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ARTICLE

Migratory Waterbird Conservation at the Flyway Level: Distilling the Added Value of AEWA in Relation to the Ramsar Convention

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I. INTRODUCTION

For millennia, the natural phenomenon of bird migration has provided humans with inspiration, sustenance, recreation, and a variety of ecological benefits.¹ While arguably the most visible group of migratory species, the astonishing distances covered by many migratory birds results in them also being one of the most

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1. See generally ROBERT BOARDMAN, *THE INTERNATIONAL POLITICS OF BIRD CONSERVATION: BIODIVERSITY, REGIONALISM AND GLOBAL GOVERNANCE* 1-5 (2006).

difficult groups of animals to protect, with such protection only being achievable through international cooperation. Waterbirds in particular have attracted significant international attention, being vulnerable not only because of their mobility, but also because of their reliance on wetlands (which fall among the world's most threatened ecosystems²) and their tendency to congregate in large numbers.³ Indeed, the adoption of the world's first global conservation treaty – the 1971 Convention on Wetlands of International Importance especially as Waterfowl Habitat⁴ (Ramsar Convention) – was largely motivated by the international community's desire to protect migratory waterfowl;⁵ and, writing in 1994, de Klemm posited that the effectiveness of the Convention on Migratory Species⁶ (CMS or Bonn Convention) – the only global treaty dedicated to migratory species conservation – would, in the future, “be judged on its ability to bring about the conclusion of flyway agreements, especially for the conservation and sustainable exploitation of water birds”.⁷

By the time that de Klemm made this comment, the Ramsar Convention had already been in force for almost 19 years. It is thus unsurprising that de Klemm, despite emphasizing the need for waterbird agreements, also identified as a potential problem “the difficulty of determining clearly the areas of responsibility of the Ramsar Convention and any future agreements that may be made on the conservation of habitats of migratory water-birds under the

2. Ward Hagemeyer, *Site Networks for the Conservation of Waterbirds*, in WATERBIRDS AROUND THE WORLD: A GLOBAL OVERVIEW OF THE CONSERVATION, MANAGEMENT AND RESEARCH OF THE WORLD'S WATERBIRD FLYWAYS, 697, 698 (Gerard C. Boere et al. eds., 2006) [hereinafter WATERBIRDS AROUND THE WORLD].

3. *Id.* at 697.

4. See generally Convention on Wetlands of International Importance especially as Waterfowl Habitat, Feb. 2, 1971, 996 U.N.T.S. 245, http://www.ramsar.org/sites/default/files/documents/library/current_convention_text_e.pdf [<https://perma.cc/X3VV-EP7Z>] [hereinafter Ramsar Convention].

5. M.J. Bowman, *The Ramsar Convention Comes of Age*, 42 NETH. INT'L L. REV. 1, 6 (1995), http://www.ramsar.org/sites/default/files/documents/library/the_ramsar_convention_in_international_law.pdf [<https://perma.cc/Z8FT-F2EK>] (“[T]he Ramsar Convention was the product of a sequence of deliberations which had as their primary purpose the protection of migratory wildfowl. . .”).

6. See Convention on the Conservation of Migratory Species of Wild Animals, June 23, 1979, 1651 U.N.T.S. 356 [hereinafter CMS].

7. Cyrille de Klemm, *The Problem of Migratory Species in International Law*, in GREEN GLOBE YEARBOOK OF INTERNATIONAL CO-OPERATION ON ENVIRONMENT AND DEVELOPMENT 67, 74-75 (Helge Ole Bergesen & Georg Parmann eds., 1994).

Bonn Convention”.⁸ In June 1995, the Agreement on the Conservation of African-Eurasian Migratory Waterbirds⁹ (AEWA) was adopted, and this instrument remains the only legally binding waterbird Agreement in the CMS Family. However, while AEWA has been lauded as a very promising instrument,¹⁰ the concern has also been raised that the Agreement “has a large potential scope for the duplication of obligations, especially with regard to the protection of wetland habitats, given the operation of the Ramsar Convention”.¹¹ The existing literature thus recognizes that overlap between AEWA and the Ramsar Convention is potentially problematic. It fails, however, to provide a detailed analysis of the nature of this overlap and the interplay between the provisions of the Agreement and the Convention, or of their respective roles in relation to waterbird conservation. This article’s primary objective is to present such an analysis and, in so doing, draw conclusions about the gaps that AEWA is able to fill in the Ramsar regime. The article’s subsidiary objectives are to make suggestions concerning the lessons that AEWA can draw from the experiences of the Ramsar Convention (and the critiques thereof); as well as the lessons that a comparison of the Convention and the Agreement offer concerning the roles, advantages, and disadvantages of ecosystem-based and species-based treaties more broadly. The issues explored go beyond mere academic relevance. Indeed, at the time at which AEWA was initially drafted, there were those who argued that the same results could be achieved under the Ramsar Convention;¹² and, even today, some non-party range states

8. *Id.* at 73-74.

9. *See generally* Agreement on the Conservation of African-Eurasian Migratory Waterbirds, June 16 1995, 2006 O.J. (L 345) 26, http://www.unep-aewa.org/sites/default/files/basic_page_documents/aewa_agreement_text_2016_2018_FINAL_correction%20made%20on%20p%2054_wcover.pdf [<https://perma.cc/V5Y5-TLZL>] [hereinafter AEWA].

