Rupert Summerson, “Protection of Wilderness and Aesthetic Values in Antarctica” in Falk Huettmann, ed, *Protection of the Three Poles* (Springer, 2012) [Huettmann, *Protection*] 77.

³³ See e.g. Justine D Shaw, “Southern Ocean Islands Invaded: Conserving Biodiversity in the World’s Last Wilderness” in LC Foxcroft et al, eds, *Plant Invasions in Protected Areas: Patterns, Problems & Challenges, Invading Nature* (Springer, 2013) 449; and Kevin Kiernan & Anne McConnell, “Glacier Retreat and Melt-lake Expansion at Stephenson Glacier, Heard Island World Heritage Area” (2002) 38 *Polar Record* 297.

³⁴ *Supra* note 1, 3.

³⁵ Grazia Borrini-Feyerabend, Ashish Kothari & Gonzalo Oviedo, eds, *Towards Equity and Enhanced Conservation Guidance on Policy and Practice for Co-managed Protected Areas and Community Conserved Areas*, Best Practice Protected Area Guidelines Series No 11 (World Commission on Protected Areas, IUCN, 2004), at 98. Suggestions are made in pages that follow as to how to improve these laws and policies, typically by involving the community in the process and recognising the rights they hold.

In relation to the other IUCN protected areas, the relationship between “biodiversity” and “wilderness” is significant in distinguishing category Ia from Ib.³⁶ Category Ia is therefore reserved for “Strict Nature Reserve” and Ib for “Wilderness Areas”.³⁷ It distinguishes between these as follows: “Category Ib protected areas will generally be larger and less strictly protected from human visitation than category Ia: although not usually subject to mass tourism they may be open to limited numbers of people prepared for self-reliant travel such as on foot or by boat, which is not always the case in Ia.”³⁸ The distinction between these categories emphasises that “wilderness” is rarely unaffected by human impact, whether western or Indigenous, and that only “pristine” (or as much as that is possible, given indirect effects) natural environments – are capable of being potentially protected by the Ia designation.

Management guidelines for Category 1b wilderness protected areas were published by the IUCN in 2016. The purpose is to highlight challenges, with the Foreword noting "No other category of protected area management allows for such a relationship between humans and nature."³⁹ Most importantly the place of Indigenous people in Category Ib was emphasised, with principles (section 2) highlighting the close relationship. For example the need to: "Manage wilderness to maintain the highest integrity of ecosystems, wildlife, and sacred and traditional cultural use sites";⁴⁰ "Create true partnership among stakeholders and nontribal government entities and indigenous, tribal and local communities in management

³⁶ See Michael Lockwood, “Global Protected Area Framework” in Michael Lockwood, Graeme L Worboys & Ashish Kothari, eds, *Managing Protected Area: A Global Guide* (London: Earthscan, 2006) [Lockwood et al, *Managing*] 73. The IUCN categories are outlined at 82-89 with examples; notably, Lockwood comments that there was “confusion over the meaning of terms such as ‘national park’ and ‘nature reserve’” (at 82), which led to the decision to develop the categories. Whether this has resolved the definitional issues – in the context of the meaning of wilderness – appears unlikely however. In relation to cultural heritage management, see also [Lockwood et al, *Managing*], Jane Lennon, 448, 462-466; and regarding collaboratively managed protected areas, Ashish Kotari, 528, 533 (Canada) and 539 (Australia).

³⁷ See online: <<https://www.iucn.org/theme/protected-areas/about/protected-areas-categories>>. The origin of the former – which equates with the notion of wilderness where there is no question of human presence, such as in Antarctica – are addressed by Bastmeijer, *Wilderness*, in relation to a nature conservation treaty adopted in 1940; *supra* note 21 at 19. In connection with other IUCN developments, see also 24-25.

³⁸ See online: <<https://www.iucn.org/theme/protected-areas/about/protected-areas-categories>>.

³⁹ SA Casson, VG Martin, A Watson, A Stringer & CF Kormos, eds, *Wilderness Protected Areas: Management Guidelines for IUCN Category 1b Protected Areas* (Gland: IUCN, 2016).

⁴⁰ *Ibid*, xi.

and designation of wilderness”;⁴¹ and “Guide wilderness management using written plans that are culturally appropriate.”⁴²

Indigenous governance and authority (section 3) is furthermore explicitly recognised, and “Sensitive consultations are often required to ensure that sites under Category 1b are locally managed in accordance with best practices.”⁴³ In relation to management tools and issues (section 4), it emphasises that “Subsistence users are a powerful and necessary partner for the protection and stewardship of large wilderness areas.”⁴⁴ In relation to evaluating effectiveness of management approaches (section 5) the IUCN Protected Area Management Effectiveness framework is the approach taken, which includes considering the site’s protection of Indigenous peoples’ rights, and that Indigenous peoples should have leading roles in evaluating effectiveness.⁴⁵

Confusingly a third IUCN designation, category II “National Park” is, according to the IUCN, of an even lesser quality than Ia or Ib,⁴⁶ although arguably some “National Parks” may be subject to very little visitation.⁴⁷ Similarly, category IV “Habitat/Species

⁴¹ *Ibid*, xi.

⁴² *Ibid*, xi. See (at 22) case study 4: Fish River Station, Australia, which highlights the role in management of “an indigenous advisory group representative of the four Traditional Owner (Indigenous) Groups: the Labarganyan, Wagiman, Malak Malak and Kanu peoples.” In Canada (at 26), case study 7 comments on the cooperative management approach which included the Naha Dehé Consensus Team for Nahanni National Park Reserve in the Northwest Territories.

⁴³ *Ibid*, xi.

⁴⁴ *Ibid*, x. Reference is also made to UNDRIP in the Guidelines, at 9.

⁴⁵ M Hockings, F Leverington and C Cook, “Protected Area Management Effectiveness”, in Graeme L Worboys, Michael Lockwood, Ashish Kothari, Sue Feary & Ian Pulsford, eds, *Protected Area Governance & Management* (Canberra: ANU Press, 2015) 889-928.

⁴⁶ IUCN online, *supra* note 38; for example: “Category II will generally not be as strictly conserved as category Ia and may include tourist infrastructure and visitation. However, category II protected areas will often have core zones where visitor numbers are strictly controlled, which may more closely resemble category Ia.” And: “Visitation in category II will probably be quite different from in wilderness areas, with more attendant infrastructure (trails, roads, lodges etc.) and therefore probably a greater number of visitors. Category II protected areas will often have core zones where numbers of visitors are strictly controlled, which may more closely resemble category Ib.” For analysis, see Alexander Gillespie, “Defining International Protected Areas” (2008) 11 J Int Wildl Law & Pol 240.