10. Richard Caddell, *International Law and the Protection of Migratory Wildlife: An Appraisal of Twenty-five Years of the Bonn Convention*, 16 *COLO. J. INT’L ENVTL. L. & POL’Y* 113, 132 (2005). *See generally* MICHAEL BOWMAN ET AL., *LYSTER’S INTERNATIONAL WILDLIFE LAW* 231 (2nd ed. 2010); Melissa Lewis, *AEWA at Twenty: An Appraisal of the African-Eurasian Waterbird Agreement and Its Unique Place in International Environmental Law*, 19 *J. INT’L WILDLIFE L. & POL’Y*, 22, 23 (2016).

11. Caddell, *supra* note 10, at 150.

12. GERARD C. BOERE, *THE HISTORY OF THE AGREEMENT ON THE CONSERVATION OF AFRICAN-EURASIAN MIGRATORY WATERBIRDS: ITS DEVELOPMENT*

continue to question the value of acceding to the Agreement when they are already parties to Ramsar.¹³ The perception that AEWA does not add sufficient value to the framework introduced by the Ramsar Convention therefore appears to have direct implications for the Agreement's membership.¹⁴ Further, in the face of resource constraints, it is becoming increasingly important for individual environmental treaties to identify not only areas of common interest in respect of which there is potential to establish synergies with other instruments (an issue which receives much attention in the contemporary discourse on international environmental governance¹⁵), but also those areas in which they are able to make *unique* contributions and should thus concentrate their efforts. In the AEWA context especially, there is a pressing need to identify the Agreement's niche insofar as a new Strategic Plan is currently under development, the purpose of which will be to identify the Agreement's strategic priorities for the period 2019-2027.¹⁶

To provide a framework against which to assess the extent to which the Ramsar Convention currently promotes the conservation of waterbirds and the areas in which AEWA makes – or has the potential to make – a unique contribution in relation to Ramsar, part II of the article outlines priority measures for

AND IMPLEMENTATION IN THE PERIOD 1985-2000, WITHIN THE BROADER CONTEXT OF WATERBIRD AND WETLANDS CONSERVATION 25 (2010), http://www.unep-aewa.org/sites/default/files/publication/aewa_history_book_sm_0.pdf [<https://perma.cc/US5A-3855>].

13. Conversation with Evelyn Moloko, Coordinator for AEWA's African Initiative, in Cape Town, S. Afr. (Oct. 27, 2013); *see also* GWEN VAN BOVEN, DEVELOPMENT OF A COMMUNICATION STRATEGY FOR THE AGREEMENT ON THE CONSERVATION OF AFRICAN-EURASIAN MIGRATORY WATERBIRDS (AEWA), QUICK SCAN-ANALYSIS OF RESULTS 17 (2004), http://www.unep-aewa.org/sites/default/files/document/tc5_inf5_4_communicationstrategy_quick_scan_0.pdf [<https://perma.cc/4VX3-Z2EE>] (recognizing the challenge of "convention exhaustion" and noting that "[i]n the international convention arena, some countries perceive AEWA as 'yet another agreement', and do not see enough benefit in joining").

14. Of course, membership of the Ramsar Convention does not explain why many of the range states that are not parties to AEWA have also failed to accede to the CMS, the application of which is not restricted to wetland-dependent species.

15. *See, e.g.*, INTERNATIONAL ENVIRONMENTAL LAW-MAKING AND DIPLOMACY REVIEW 2011 (Tuula Honkonen & Ed Couzens eds., 2013) (on synergies amongst the biodiversity-related conventions specifically).

16. *See generally* Lewis, *supra* note 10, at 55-56 (discussing AEWA's failure to undertake adequate prioritization thus far).

achieving the effective long-term conservation of migratory waterbirds. Particular detail is provided regarding habitat conservation, since it is in this area that the provisions of the Agreement and the Convention experience the greatest overlap and in respect of which the most intricate analysis is therefore necessary in order to distinguish each treaty's distinctive role. That AEWA has a more pronounced contribution to make than Ramsar in respect of threats that are *unrelated* to habitat is fairly obvious; though, as will be illustrated in the course of the article, the Convention's provisions are also relevant in this regard and establish an important link to the Agreement. Part II, therefore, also briefly outlines the need to address threats that are not habitat-related, as well as to address gaps in knowledge. After an introduction to the Ramsar Convention and AEWA is presented in part III, parts IV to VI assess the manners in which the texts of, and the guidance, procedures, and institutions developed under, these two instruments provide for the measures identified in part II, and suggest various improvements that can be made in this regard. While other multilateral environmental agreements (MEAs) are referred to where relevant, a full assessment of their contribution to waterbird conservation falls beyond the scope of this article.

Of course, even if a treaty regime makes provisions for all necessary conservation measures, its effectiveness will depend largely upon the willingness and ability of range states to both become parties to the treaty and implement its provisions.¹⁷ Insofar as participation is concerned, clarifying AEWA's role in relation to the Ramsar Convention is, as noted above, an important step towards filling gaps in the Agreement's current membership. In addition, part VII highlights the need to make accession more appealing to developing countries and considers whether there are any lessons that AEWA can draw from the Ramsar Convention in this regard. Although the article does not attempt to present a comprehensive analysis of the current implementation status of AEWA and the Ramsar Convention, it does comment on the extent to which, and the manner *in* which, certain provisions are being

17. These being two elements of the "effectiveness test" proposed in KARIN BAAKMAN, TESTING TIMES: THE EFFECTIVENESS OF FIVE INTERNATIONAL BIODIVERSITY-RELATED CONVENTIONS 59-61, 72-74 (2011).

implemented, as determined by the various monitoring mechanisms that are in place under each treaty. Finally, by unpacking the unique, though complementary, contributions of AEWA and the Ramsar Convention, the article provides a setting within which to reflect on the respective advantages and disadvantages of ecosystem-based and species-based treaties in general. The broader lessons that are offered by this comparison are therefore briefly considered in part VIII before conclusions are presented in part IX.

II. PRIORITY MEASURES FOR THE CONSERVATION OF MIGRATORY WATERBIRDS

The first step towards assessing the manners in which the Ramsar Convention contributes to waterbird conservation, the shortcomings of the Convention as a machine for achieving this objective, and the ways in which it is possible for AEWA to compensate for such shortcomings, is to identify the measures that need to be taken to achieve waterbird conservation in the long-term. To achieve their objectives, international instruments aimed at conserving migratory waterbirds should – either independently or jointly – require and, to the extent possible, facilitate these measures, and provide mechanisms for their coordination throughout species’ migration routes (flyways¹⁸).

The precise strategies required to maintain particular waterbird populations at, or restore them to, a favorable conservation status will obviously vary depending on the ecological requirements and distributions of, and threats faced by, each population. Regardless of the species/population involved, it will, however, be necessary to both ensure that adequate habitat is available at all life cycle stages and address what this article shall refer to as “species threats”¹⁹ (that is, threats that may cause

18. See also Gerard C. Boere & David A. Stroud, *The Flyway Concept: What It Is and What It Isn't*, in WATERBIRDS AROUND THE WORLD, *supra* note 2, at 40-42 (on the meaning of the term “flyway”).

19. See Gerard C. Boere & Tim Dodman, *Module 1: Understanding the Flyway Approach to Conservation*, in THE FLYWAY APPROACH TO THE CONSERVATION AND WISE USE OF WATERBIRDS AND WETLANDS: A TRAINING KIT 80-88 (2010), <http://wow.wetlands.org/CAPACITYBUILDING/TRAININGAWARENESSRAISING/WOWTrainingResources/tabid/1688/language/en-US/Default.aspx>

population decline through increased mortality or other negative impacts, despite not necessarily having a direct impact on the habitat²⁰); as well as to promote various ancillary measures, the most important of which are arguably measures to fill gaps in the data required to inform conservation activities.²¹ This part of the article elaborates upon these broad requirements so as to provide a normative framework against which to subsequently examine the respective contributions of the Convention and the Agreement.

A. Habitat Conservation

Habitat loss and degradation currently present the most significant threats to biodiversity worldwide.²² Waterbirds are no exception,²³ being particularly vulnerable due to their reliance on wetlands, which continue to be degraded and lost more rapidly than other ecosystems.²⁴ Habitat conservation is thus an indispensable component of any legal regime designed to protect waterbirds. Insofar as *migratory* waterbirds are concerned, a single population may be impacted by habitat loss in any part of

[<https://perma.cc/6U2L-XTYM>] (distinguishing between “habitat threats” and “species threats”).

20. Some threats may operate at *both* the habitat level and the species/population level. For instance, infrastructural developments have the potential to destroy or degrade habitat and may additionally cause disturbance to waterbird populations and the mortality of individual birds. Similarly, non-native species may degrade habitat in addition to impacting waterbird populations directly through predation, hybridization, or competition for resources.

21. Other relevant ancillary measures (which are touched upon in this article, despite not receiving an independent focus) would include, *inter alia*, capacity-building and awareness-raising.

22. SECRETARIAT OF THE CONVENTION ON BIOLOGICAL DIVERSITY, GLOBAL BIODIVERSITY OUTLOOK 3, at 55 (2010), <https://www.cbd.int/doc/publications/gbo/gbo3-final-en.pdf> [<https://perma.cc/Z9GG-P8VA>]; UNITED NATIONS ENV'T PROGRAMME, GLOBAL ENVIRONMENTAL OUTLOOK 5: ENVIRONMENT FOR THE FUTURE WE WANT 134, 139 (2012), http://web.unep.org/geo/sites/unep.org/geo/files/documents/geo5_report_full_en_0.pdf [<https://perma.cc/ZC8D-3CL6>].

23. WETLANDS INT'L, STATE OF THE WORLD'S WATERBIRDS 2010, at 8 (2010), <https://www.wetlands.org/publications/state-of-worlds-waterbirds-2010> [<https://perma.cc/3E6J-7LS6>] [hereinafter WETLANDS INT'L].

24. MILLENNIUM ECOSYSTEM ASSESSMENT, ECOSYSTEMS AND HUMAN WELL-BEING: WETLANDS AND WATER SYNTHESIS, at ii (José Sarukhán et al. eds., 2005), <http://www.millenniumassessment.org/documents/document.358.aspx.pdf> [<https://perma.cc/CC2T-6ZKP>]; See Nick C. Davidson, *How Much Wetland Has the World Lost? Long-term and Recent Trends in Global Wetland Area*, 65 MARINE & FRESHWATER RES. 934 (2014).

its migration route. The effective conservation of migratory waterbirds thus depends upon the availability of habitat both at, and between their breeding areas and their non-breeding destination areas.