⁴⁷ For example North East Greenland National Park, the largest terrestrial protected area in the world, where sealers and whalers are the only common visitors.

Management Area(s)” are also of relevance to the purpose of this article,⁴⁸ because of the role of Indigenous peoples in wise use and the application of traditional knowledge thereto. They are also relevant because in the Canadian Arctic, as three of the Nunavut wetland properties fall within this category, at least on the Convention website, if not that of the Canadian Government.⁴⁹ Clearly however the distinctions between the IUCN categories are not consistent with the definition of wilderness being an “incipient and pristine land free of human interference”, which would only apply to category Ia, the Strict Nature Reserve. In contrast, it can be argued that the IUCN categories should be interpreted more loosely to enable each of Ia, Ib, II and IV to potentially provide for wilderness protection.⁵⁰

As to protection, what does law and policy,⁵¹ and specifically international environmental law, add?⁵² The IUCN describes a *protected area* as “A clearly defined geographical space, recognised, dedicated and managed, through *legal* or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.”⁵³ Watson *et al* additionally emphasise that: “Most wilderness resources are far removed in the north, away from legislative centres and the population, yet located in regions with high proportions of indigenous people. Without strong insistence or legislative influence and other protection strategies, the traditional relationships to these places will not be valued and protected by the majority, distant population.”⁵⁴ This highlights the important role of the law in conservation by establishing clear rules of behaviour for users which must support inscriptions based on their agreed criteria.

⁴⁸ The IUCN explanation of this category as distinct from category Ib, states as follows: “Category IV protected areas cannot be described as ‘wilderness’, as defined by IUCN. Many will be subject to management intervention that is inimical to the concept of category Ib wilderness areas; those that remain un-managed are likely to be too small to fulfil the aims of category Ib.” It will be argued in section IV of this article that as Queen Maud Gulf – the world’s second largest Wetlands site (and Canada’s largest protected area) – is certainly not subject to this caveat about scale, and that if unmanaged it is more than capable of meeting the classification of wilderness, whether based on the IUCN categorisation, or under the wilderness criteria.

⁴⁹ This difference is detailed further below.

⁵⁰ For further explanation, see Casson et al, *supra* note 39, 6-8.

⁵¹ See generally Cyril F Kormos, ed, *A Handbook of International Wilderness Law and Policy* (Golden: Fulcrum Publishing, 2008).

⁵² See Bastmeijer, *Wilderness*, *supra* note 21, Part II .

⁵³ Casson et al, *supra* note 39, after title page (my emphasis).

⁵⁴ *Supra* note 1, 6. See also the reference to the Alaska National Interest Land Conservation Act of 1980, which allowed continuance of subsistence hunting and gathering (at 2).

Bastmeijer defines these wilderness criteria as follows: *naturalness*, which requires the presence of native species, ecosystems and free functioning natural processes; *undevelopedness* (incorporating “undisturbedness” derived from the IUCN), meaning the absence of infrastructure and other evidence of modern human society, and a sufficient distance away from such things; and *relatively large size*, which while not specifically clarified is designed in part to ensure effective ecological functioning.⁵⁵ In relation to the *Wetlands Convention*, these three “wilderness criteria”⁵⁶ can be compared with nine “wetlands criteria” found in Convention guidance to examine the extent to which they are capable of providing for overlapping definitions of Arctic protected areas. This is considered in more detail in section III below.

However even without regulation protecting properties based on one or both sets of these criteria,⁵⁷ is isolation enough - or was it until the “Age of the Anthropocene”⁵⁸ - to ensure protection of wetland wilderness areas? In contrast, Hunter, Salzman and Zaelke note that “the benefits from Ramsar listing come in part from access to technical expertise, in part from access to funds, and in largest part from heightened public profile.”⁵⁹ The last of these, public profile, may therefore be a negative given the draw card of visitation that often accompanies more ready access to isolated destinations or inscription on what becomes a “bucket list” of places to visit.⁶⁰ This may be particularly true of properties which are

⁵⁵ Bastmeijer, *Wilderness*, *supra* note 21, 33.

⁵⁶ Bastmeijer, *Wilderness*, *supra* note 21, 33. See also Casson et al, *supra* note 39, 2-3, which distinguishes between three meanings of wilderness: wilderness as a biological descriptor, wilderness as a protected area classification, and wilderness and human society.

⁵⁷ In connection with Canada, and the *Canada Wildlife Act* in particular, which is applicable to wetland sites: see Vannini & Vannini, *supra* note 22, 4.

⁵⁸ Damian Carrington, “The Anthropocene Epoch: Scientists Declare Dawn of Human-Influenced Age”, *The Guardian* (29 August 2016).

⁵⁹ David Hunter, James Salzman & Durwood Zaelke, *International Environmental Law and Policy* (New York: Foundation Press, 2007) 1175.

⁶⁰ For example, online: <<http://travel.cnn.com/explorations/play/natural-wonder-bucket-list-50-spectacular-places-see-639593/>>. In relation to the Antarctic, see LK Kriwoken & D Roots, “Tourism on Ice: Environmental Impact Assessment of Antarctic Tourism” (2000) 18 *Impact Assessment & Project Appraisal*, 138; and Kees Bastmeijer, “Protecting Polar Wilderness: Just a Western Philosophical Idea or a Useful Concept for Regulating Human Activities in the Polar Regions?”, in Gudmundur Alfredsson, Timo Koivurova & David Leary, eds, (2009) 1 *The Yearbook of Polar Law* 73-99. In relation to the second aspect, see e.g. Terry de Lacy & Michelle Whitmore, “Tourism and Recreation” in Lockwood et al, *Managing* 497, *supra* note 36.

promoted as “wilderness” destinations when the understanding of the term is akin to the notion portrayed in the western mind of a protected area (national park or “wilderness” reserve) accessible to such visitors, rather than a protected area which prohibits or restricts easy access (strict nature reserve, or other category constituting an Indigenous homeland). This access is however increasing, including in the Arctic.⁶¹

In summary, different perspectives of “wilderness” therefore have implications for the protection of listed wetland areas. This section highlights the confusion not only among the public and scholarly communities, but also in the IUCN categories that are intended to clarify the differences. In accepting the need to halt the disappearance of wilderness globally (as defined by the wilderness criteria) – and their relationship to the listing criteria of Convention wetlands – some flexibility is needed in interpreting the IUCN categories so that Indigenous (co)/management can be utilised wherever possible. This article therefore emphasises that wilderness must be understood and accepted to include the presence – and perspectives of – Indigenous people. The significance of this relates to maximising protection wherever possible. The next section highlights the benefits that derive from this in connection with the wise use of wetlands under the *Wetlands Convention*.