Many populations of migratory waterbirds congregate in large numbers at key sites during at least part of their annual cycles,²⁵ making them extremely vulnerable to localized threats. The deterioration or loss of such sites may have significant impacts at the population level,²⁶ with the corollary of this of course being that site-based measures can make a major contribution to waterbird conservation. Flyway-level conservation requires that attention be paid not only to individual sites, but to *networks* of sites that provide ‘stepping stones’ along waterbirds’ migration routes.²⁷ These networks need to be identified, protected, and managed (ideally through formal designation of sites as protected areas and the development of management plans, although site conservation can also be achieved through other measures) with a view to maintaining, or if need be restoring,²⁸ their value for migratory waterbirds.²⁹ They should also have a measure of flexibility in

25. Hagemeijer, *supra* note 2, at 697.

26. See Nicholas C. Davidson & David A. Stroud, *African-Western Eurasian Flyways: Current Knowledge, Population Status and Future Challenges*, in WATERBIRDS AROUND THE WORLD, *supra* note 2, at 68; Jeff Kirby, *Review of Current Knowledge of Bird Flyways, Principal Knowledge Gaps and Conservation Priorities*, in A REVIEW OF MIGRATORY BIRD FLYWAYS AND PRIORITIES FOR MANAGEMENT 47, 66-68, 85 (CMS Tech. Ser. Publ’n No. 27, 2014), http://www.cms.int/atlantic-turtles/sites/default/files/publication/CMS_Flyways_Reviews_Web.pdf [<https://perma.cc/TG57-ET5V>].

27. Hagemeijer, *supra* note 2, at 698; Kirby, *supra* note 26, at 85; see also Barbara Lausche et al., *The Legal Aspects of Connectivity Conservation: A Concept Paper*, in 1 IUCN ENVTL. POL’Y & L. PAPER NO. 85, 62 (2013), <https://portals.iucn.org/library/sites/library/files/documents/EPLP-085-001.pdf> [<https://perma.cc/76A5-D4ET>] (for a broader discussion of “connectivity conservation,” which encompasses, but is not limited to, connectivity measures aimed at allowing the continued natural movement of migratory species across their ranges).

28. David A. Stroud et al., *Waterbird Conservation in a New Millennium – Where From and Where to?*, in WATERBIRDS AROUND THE WORLD, *supra* note 2, at 32 (noting that the discourse on habitat protection no longer focuses exclusively on the need to prevent habitat loss and degradation, but also on the importance of habitat restoration and rehabilitation).

29. WETLANDS INT’L, *supra* note 23, at 10 (highlighting that the “protection and management of a network of key wetland sites where waterbirds congregate in large numbers is one of the key components of effective conservation of

order to accommodate the shifts in waterbird distributions that are occurring in response to climate change.³⁰ Given that sites are not isolated from their surrounding environment and may be adversely impacted by external influences, the effective conservation of a particular site will generally involve the management of activities within not only the site itself, but also surrounding areas.³¹

For populations that are more widely dispersed during part or all of their annual cycles, the conservation of site networks will be inadequate and there is a need to address the impacts of human activities in the wider environment in order to maintain the ecological functions of particular habitats for migratory waterbirds.³² Writing in 2006 (and citing studies from the 1990s), Davidson and Stroud, for instance, noted that amongst the African-Eurasian wader populations with known status, the largest proportion of declining populations were those which bred in north-west and western Europe, where the reliance of many of these populations on low-intensity agricultural land made them particularly vulnerable to intensified farming practices under European agricultural policies.³³ The authors proceeded to emphasize that “to maintain the populations of migratory species, it is pointless to secure their well-being at one stage in their annual cycle [through site-focused conservation] whilst other policies lead to their decline at other times of the year” (in this instance, through broad-scale land use change which affected the viability of breeding populations).³⁴ This example demonstrates why site-based conservation measures will be inappropriate for protecting

waterbirds”); see also Tim Dodman & Gerard C. Boere, *Module 2: Applying the Flyway Approach to Conservation*, in *THE FLYWAY APPROACH TO THE CONSERVATION AND WISE USE OF WATERBIRDS AND WETLANDS: A TRAINING KIT*, *supra* note 19, at 181-82.

30. See Gerard C. Boere & Douglas Taylor, *Global and Regional Governmental Policy and Treaties as Tools Towards the Mitigation of the Effect of Climate Change on Waterbirds*, 146 *IBIS* 111, 114 (2004).

31. Cyrille de Klemm & Clare Shine, *Biological Diversity Conservation and the Law: Legal Mechanisms for Conserving Species and Ecosystems*, in *IUCN ENVTL. POL'Y & L. PAPER No. 29*, 195 (1993).

32. Colin A. Galbraith, *Policy Options for Migratory Bird Flyways*, in *A REVIEW OF MIGRATORY BIRD FLYWAYS AND PRIORITIES FOR MANAGEMENT*, *supra* note 26, at 142; Kirby, *supra* note 26, at 84-85; Dodman & Boere, *supra* note 29, at 62-63, 68-69.