III. THE WETLANDS CONVENTION, WISE USE AND WILDERNESS PROTECTION

The *Wetlands Convention* was the first global agreement to address the conservation of a particular habitat.⁶² Article 1(1) defines wetlands as: “areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.” The related Article 1(2) defines waterfowl as “birds [which are] ecologically dependent on wetlands.” The treaty scheme under Article 2 provides for each

⁶¹ The opening of the Northwest Passage to cruise and other vessels is a particular concern. See e.g. Robin McKie, “Inuit Fear they will be Overwhelmed as ‘Extinction Tourism’ Descends on Arctic”, *The Guardian* (21 August 2016), online: <<https://www.theguardian.com/world/2016/aug/20/inuit-arctic-ecosystem-extinction-tourism-crystal-serenity>>. Note that easier access to these waters has benefitted wetland archaeology in recent years, as – in combination with Inuit oral traditions – the discovery was made of Sir John Franklin’s HMS Erebus, heralded as “one of Parks Canada’s most significant achievements” in 2014. Online: <<http://www.pc.gc.ca/eng/culture/franklin/communiques-franklin-releases.aspx>>.

⁶² For a general outline see e.g. Philippe Sands & Jacqueline Peel, *Principles of International Environmental Law* (Cambridge: Cambridge University Press, 2012) 492-494.

state Party to designate at least one wetland for inclusion on the List of Wetlands of International Importance, to be chosen “on account of their international significance in terms of ecology, botany, zoology, limnology or hydrology” (Article 2(2)). The UK has the most sites (170),⁶³ and Canada has the sites covering the largest surface area (13,086,771 ha). Once included on the List, state Parties have obligations to promote their conservation under Articles 3 and 4. A Conference of the Contracting Parties (COP) is established under Article 6 and meets every three years; membership should include “experts on wetlands or waterfowl by reason of knowledge and experience gained in scientific, administrative or other appropriate capacities” (Article 7(1)). There is no mention of the role of Indigenous peoples specifically, reflective of the early time at which the text was drafted.

The Convention has its own criteria for inscribing wetlands on the List, supplementing the designation process under Article 2(2).⁶⁴ The Convention notes that the process of adopting specific identification criteria began in 1974, but the first official wetlands criteria were agreed at COP1 in 1980. Subsequently in 1987 and 1990 the COP revised these, and at COP6 in 1996 new criteria, (fish and fisheries), were added. The wetlands criteria were reorganized into two groups based upon representativeness/uniqueness (Group A) and biodiversity (Group B),⁶⁵ and at COP9 in 2005 a ninth criterion was added (wetland-dependent non-avian animal species). The current wetlands criteria are found within numbered categories whereby wetlands are considered internationally important in a number of ways. While there are some synergies with the three wilderness criteria outlined above (naturalness, undevelopedness and relatively large size), it is not possible to closely relate one set of criteria with the other as they are focused upon different things. The “naturalness”

⁶³ For an early English overview with links with the Convention, comparative Australian perspectives and examples of wise use practice, see Simon Marsden, “Protecting Archaeological Heritage in Wetlands: the Muddied Waters of International, European, English and Australian law” (2002) 4:1 Env L Rev 26; in relation to wetland archaeology, which is assuming greater significance in a warming Arctic, also Simon Marsden, “The Heritage Management of Wetlands: Legislative Designation and Protection - A Viewpoint from England and Wales”, in Bryony Coles & Adrian Olivier, eds, *The Heritage Management of Wetlands in Europe* (European Archaeological Consortium / Wetland Archaeology Research Project / English Heritage, 2001) EAC Occasional paper no 1, 7.

⁶⁴ Ramsar Convention, *The Criteria for Identifying Wetlands of International Importance*, Ramsar Information Paper No 5.

⁶⁵ See *Strategic Framework and Guidelines for the Future Development of the List* (adopted by Resolution VII.11, 1999).

wilderness criterion is perhaps the most closely related to each of the wetland criteria, with the “relatively large size” wilderness criterion also having some bearing upon the majority of the wetlands criteria also.

The nine wetlands criteria can be summarised as follows: representative, rare or unique wetland types within the biogeographic region (1); support for vulnerable, endangered or critically endangered species or threatened ecological communities (2); support for plant and / or animal species important for maintaining biodiversity of a particular biogeographic region (3); support for plant and / or animal species at a critical stage in their life cycles or provision of refuge during adverse conditions (4); regular support for 20,000 or more waterbirds (5); regular support of 1% of individuals within one species or subspecies (6); support for a significant proportion of indigenous fish representative of wetland benefits and / or values and contributing to global biodiversity (7); an important source of food for fish, spawning ground or migration path (8); and if it regularly supports 1% of a population of wetland dependent non-avian animal species (9).

Promoting the conservation of wetlands via the concept or principle of “wise use” is an inherent part of the Convention.⁶⁶ It is contained in Article 3(1) and was first defined in guidance prepared by the COP.⁶⁷ COP3 in Regina, Canada, from 27 May to 5 June 1987, adopted the following definition: “The wise use of wetlands is their sustainable utilization for the benefit of humankind in a way compatible with the maintenance of the natural properties of the ecosystem”. Establishment of national wetland policies was a key part of the approach, as was the need for actions to increase knowledge and awareness of wetlands and their values, including “(c) review of *traditional* techniques of wise use” (my emphasis). Whether this component contemplated the application of traditional (ecological) knowledge during the early years of application is not clear from Convention guidance;⁶⁸ however in more recent times – as this article will show – it has become part of the process.

⁶⁶ See also CM Finlayson et al, “The Ramsar Convention and Ecosystem-Based Approaches to the Wise Use and Sustainable Development of Wetlands” (2011) 14:3-4 J Int Wildl Law & Pol 176.

⁶⁷ Ramsar Convention Secretariat, *Handbooks for the Wise Use of Wetlands - Handbook 1: Concepts & Approaches for the Wise Use of Wetlands* (4th edition, 2010).

⁶⁸ See further: *Guidelines for the Implementation of the Wise Use Concept*, first adopted as an annex to Recommendation 4.10, COP4 (Montreux, Switzerland, 27 June – 4 July 1990); *Additional Guidance for the Implementation of the Wise Use Concept*, adopted as an annex to Resolution 5.6 by COP5 (Kushiro Japan, 9-16 June 1993).