33. Davidson & Stroud, *supra* note 26, at 71.

34. *Id.*

the habitats of all waterbird populations for all parts of their annual cycles, as well as the importance of integrating the needs of waterbirds into the policies of other sectors. It additionally illustrates the fact that, while wetlands constitute the most important habitat type for many waterbird species,³⁵ other habitat types are often also important. As explained by Dodman and Boere:

Many waterbirds use non-wetland habitats during their breeding period. The Barnacle Goose *Branta leucopsis* breeds on islets, crags and rocky outcrops in the Arctic tundra, as does the Pink-footed Goose *Anser brachyrhynchus*, which also uses tundra hummocks and gorges for breeding. In Europe, the White Stork *Ciconia ciconia* nests in buildings and in trees The Southern African population of Black Stork *Ciconia nigra* breeds on cliffs, in caves or potholes and even in abandoned mines. Black Storks that migrate from Europe into Africa after breeding often utilise non-wetland areas, such as open dry grassland in the highlands of Ethiopia and in open woodlands in West Africa's Sahel. The Sociable Lapwing *Vanellus gregarius* breeds on the semi-arid lowlands or low upland steppe of Central Asia, whilst its non-breeding habitat in the Middle East include semi-deserts, steppes and bare or cultivated fields.³⁶

In such instances, measures targeted at wetland conservation alone will clearly be inadequate and additional habitat types must be considered. Of course, the more broadly the term "waterbirds" is defined,³⁷ the wider the range of habitats that become relevant. For instance, if this group is defined to include seabirds, then consideration needs to be given to habitat conservation measures in the marine environment.

B. Measures to Address Species Threats

Although measures to address habitat-level threats are a necessary feature of waterbird conservation, such measures will not always be sufficient to maintain/restore favorable conservation status and need to be combined with measures targeting other

35. Hagemeyer, *supra* note 2, at 698.

36. Dodman & Boere, *supra* note 29, at 142.

37. See Davidson & Stroud, *supra* note 26, at 64; *infra* Part III.B (on the definition of "waterbirds").

drivers of population decline. Threats with particular significance for migratory waterbirds include: unsustainable harvest; lead and other forms of poisoning; disease; non-native species; human disturbance; mortality caused by artificial structures such as wind turbines and power lines; and (if seabirds are included) pollution, overfishing, and bycatch in the marine environment.³⁸ If international instruments are to achieve the effective long-term conservation of migratory waterbirds, they therefore need to provide a framework for addressing such challenges. As in the case of habitat conservation, measures directed towards species threats need to take entire migration routes into consideration.

C. Measures to Address Gaps in Knowledge

Robust data regarding waterbird populations and the habitats upon which they rely are essential for planning and implementing appropriate conservation measures, as well as evaluating the success thereof.³⁹ While not directly impacting conservation status, data collection, in other words, enables the measures discussed in parts A and B above and is an essential prerequisite for waterbird conservation. As a result of monitoring under such initiatives as the International Waterbird Census,⁴⁰ waterbirds in the African-western Eurasian region are amongst the best studied animals in the world.⁴¹ Nevertheless, significant knowledge gaps remain regarding, for instance, the sizes, trends, and migration patterns of certain populations; the importance of certain sites; the impacts of climate change upon migratory waterbirds; and the impacts of waterbird harvest.⁴² There is consequently a need for improved monitoring of waterbird populations and their habitats,⁴³ and this should ideally be promoted by those legal instruments which aim to achieve waterbird conservation.

38. See Kirby, *supra* note 26, at 66-75; Galbraith, *supra* note 32, at 142-47; WETLANDS INT'L, *supra* note 23, at 8-9; Boere & Dodman, *supra* note 19, at 81-88.

39. WETLANDS INT'L, *supra* note 23, at 1; Galbraith, *supra* note 32, at 147.

40. *Monitoring Waterbird Populations*, WETLANDS INT'L <http://archive.wetlands.org/OurWork/Biodiversity/Monitoringwaterbirdpopulations/tabid/773/Default.aspx> [<https://perma.cc/H8FL-3A5R>].

41. See Davidson & Stroud, *supra* note 26, at 64-66.

42. See Boere & Dodman, *supra* note 19, at 104-107 (providing an overview of key knowledge gaps and research needs).

43. *Id.* at 104; WETLANDS INT'L, *supra* note 23, at 1.

III. A BRIEF INTRODUCTION TO THE RAMSAR CONVENTION AND AEW

A. Overview of Objectives, Nature of Provisions and Scope

The Ramsar Convention was adopted in 1971 in an attempt to “stem the progressive encroachment on and loss of wetlands.”⁴⁴ Although wetlands are highly productive ecosystems which provide a broad spectrum of environmental services,⁴⁵ it was the international community’s desire to protect migratory waterfowl that provided the primary catalyst for the Convention’s negotiation and adoption.⁴⁶ Waterfowl are thus mentioned in the Convention’s title and preamble, and are repeatedly emphasized in its operative provisions.⁴⁷ This initial emphasis on birds is not surprising insofar as the importance of wetlands to migratory waterfowl (which, as highlighted by the Convention’s preamble, “should be regarded as international resources”⁴⁸) provides an important justification for the international regulation of ecosystems which themselves fall predominantly within national boundaries.⁴⁹ Focusing on waterfowl, in other words, gives an international dimension to the issue of wetland conservation, and thus a basis for asserting that states have a responsibility to cooperate in the conservation of wetlands both within and outside their territories. More recently, states have accepted that the conservation of

44. Ramsar Convention, *supra* note 4, pmbl.

45. *See, e.g.*, MILLENNIUM ECOSYSTEM ASSESSMENT, *supra* note 24, at 30-38; DANIELA RUSSI ET AL., THE ECONOMICS OF ECOSYSTEMS AND BIODIVERSITY FOR WATER AND WETLANDS 5-17 (2013), http://doc.teebweb.org/wp-content/uploads/2013/04/TEEB_WaterWetlands_Report_2013.pdf [<https://perma.cc/2EYU-PMXL>] (both on the various services provided by wetlands).

46. Bowman, *supra* note 5, at 6.

47. *See* Ramsar Convention, *supra* note 4, arts. 2(1), 2(2), 2(6), 4(1), 4(2), 4(4), 7(1).

48. *Id.* pmbl.

49. *See, e.g.*, IWRB/MAR BUREAU, PROJECT MAR – THE CONSERVATION AND MANAGEMENT OF TEMPERATE MARSHES, BOGS AND OTHER WETLANDS 29 (IUCN Publ’n New Ser. No. 3, 1963) (reflecting the view of participants at the 1962 MAR Conference – which recommended that the IUCN compile a list of wetlands of international importance and that this may be considered as a foundation for an international convention on wetlands – that the importance of wetlands to migratory birds “makes their continued existence a matter of international significance appropriate to international cooperation”).

biodiversity constitutes a “common concern of human kind”,⁵⁰ thus giving “the international community of states both a legitimate interest in resources of global significance and a common responsibility to assist in their sustainable development”.⁵¹ At the time of the Ramsar Convention’s adoption, however, this approach had yet to evolve. Indeed, at that time, no other examples of global conservation treaties existed. In contrast, AEWA, which was adopted in 1995 with the objective of maintaining migratory waterbird species in a favorable conservation status or returning them to such status,⁵² is a relatively young instrument, whose drafters had the benefit of learning from the myriad of global and regional conservation treaties that had preceded it. It thus stands to reason that AEWA’s structure and provisions are significantly more elaborate than those of the Ramsar Convention. Parties to AEWA are required to implement a broad range of detailed conservation commitments, which are found in the Agreement text and a legally binding Action Plan annexed thereto.⁵³ The text of the Ramsar Convention, on the other hand, appears simple by modern standards.⁵⁴ As discussed below, the Convention’s small collection of substantive provisions are heavily qualified and, in places, vague; though the Ramsar Conference of the Parties (CoP) has adopted a comprehensive body of guidance to inform the interpretation of these provisions.

Interestingly, early thinking in the development of both the Ramsar Convention and AEWA envisaged instruments with a significantly narrower geographic scope and species coverage than was ultimately provided for in either instrument. In the case of Ramsar, early discussions on a wetlands treaty focused on creating a framework for the protection of European refuges for ducks,

50. Convention on Biological Diversity, June 5, 1992, 1760 U.N.T.S. 79, pmb1., <https://www.cbd.int/doc/legal/cbd-en.pdf> [<https://perma.cc/8CET-5TYV>] [hereinafter CBD].

51. PATRICIA BIRNIE ET AL., *INTERNATIONAL LAW AND THE ENVIRONMENT* 130 (3rd ed. 2009).

52. AEWA, *supra* note 9, art. II(1).

53. See Rachelle Adam, *Waterbirds, the 2010 Biodiversity Target, and Beyond: AEWA’s Contribution to Global Biodiversity Governance*, 38 *ENVTL. L.* 87, 124-125 (2008) (discussing the nature of AEWA’s provisions).

54. Bowman, *supra* note 5, at 3 (“Judged by the standards of modern environmental treaties, the Ramsar Convention in its original form seems an extraordinarily simple, almost simplistic, legal instrument.”).

geese and swans (*Anitidae*).⁵⁵ Similarly, the initial thinking regarding AEWA was to develop an Agreement that focused solely on western palearctic *Anitidae*.⁵⁶ In terms of geographic coverage, the Ramsar Convention was ultimately adopted as a global instrument⁵⁷ and AEWA as a regional one. The latter's "Agreement Area" is designed to encompass the entire migration systems of African-Eurasian migratory waterbirds, spanning 119 range states (predominantly in Europe and Africa, though also including parts of Asia, as well as the Canadian archipelago).⁵⁸ Within the region in which both instruments apply, the Ramsar Convention is currently supported by a greater number of range states, with 112 state parties,⁵⁹ as compared to AEWA's 75.⁶⁰ The Convention's text refers to "waterfowl", while AEWA refers to "waterbirds"; and the definitions of these terms – neither of which is limited *Anitidae* – are relevant insofar as they influence the role of each instrument.

B. Definitional Issues

The Ramsar Convention defines "waterfowl" to mean "birds ecologically dependent on wetlands",⁶¹ and this term has come to be regarded as synonymous with "waterbird" under the

55. G.V.T. MATTHEWS, THE RAMSAR CONVENTION ON WETLANDS: ITS HISTORY AND DEVELOPMENT 15 (2013), <http://www.ramsar.org/sites/default/files/documents/pdf/lib/Matthews-history.pdf> [<https://perma.cc/8HZW-QWRS>].

56. CMS, Res. 1.6, *Agreements* (Oct. 21-26 1985), http://www.cms.int/sites/default/files/document/Res1.6_E_0_0.pdf [<https://perma.cc/Y5W2-KUHU>] (instructing the CMS Secretariat to take appropriate measures to develop Agreements for several species/groups of species, including western palearctic *Anatidae*).