Following identification that “2) Special attention needs to be given to the local populations who will be the first to benefit from improved management of wetland sites. [and] *The values that indigenous people can bring to all aspects of wise use need special recognition*” (my emphasis),⁶⁹ an updated version of the concept was subsequently released. This confirmed that “Wise use of wetlands is the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development.”⁷⁰ Whether the wise use principle has in general been effectively implemented has however been questioned.⁷¹ And specifically of relevance here, whether the guidance accurately reflects the position with respect to Indigenous rights-holders in the 21st Century is also open to question.⁷² This article is an attempt to discover the answer to that question (number 3 in the Introduction) together with the other questions asked above.

The establishment of nature reserves is a key part of the scheme of the *Wetlands Convention* under Article 4(1). The type of reserve established in each state is dependent upon the particular qualities of each and is determined with reference to the IUCN protected area categories outlined above; the IUCN itself performed the initial administrative functions under the Convention (Article 8(1)). In relation to the second research question, the connection between the *Wetlands Convention* and wilderness can be seen in regard to the first property inscribed under the treaty, 42 years ago.⁷³ The inscription made reference to both wilderness and Indigenous peoples.⁷⁴ Now known as Garig Gunak Barlu National Park, it is jointly managed by the Arrarrkbi people and the Parks and Wildlife Commission of the Northern Territory, and was the first reserve in Australia to have a formal arrangement with

⁶⁹ See Recommendation 6.3, COP6 (Brisbane, Australia, 19-27 March 1996), and from COP7 (San José, Costa Rica, 10-18 May 1999), *Guidelines for Establishing & Strengthening Local Communities' & Indigenous Peoples' Participation in the Management of Wetlands*.

⁷⁰ Resolution IX.1 Annex A, COP9 (Kampala, Uganda, 8-15 November 2005), *Conceptual Framework for the Wise Use of Wetlands and the Maintenance of their Ecological Character*, 6.

⁷¹ David Farrier & Liz Tucker, “Wise Use of Wetlands under the Ramsar Convention: A Challenge for Meaningful Implementation of International Law” (2000) 12:1 J Envtl L 21.

⁷² By contrast, note efforts under the World Heritage Convention in this respect. See Simon Marsden, “The World Heritage Convention in the Arctic and Indigenous People: Time to Reform?” (2014) 6 The Yearbook of Polar Law 226.

⁷³ See e.g. “World’s first Ramsar Site Turns 40” (8 May 2014), online : <<http://www.ramsar.org/news/world%E2%80%99s-first-ramsar-site-turns-40>>.

⁷⁴ *Ibid.*

Indigenous people.⁷⁵ It is also considered a property of significance to the promotion of wise use, which is importantly noted to be as a result of its isolation and the continuance of traditional methods of conservation.⁷⁶

The relationship between wilderness and the *Wetlands Convention* has been considered in other continents and contexts in recent years. For example an international conference under the Convention on Mires and Wilderness was held in Estonia in April 2011, noting that “wilderness is increasingly being recognised as a valuable asset of natural areas, essentially in the context of biodiversity conservation and the development of sustainable nature tourism.”⁷⁷ The importance of wilderness areas and action to protect such areas was called for during the conference, and the European Commission subsequently developed specific guidance on the protection and management of wilderness areas in the context of the EU nature legislation.⁷⁸ The conference delegates concluded that “...maintaining and restoring wetland wilderness areas wherever possible should be considered as a particularly attractive form of ‘wise use.’”⁷⁹ The potential for this is examined with respect to the Arctic in the next section.

IV. ARCTIC ENVIRONMENTAL CHALLENGES AND WILDERNESS VALUES OF LISTED CANADIAN ARCTIC WETLANDS

The environmental challenges facing the Arctic are extensive, well known and above all driven by a warming planet, and pressure on its own resources. This is confirmed by evidence

⁷⁵ See Ashish Kotari, “Collaboratively Managed Protected Areas”, in Lockwood et al, *Managing, supra* note 36, 539-540. The IUCN status of this is not clear, but since it is a National Park based on domestic designation, it is likely to be category II.

⁷⁶ The article comments for example that: “Cobourg’s isolation from the rest of the mainland and its management arrangements, have seen many small and medium-sized native mammal species thrive.” It also notes, of comparative relevance to the World Heritage listed Tasmanian Wilderness property (*supra* notes 26, 27 and 28), that: “This includes seasonal fire management which maintains the ecological character of the site.”

See “Historic Cobourg Peninsula is a Model of Wise Use and Wetland Conservation, 40 years after its Designation as a Wetland of International Importance” (13 May 2016), online: <<http://www.ramsar.org/news/historic-cobourg-peninsula-is-a-model-of-wise-use-and-wetland-conservation-40-years-after-its>>.

⁷⁷ See “Wetland Wilderness values in Estonia” (29 April 2011), online: <<http://www.ramsar.org/news/wetland-wilderness-values-in-estonia>>.

⁷⁸ Bastmeijer, *supra* note 21, 27-29.

⁷⁹ *Supra* note 77.

presented to the UK Select Committee on the Arctic: “Key drivers of change in the Arctic are the result not of actions in the region, but actions and decisions outside it.”⁸⁰ The AC has played a major role in raising awareness of issues;⁸¹ over a decade ago it showed that warming had been double the global average since the 1970s.⁸² In relation to resource pressures, these derive largely from economic development, oil and gas exploration and extraction, development of geothermal resources, and associated heavy industry. While development within the Arctic has necessitated innovative approaches to evaluating the significance of environmental effects locally,⁸³ preventing or slowing change requires global solutions as well.

In emphasizing the importance of the Arctic focus of this article, in December 2014 the *Wetlands Convention* decided to prioritise Arctic wetlands,⁸⁴ emphasising their significance, challenges and that there will inevitably be more wetlands in the future. In relation to global warming and development: “Arctic peatlands, glacier forelands, rivers, lakes, wet tundras, seashores and shallow bays make up the largest part of the Arctic ... Arctic wetlands store enormous amounts of carbon in frozen peat and soil... Accelerated climate change ... provokes rapid environmental change [and] easier access to oil and gas, minerals and fisheries...”⁸⁵ In relation to TEK and of particular relevance to the focus of this

⁸⁰ UK Parliament Select Committee on the Arctic, *Report of Session 2014-15*, written evidence from Arctic Athabaskan Council (ARC0014).

⁸¹ The Expert Group on Black Carbon and Methane for example was established at the AC Ministerial Meeting in Iqaluit in 24 April 2015. Its objective is to periodically assess progress of the implementation of the AC’s Framework for Action on Black Carbon and Methane, and inform policy makers from AC states and Observer states. It held its first meeting 27-28 January 2016 in Reykjavik.

⁸² Arctic Climate Impact Assessment, *Impacts of a Warming Arctic, Overview Report* (Cambridge: Cambridge University Press, 2004). Other studies have confirmed these findings: see Adam Stępien, Timo Koivurova & Paula Kankaanpää, eds, *The Strategic Assessment of Development in the Arctic: An Assessment Conducted for the European Union* (European Union, 2014).

⁸³ Timo Koivurova & Pamela Lesser, *Environmental Impact Assessment in the Arctic: A Guide to Best Practice* (Cheltenham: Edward Elgar, 2016). See in particular the reference to the role of traditional knowledge in the impact assessment process, at 130.

⁸⁴ See: “Ramsar Focuses on Arctic Wetlands” (11 December 2014), online: <<http://www.ramsar.org/news/ramsar-focuses-on-arctic-wetlands>>.

⁸⁵ *Ibid.* See also T Minayeva and A Sirin, “Arctic Peatlands”, *Arctic Biodiversity Trends 2010*, 71 which notes (at 74): “The vast undisturbed peatlands of the Arctic and sub-Arctic zones are amongst the last remaining wilderness and natural resource areas of the world. Development in such areas often ignores the special

article, in 2013 the *Arctic Biodiversity Assessment* was released by The Conservation of Arctic Flora and Fauna (CAFF), the relevant working group of the AC. This is described as: “a report containing the *best available science informed by traditional ecological knowledge* on the status and trends of Arctic biodiversity and accompanying policy recommendations for biodiversity conservation”⁸⁶ (my emphasis).

CAFF is part of the AC high-level intergovernmental forum which consists of not only the eight Arctic countries, but also the six Indigenous peoples’ organisations with which it works closely.⁸⁷ The input of Indigenous peoples is therefore significant and widely recognised in this context. The global relevance of climate change to the Convention is furthermore illustrated by changes whereby birds that depend on Arctic tundra to breed also spend the rest of the year migrating across the globe.⁸⁸ CAFF has begun a project to address the conservation needs of declining populations in the Arctic and along migration routes, with the aim of using the international forum to convince non-polar states to find sustainable solutions.⁸⁹

For Ramsar Parties, the Arctic Biodiversity Congress was also an opportunity to promote a draft resolution for COP12 in June 2015 in Uruguay.⁹⁰ Finland submitted the draft

hydrological and ecological characteristics that are central to the productivity of these areas.” In addition, see Hans Joosten, “Peatlands, Climate Change Mitigation and Biodiversity Conservation”, policy brief, (Copenhagen: Nordic Council of Ministers, 2015); and *Changing Times: Climate Change Impacts & Adaptation in Nunavut*, online: <www.gov.nu.ca/sites/default/files/changing_times_-_english_low_res.pdf>

⁸⁶ See *The Arctic Biodiversity Assessment* (21 May 2013), online:

<<http://www.ramsar.org/news/the-arctic-biodiversity-assessment>>.

⁸⁷ The Aleut International Association, Arctic Athabaskan Council, Gwich’in Council International, Inuit Circumpolar Council, Russian Association of Indigenous Peoples of the North and the Saami Council. See Byers, *supra* note 10, 229-230, who indicates why strength in numbers is important to the operation of these groups. The same rationale applies to the attraction of international law generally to Indigenous people, see Timo Koivurova & Leena Heinämäki, “The Participation of Indigenous People in International Norm-making in the Arctic” (2006) 42 *Polar Record* 101, who comment: “As many of the problems of today can be solved only at the global or regional level, indigenous peoples are also quite naturally interested in gaining access to the international treaty-making processes.”

⁸⁸ See also Christoph Zöckler, “Status, Threat, and Protection of Arctic Waterbirds” in Huettmann, *Protection*, *supra* note 32, 203.

⁸⁹ See online: <<http://www.caff.is/arctic-migratory-birds-initiative-ambi>>.

⁹⁰ See e.g. Arctic Biodiversity Congress Bulletin, “Summary of the Arctic Biodiversity Congress 2014”, IISD / CAFF, (7 December 2014), online: <<http://www.iisd.ca/biodiv/arctic/2014/>>.

(with support from Wetlands International, WWF International and other Arctic countries), on “*undertaking an inventory of polar and subpolar wetlands some of them already designated as Ramsar Sites in the Arctic and Sub-Antarctic regions*”⁹¹ (my emphasis). In doing so, it highlighted the global importance of biodiversity and freshwater resources supported by wetlands, and called for Parties, together with CAFF, the other biodiversity-related conventions (CBD, WHC, the Convention on Migratory Species⁹² – CMS – and Convention on International Trade in Endangered Species⁹³ – CITES), and other organisations to support the draft resolution.

In Arctic Canada there are eight properties on the List of Wetlands of International Importance: Polar Bear Pass, Dewey Soper Migratory Bird Sanctuary, Rasmussen Lowlands, Queen Maud Gulf, McConnell River, Old Crow Flats, Whooping Crane Summer Range, and the Peace-Athabasca Delta. The first five are in Nunavut, and the others (respectively) are in the Yukon, Alberta and the Northwest Territories (a transboundary site), and in Alberta. The last two are also World Heritage listed properties. Of the Nunavut inscriptions, the first (Polar Bear Pass) is protected under Canadian law as a National Wildlife Area (NWA), and the others are protected as Migratory Bird Sanctuaries (MBS). Various provisions apply to the other listings which are beyond the scope of this article. Notably, Old Crow Flats is designated as a Habitat Protection Area under Territory law.⁹⁴

Whether the properties are capable of meeting the definitions of wilderness is also important. This can be in part considered in accordance with the IUCN protected area categories. The Nunavut properties are classified under the *Wetlands Convention* as follows. Polar Bear Pass, the most northerly, and other than by sea significantly isolated, is a category Ia property (Strict Nature Reserve). Queen Maud Gulf,⁹⁵ the world’s second largest *Wetlands Convention* site (after Botswana’s Okavango Delta), Dewey Soper Migratory Bird

⁹¹ *Ibid.*

⁹² *Convention on the Conservation of the Migratory Species of Wild Animals*, 23 June 1979, 1651 UNTS 333 (entered into force 1 November 1983) (CMS).

⁹³ *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, 3 March 1973, 993 UNTS 243 (entered into force 1 July 1975) (CITES).