57. Ramsar Convention, *supra* note 4, art. 9(2).

58. AEWA, *supra* note 9, art. I(1), annex 1.

59. The Ramsar Convention has 169 contracting parties in total. RAMSAR CONVENTION SECRETARIAT, CONTRACTING PARTIES TO THE RAMSAR CONVENTION (2016), http://www.ramsar.org/sites/default/files/documents/library/annotated_contracting_parties_list_e.pdf [<https://perma.cc/9FXJ-Q5NT>]. The only countries within AEWA's geographic range that are *not* Ramsar parties are Angola, Eritrea, Ethiopia, Qatar, San Marino, Saudi Arabia and Somalia; and of these only one, Ethiopia, is a party to AEWA. *Parties and Range States*, AEWA, <http://www.unep-aewa.org/en/parties-range-states> [<https://perma.cc/287N-7KFX>].

60. *Parties and Range States*, *supra* note 59 (the European Union (EU) is also a party to AEWA).

61. Ramsar Convention, *supra* note 4, art. 1(2).

Convention.⁶² Several attempts have been made to provide parties with more detailed guidance on the species which qualify as waterfowl/waterbirds. The most recent of these is found in the glossary to the *Strategic Framework and Guidelines for the Future Development of the List of Wetlands of International Importance*, which explains that the Convention's definition of waterfowl includes any wetland bird species and, at the broad level of taxonomic order, "includes especially":

- Penguins: *Sphenisciformes*;
- Divers: *Gaviiiformes*;
- Grebes: *Podicipediformes*;
- Wetland related pelicans, cormorants, darters and allies: *Pelecaniformes*;
- Herons, bitterns, storks, ibises and spoonbills: *Ciconiiformes*;
- Flamingos: *Phoenicopteriformes*;
- Screamers, swans, geese and ducks (wildfowl): *Anseriformes*;
- Wetland related raptors: *Accipitriformes* and *Falconiformes*;
- Wetland related cranes, rails and allies: *Gruiformes*;
- Hoatzin: *Opisthocomiformes*;
- Wetland related jacanas, waders (or shorebirds), gulls, skimmers and terns: *Charadriiformes*;
- Woucals: *Cuculiformes*; and
- Wetland related owls: *Strigiformes*.⁶³

62. *Strategic Framework and Guidelines for the Future Development of the List of Wetlands of International Importance of the Convention on Wetlands* (Ramsar, Iran, 1971), app. E, at 91 (3rd ed. 2008), <http://www.ramsar.org/sites/default/files/documents/pdf/guide/guide-list2009-e.pdf> [<https://perma.cc/B39A-2E PJ>] [hereinafter Ramsar Convention, *Strategic Framework*] (defining the term "waterbirds").

63. *Id*; see also Final Act of the International Conference on the Conservation of Wetlands and Waterfowl, ¶ 19 (Jan. 30 - Feb. 3, 1971), http://www.ramsar.org/sites/default/files/documents/library/final_act_ramsar_conference1971.pdf [<https://perma.cc/J6HQ-HU55>]; Ramsar Convention, Recommendation 4.2, *Criteria for Identifying Wetlands of International Importance*, at 4 (June 27 - July 4, 1990), http://www.ramsar.org/sites/default/files/documents/library/key_rec_4.02e.pdf [<https://perma.cc/T36D-EGEZ>] [Ramsar Convention, Recommendation 4.2] (both providing earlier guidance on the meaning of "waterfowl").

This list of orders, accompanied by vernacular names to indicate which exact families are meant, addresses various deficiencies with previous Ramsar guidance which Matthews had criticized⁶⁴ for listing a confusing mixture of orders, sub-orders, and families (rather than restricting itself to one taxonomic rank), and for excluding various wetland-dependent taxa. Most of the exclusions identified by Matthews have been rectified in the current guidance, with the one notable exception being that the order *Passeriformes*, which includes just as many wetland species as *Accipitriformes* and *Falconiformes*, is still not mentioned. The relevance of this omission is, however, questionable, given that – as can be inferred from its use of the word “includes” – the above list of orders clearly is not intended to be exhaustive. The Ramsar Convention’s waterfowl provisions can thus be considered applicable to additional taxa, provided that these indeed depend upon wetlands. The Convention defines “wetlands” to include an exceptionally wide range of habitats, including “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”.⁶⁵ Commenting on the breadth of this definition, Bowman observes that since “the primary aim of those who drafted the Convention was to establish a conservation regime for all those habitats which were of importance to waterfowl, the definition adopted was one wide enough to embrace virtually every practical possibility, without particular regard to scientific nicety”.⁶⁶ Nevertheless, there do remain species which, while clearly falling within the Ramsar Convention’s definition of waterfowl, do not rely exclusively upon the habitats included in its definition of wetlands (for instance, the species identified in the Dodman and Boere quote at the end of part II.A above); and this

64. See MATTHEWS, *supra* note 55, at 37-38 (referring specifically to the guidance attached to the Ramsar Convention’s Recommendation 4.2).