⁹⁴ Yukon Government, “Governments Establish Old Crow Flats Habitat Protection Area” (29 June 2009). See online: <<http://www.gov.yk.ca/news/09-156.html>>.

⁹⁵ While the designation under the Convention is IV, curiously Environment and Climate Change Canada has the designation at Ib. See online: <<https://ec.gc.ca/ap-pa/default.asp?lang=En&n=20CAE357-1>>.

Sanctuary⁹⁶ and McConnell River⁹⁷ are all category IV properties (Habitat/Species Management Areas). The Rasmussen Lowlands does not have an IUCN category because it is yet to be given a national designation.⁹⁸ Of the other three sites in the Canadian Arctic, Old Crow Flats is a category Ib property (Wilderness Area); Whooping Crane Summer Range, and Peace-Athabasca Delta are both category II (National Parks, as they are part of Wood Buffalo National Park).

What do these categorisations mean for wilderness protection? Do the inscriptions also meet the three wilderness criteria (naturalness, undevelopedness, and relatively large size)? The focus of the remainder of this section will be a summary of the following four properties which are, respectively, examples of each of the relevant categories: Polar Bear Pass (Ia), Old Crow Flats (Ib), Whooping Crane Summer Range (II), and Queen Maud Gulf (IV). They are also examined because their geographical location and other matters which suggests they are more likely to meet the wilderness criteria. The first, Polar Bear Pass, a Strict Nature Reserve, is located at 75°43'N and with an area of 262 400 ha is described as “A wetland oasis in a dry high Arctic desert ...The purpose of most visits are for wildlife research or ecological studies.”⁹⁹ There is no evidence of development activity at the site, so there would appear to be little difficulty for it to meet the wilderness criteria.

The second, Old Crow Flats, while not as northerly (67°34'N), is however more than twice the size (617,000 ha). It is described in the inscription as “A vast plain (in fact, an ancient lake bottom) of meandering tributaries and perched wetlands with more than 2,000 freshwater lakes... Indigenous people take an economically important harvest of muskrats. The area includes some of the richest archaeological sites of early human habitation in North

⁹⁶ While the designation under the Convention is IV, again Environment and Climate Change Canada has the designation at Ib. See online: <<https://ec.gc.ca/ap-pa/default.asp?lang=En&n=4EC0B0A3-1>>.

⁹⁷ As with Dewey Soper, McConnell River is also given a different IUCN designation by Environment and Climate Change Canada. It is indicated to be category Ia not IV. See online: <<https://ec.gc.ca/ap-pa/default.asp?lang=En&n=6E74294E-1>>.

⁹⁸ A review however recommended it become a NWA, see online: <https://www.researchgate.net/publication/290489618_Assessment_of_bird_populations_in_the_Rasmussen_Lowlands_Nunavut>.

⁹⁹ Ramsar site no. 245, listed 24/5/82, most recent RIS information: 2001. See online: <<https://rsis Ramsar.org/ris/245>>.

America. Some oil exploration has occurred.”¹⁰⁰ There is therefore evidence of both Indigenous hunting practices and past development, although the latter does not appear to have compromised its overall wilderness qualities significantly to date. This may however change, as “[a]lthough industrial development is prohibited in the park the entire area is threatened by possible road construction and pipeline development.”¹⁰¹

An even larger protected area under the *Wetlands Convention* in Canada is Whooping Crane Summer Range, at 1,689,500 ha, and which is found at 60°15'N.¹⁰² The size of the area and absence of notable threats suggests it will likely meet each of the wilderness criteria for the present if not the foreseeable future. It is described in the listing as “A huge complex of thousands of basically continuous water bodies including lakes, bogs, marshes, shallow ponds and streams. This site is of unique importance as the only remaining natural nesting area for the endangered whooping crane...”¹⁰³ As to the future, IBA Canada highlights various matters including the potential threat that drought poses in particular. In addition therefore to “disturbance from vehicles, aircraft, hunting, and collisions with power lines... One of the more critical, uncontrollable threats to Whooping Cranes is drought. Such conditions reduce the abundance of amphibians and invertebrates upon which the cranes feed, and make it easier for predators to move about in the normally waterlogged terrain.”¹⁰⁴

Finally, Queen Maud Gulf, the largest of all the Canadian properties (and the largest protected area in Canada), is 6,278,200 ha in size and located at 67°00'N. It must be noted

¹⁰⁰ Ramsar site no. 244. Most recent RIS information: 2001. See online: <<https://rsis Ramsar.org/ris/244>>. See also Vuntut Gwichin Government / Yukon Government, Old Crow Flats, *Van Tat K'atr'anahtii*, Special Management Area, *Management Plan*, 14 August 2006, which indicates the different responsibilities of the governments.

¹⁰¹ IBA [Important Bird Areas] Canada, a Canadian NGO which is part of Birdlife International, comments further on the domestic arrangements for this site: “Part of the Flats lies within Vuntut National Park and the section south of the Old Crow River has been designated as a Special Management Area. The Vuntut Gwichin First Nation manages the Special Management Area, and in co-operation with the federal government, the Vuntut National Park... in general the Flats have experienced little impact from industrial activities. Management plans for Vuntut National Park and Old Crow Flats will be cooperatively developed by the federal government and the Vuntut Gwitchen First Nation.” See online: <<http://www.ibacanada.com/mobile/site.jsp?siteID=YK001>>.

¹⁰² For a description of some of the issues, see: Jennifer S Holland, “Counting Cranes”, *National Geographic*, June 2010.

¹⁰³ Ramsar site no. 240. Most recent RIS information: 2001. See online: <<https://rsis Ramsar.org/ris/240>>.

¹⁰⁴ See online: <<http://www.ibacanada.org/site.jsp?siteID=NT002>>.

that as with Dewey Soper and McConnell River, the IUCN designation for this property indicated under the Convention (IV) differs from that set out by Environment and Climate Change Canada (Ib). As to current qualities, the *Wetlands Convention* indicates that it "...embraces a vast tundra plain comprising a huge area of low-lying wet sedge meadows and marsh tundra, interspersed with communities of lichens, mosses and vascular plants. The area includes open sea, coastal bays, intertidal zones, tidal estuaries, deltas, lowland rivers and freshwater lakes."¹⁰⁵ It will therefore have little difficulty meeting the criterion for scale and, because of its isolation from population or development, the other two criteria also. In relation to development this is now a cause for some concern as with the other potentially threatened properties above. IBA Canada notes: "A recent increase in mineral exploration to the east of the Queen Maud Gulf [which] has resulted in pressure on the [Canadian Wildlife Service] CWS to permit mineral exploration in the Sanctuary."¹⁰⁶

V. THE RELATIONSHIP BETWEEN TRADITIONAL ECOLOGICAL KNOWLEDGE AND WISE USE

Section III above indicated clear connections between the wise use principle and TEK under the *Wetlands Convention*, and section IV described Canada's Arctic listed wetlands and noted specific and general pressures to which they are subject. This section considers TEK / wise use links further, on the basis that "TEK assumes that humans are, and always will be, connected to the natural world, and that there is no such thing as nature that exists independent of humans and their activities."¹⁰⁷ As a means of implementing the wise use principle, connections between wilderness and TEK have therefore been highlighted. As indicated in the Introduction however, Watson *et al* advocate greater understanding of the relationship, noting as follows:

Wilderness is a place with all the pieces intact. Just as these intact systems offer the opportunity for scientific investigation, they also provide opportunity for continued evolution of traditional relationships. TEK is not static, but the long history of association between

¹⁰⁵ Ramsar site no. 246. Most recent RIS information: 2001. See online: <<https://rsis Ramsar.org/ris/246>>.

¹⁰⁶ It also notes that the Canadian Wildlife Service has recommended the designation of the Sanctuary be changed to a NWA to provide stronger protection. The proposal is currently on hold, pending resolution of other land use issues in the region.' See online: <<http://www.ibacanada.org/site.jsp?siteID=NU009>>.

¹⁰⁷ Watson et al, *supra* note 1, 3.

people and the environment provides opportunity for continued growth in ability to anticipate reaction to human activity, whether by aboriginal or non-aboriginal visitors or managers. Wilderness protection concerns not just individual plants or animals, but also the relationship between humans and the land.¹⁰⁸

These connections have been explored further in related literature, including in the North American - and BC¹⁰⁹ - context. In the US for example, a study of Huna Tlingit traditional gull-egg harvests in the wilderness of Glacier Bay National Park and Preserve, Alaska, indicates that TEK includes a sophisticated appreciation of glaucous-winged gull nesting biology and behaviour; this was able to be applied by the community to the design of sustainable egg-harvesting strategies.¹¹⁰ Concerning wise use under the *Wetlands Convention* specifically, the application of TEK has also been considered and reported upon. The role of traditional beliefs, allied hunting practices, and associated TEK in a species' discovery and subsequent community-based conservation has also been examined in other global contexts; consideration was given to how these things might influence future conservation outcomes, and how they may themselves be shaped by conservation efforts.¹¹¹

¹⁰⁸ Watson et al, *supra* note 1, 8.

¹⁰⁹ See e.g. Nancy J Turner, Marianne Boelscher Ignace & Ronald Ignace, "Traditional Ecological Knowledge and Wisdom of Aboriginal Peoples in British Columbia" (2000) 10:5 *Ecological Applications* 1275; and, with a more recent focus on the fishery, Nicole Schabus, "Après les Deluge – Reclaiming the Space for Indigenous Traditional Knowledge", paper presented to Journal of Environmental Law and Practice Conference, Kananaskis, 6 June 2015. After an anticipated deluge of another kind however, BC may soon have a larger area of (man-made) wetlands following a decision to approve the Site C hydroelectric dam which may not have respected the views of the First Nations, contrary to Canada's 2016 full acceptance of UNDRIP: see Ashifa Kassam, "Construction of Giant Dam in Canada Prompts Human Rights Outcry", *The Guardian* (10 August 2016). Regrettably this is not the only example of this kind in Canada, with another from sub-Arctic Labrador also of note; see Colin Samson, "How a Controversial Dam Threatens Rights of Canada's Indigenous Innu People", *The Conversation* (6 July 2016).

¹¹⁰ See Eugene S Hunn et al, "Huna Tlingit Traditional Environmental Knowledge, Conservation, and the Management of a 'Wilderness' Park" (2003) 44 *Current Anthropology* 79.

¹¹¹ See JM McPherson et al, "Integrating Traditional Knowledge When it Appears to Conflict with Conservation: Lessons from the Discovery and Protection of Sitatunga in Ghana" (2016) 21:1 *Ecology and Society* 24.

The significance of culture has been a part of the ongoing deliberations under the *Wetlands Convention*.¹¹² Providing background to the third question on the role of TEK in site management, fifteen years ago COP8 developed Cultural Values Principles;¹¹³ Parties were advised to use them in the conservation and enhancement of the cultural values of wetlands, “within their national and legal frameworks and available resources and capacity”.¹¹⁴ Significantly, they were furthermore encouraged to do this “for the designation of new Wetlands ... or when updating ... existing Ramsar sites, taking into account ... customary law, and the principle of prior informed consent...”¹¹⁵ Additionally, they were encouraged “to integrate cultural and social impact criteria into environmental assessments ... carry out such efforts with the active participation of indigenous peoples ... and to consider using the cultural values of wetlands as a tool to strengthen this involvement, particularly in wetland planning and management...”¹¹⁶

Emphasis was put upon “the strong link between wetland conservation and benefits to people... [and the] positive correlation between conservation and the sustainable use of wetlands... [and] the involvement of indigenous peoples...”¹¹⁷ These are all clear illustrations of the connections between wise use and TEK under the *Wetlands Convention*; for example integration of cultural criteria and participation of First Nations in environmental assessment processes highlights advocacy for cultural knowledge transfer into policy making.

A resolution was subsequently adopted at COP9 urging Parties to take into account the cultural values of wetlands, in recognition that wetlands are: “places where ...indigenous peoples have developed strong cultural connections and sustainable use practices [and] are especially important to ...indigenous peoples and that the[y] must have a decisive voice in

¹¹² See online: <http://ramsar.rgis.ch/cda/en/ramsar-documents-culture/main/ramsar/1-31-417_4000_0__>.

¹¹³ Resolution VIII.19, COP8 (Valencia, Spain, 18-26 November 2002), *Guiding Principles for Taking into Account the Cultural Values of Wetlands for the Effective Management of Sites*.

¹¹⁴ *Ibid*, paragraph 20

¹¹⁵ *Ibid*, paragraph 18.

¹¹⁶ *Ibid*, paragraph 18 d) and e).

¹¹⁷ *Ibid*, Guiding principle 2; see also: Guiding principle 4 - To learn from traditional approaches; Guiding principle 5 – To maintain traditional sustainable self-management practices; Guiding principle 16 – To safeguard wetland-related oral traditions; Guiding principle 17 – To keep traditional knowledge alive; and Guiding principle 18 – To respect wetland-related religious and spiritual beliefs and mythological aspects in the efforts to conserve wetlands.

matters concerning their cultural heritage.”¹¹⁸ The relationship between human wellbeing and wetlands was furthermore recognised under the *Changwon Declaration* during COP10, although other than a passing mention (at 9) this does not address the relationship between Indigenous peoples or TEK.¹¹⁹ However at COP11, a resolution was approved encouraging “...active participation of indigenous peoples ...taking fully into account the ethical implications of cultural and historical issues of indigenous peoples and ...the involvement of such communities in decision-making...”¹²⁰

Despite these efforts, in 2013 the Ramsar Culture Working Group (WG) released a document to draw attention to the fact that the cultural dimension had “lagged behind” economic, scientific and recreational values.¹²¹ The WG furthermore notes that despite the adoption of resolutions, the establishment of the WG itself, and the Strategic Plan (2009-2015) giving “some support for greater recognition of cultural (and spiritual) values in decision-making”, this has “fallen short of providing the more developed strategic direction on the issue which ...is increasingly sought in today’s evolving context of ecosystem services and broader partnership working.” While there is no specific reference to Indigenous cultures in this document, earlier documents produced under the Convention include them as a key aspect, for example a COP8 Resolution in 2002.¹²²

The 52nd meeting of the Standing Committee made a number of observations in this respect.¹²³ To address the deficiencies identified perhaps - and to support the implementation of the international law relevant to Indigenous peoples identified above - the 2016-2018 Secretariat Work plan includes notable targets of relevance, in particular Target 10, which urges that “traditional knowledge, innovations and practices of indigenous peoples ...relevant

¹¹⁸ Resolution IX.21, COP9 (Kampala, Uganda, 8-15 November 2005).

¹¹⁹ Resolution X.3, COP10 (Changwon, South Korea, 28 October – 4 November 2008).

¹²⁰ Resolution XI.7, COP11 (Bucharest, Romania, 6-13 July 2012), paragraph 16.

¹²¹ Ramsar Culture Network, *Culture and Wetlands in Strategic Planning for the Ramsar Convention*, January 2013.

¹²² These guiding principles identify specifically in paragraph 13 *ILO Convention 169*, and the Permanent Forum of Indigenous People, which the *Wetlands Convention* is urged to cooperate with to address ‘the need for resolute action to preserve the cultural heritage’.

¹²³ 13 June 2016 - 17 June 2016. See online: <<http://www.ramsar.org/event/52nd-meeting-of-the-standing-committee>>. Note that although COP12 was held mid-2015 (Punta Del Este, Uruguay, 1-9 June 2015), materials from the meeting are not at the time of writing available. For updates, see online: <http://ramsar.rgis.ch/cda/en/ramsar-documents-cops-cop12/main/ramsar/1-31-58-606_4000_0__>.

for the wise use of wetlands and their customary use of wetland resources are documented, respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention, with a full and effective participation of indigenous peoples...”¹²⁴ This is also clear evidence of efforts to integrate TEK into the wise use of wetlands.

VI. CONCLUSIONS

The research questions asked in the Introduction were as follows: Firstly what is wilderness, and can it be protected by legal means? Applying the threefold definition of the wilderness criteria is a helpful starting point to answering the initial part of the question, although the need to understand and accept the presence of, and relationship between, Indigenous people and the land must above all be emphasised. Wilderness is not just the physical components of a place, but above all the connection of Indigenous people with it. Without this understanding, there can be no legitimacy in management decisions taken, and no advantage gained from the local knowledge that can support its protection. As to answering the latter part of the question, provided acceptable definitions can be promoted and supported, wilderness can potentially be legally protected, although the effectiveness of this also depends upon domestic implementation and compliance.

Secondly, does international environmental law, and the *Wetlands Convention* in particular, provide for wilderness protection either directly or indirectly? By comparing the threefold definition of wilderness to the wetlands inscription criteria in the treaty, considering the obligations to promote conservation through wise use, and contextualising the discussion with reference to other international law concerning the environment and Indigenous peoples, an affirmative answer to this question can generally be given. Wilderness protection is however indirect, as there is no specific reference to this. Yet in regard to the law itself, there is also a considerable difference between making provision for something and actually achieving it. The weak language of the treaty text, and limited and not particularly supportive nature of the international case law, means ultimately that legal protection depends upon political will. It must furthermore be acknowledged that other factors may also influence wilderness protection, such as relative isolation from population or development pressures.

¹²⁴ Based on previous resolutions, Activity 10.1 requires Parties to Support Ramsar Culture Network to encourage active and informed participation of indigenous peoples and local communities in the conservation and wise use of wetlands (Resolution XII.2 para.19); and Activity 10.2 requires them to Compile data on the relationship of indigenous peoples and local communities with wetlands (Resolution XII.2 para.20).

Until recently, these other factors may well have been as important as the law in ensuring wilderness protection at some of Canada's inscribed wetlands.

Thirdly, what is the connection between TEK and does the central concept of "wise use", and does this ensure that appropriate weight is given to Indigenous rights-holders? The answer to the first part of this question is that TEK is an essential part of the wise use concept. Special attention to Indigenous values has been given for at least the last two decades, with some evidence that the Convention has incorporated Indigenous perspectives into the wise use process, although evidence and scholarly comment upon the effectiveness of this is admittedly limited. In relation to the second part, ensuring appropriate weight is given to Indigenous rights-holders however depends upon greater application of other relevant international law to reinforce this, UNDRIP in particular, and especially the principle of FPIC. It remains to be seen to what extent this is considered in the wetland wilderness contexts reviewed in this article.

Fourth and finally, what are the implications for wilderness protection that flow from applying TEK to wise use of protected wetlands? To put this another way, does linking TEK with ecological knowledge help protect Canada's Arctic wilderness? While more detailed research is inevitably needed to provide evidence, the answer to this question can at least be aided by defining wilderness to include Indigenous people. Where wilderness is acknowledged to exist – such as the northern Yukon or across Nunavut – it has therefore been shaped with reference to the Indigenous peoples who have lived there for generations, and the reason the land is in the condition it is in is because of their environmental stewardship, or traditional "wise use".

Wilderness protection of listed wetlands depends on understanding and accepting this fact as well as addressing more recent threats directly by other means, legal and political. Whether threats to Canada's Arctic wetland wilderness sites come from human induced climate change or resource development, ensuring these threats are appropriately prevented, limited or managed is therefore also essential. All measures considered must however be determined in close partnership with Indigenous peoples as rights-holders, both in respect and recognition of this traditional status, and so that the knowledge that they can bring can assist in providing the best possible protection for these special places.