65. Ramsar Convention, *supra* note 4, art. 1(1).

66. Bowman, *supra* note 5, at 6. Regarding the Ramsar’s Convention’s objective to protect wetlands as waterfowl habitat, Bowman further comments that, although this “gave the Convention an emphasis which may not have been wholly to its advantage. . . it is hard to believe that, without this overarching ornithological perspective, it would ever have been considered appropriate to devise a single instrument for the protection of such a diverse variety of habitats as the Convention embraces.” *Id.*

obviously limits the Convention's potential to contribute to the conservation of certain species.⁶⁷

AEWA's Agreement text defines "waterbirds" to include "those species of birds that are ecologically dependent on wetlands for at least part of their annual cycle, have a range which lies entirely or partly within the Agreement Area and are listed in Annex 2 to [the] Agreement."⁶⁸ The first part of this definition is clearly based on the Ramsar Convention's definition of waterfowl (indeed, AEWA's drafters used the Ramsar definition as a starting point for identifying which species should be covered by the Agreement⁶⁹); while the second and third parts of the definition restrict both its geographic and taxonomic reach. Annex 2 currently lists 254 species belonging to 28 families.⁷⁰ It includes several species of coastal seabirds,⁷¹ but is not as inclusive as the list provided in the Ramsar Convention's guidance insofar as it excludes endemic species and species that do not occur in AEWA's Agreement Area, as well as coucals and wetland related raptors and owls.⁷² The fact that AEWA has opted for a more restricted definition of waterbirds makes sense, given that the obligations attached to a species' listing under the Agreement are (as explored below) more onerous than those that result from a species being considered to be a waterfowl for the purposes of the Ramsar Convention. Nevertheless, it has been suggested that AEWA's coverage could be extended to additional taxonomic groups, such as wetland-dependent raptors,⁷³ and the guidance provided under the Ramsar Convention illustrates that the term "waterbirds" is sufficiently flexible to accommodate this. The Agreement fails to define "wetlands." Both AEWA's negotiation history⁷⁴ and the guidance

67. But see, *infra* Part IV.A on the inclusion of non-wetland habitat within the boundaries of Wetlands of International Importance.

68. AEWA, *supra* note 9, art. I(2)(c).

69. Minutes of the Informal Negotiation Meeting on the draft Agreement text of AEWA, first session, ¶ 38 (June 12-14, 1994) (copy on file with author).

70. AEWA, *supra* note 9, annex 2.

71. See Lewis, *supra* note 10, at 39-40 (discussing AEWA's evolving taxonomic coverage).

72. Hoatzin are also excluded, though this has no significance, since they do not occur within AEWA's geographic range.

73. Lewis, *supra* note 10, at 39.

74. *E.g.*, Convention on the Conservation of Migratory Species of Wild Animals, Agreement on the Conservation of African-Eurasian Migratory

documents approved by the Agreement's Meeting of the Parties (MoP) since its adoption⁷⁵ suggest that this term should be interpreted to have the same meaning as it does under the Ramsar Convention;⁷⁶ though the significance of this is diluted by the fact that most of AEWA's habitat-related provisions do not apply exclusively to wetlands, but also to important terrestrial habitats and to marine areas – including areas beyond national jurisdiction to the extent that these are encompassed by the Agreement Area. Each instrument's role in the conservation of wetlands and other habitats is examined more closely in the next part of this article.

IV. HABITAT CONSERVATION

It is in respect of the conservation of waterbird habitat that the Ramsar Convention and AEWA experience the greatest overlap, resulting in a need to clearly unpack the respective roles of the Convention and the Agreement in relation to habitat conservation. As explained in part II, a variety of measures are necessary to ensure the availability of sufficient habitat along waterbird flyways. For populations that congregate during at least part of their annual cycles, networks of sites need to be identified and protected, and human activities within these sites and their surrounding environments need to be managed in a manner that maintains or restores their value for migratory waterbirds; all the while retaining sufficient flexibility to accommodate climate-induced range shifts. For dispersed populations, site-based measures will be inadequate and broader habitat measures are

Waterbirds: Volume II – Draft Management Plan 1 (Sept. 1993) (copy on file with author) (reflecting the explanation in the Management Plan annexed to an early draft of the Agreement Text that the Agreement's definition of "waterbird" followed the Ramsar Convention's definitions of both "waterfowl" and "wetland").

75. *E.g.*, WETLANDS INT'L, AEWA CONSERVATION GUIDELINES No. 3: GUIDELINES ON THE PREPARATION OF SITE INVENTORIES FOR MIGRATORY WATERBIRDS 12 (2005), http://www.unep-aewa.org/sites/default/files/publication/cg_3new_0.pdf [<https://perma.cc/72K8-ZUFJ>] (advising AEWA's parties to make use of the Ramsar Classification System for Wetland Type when refining site descriptions during the preparation of site inventories).

76. Vienna Convention on the Law of Treaties art. 31-32, May 22, 1969, 1155 U.N.T.S. 331 [hereinafter Vienna Convention] (providing that "any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions" shall be taken into account in the interpretation of a treaty's provisions, and that recourse may also be had to the preparatory work of the treaty and the circumstances of its conclusion).

necessary. Conservation measures need to take into account all habitat types relied upon by waterbirds during their annual cycles (rather than being restricted to wetlands alone); and intersectoral cooperation will frequently be a prerequisite for achieving such measures. This part of the article begins by assessing the extent to which the Ramsar Convention promotes the habitat conservation measures enumerated in part II, and then proceeds to explore the interaction between the Convention's provisions and AEWA's habitat-related provisions and to identify the ways in which AEWA adds, or has the potential to add, value to Ramsar's framework for habitat conservation.

A. The Ramsar Convention's Contribution to the Conservation of Waterbird Habitat

1. Identification of Key Sites

Article 2 of the Ramsar Convention requires each contracting party to designate at least one wetland within its territory for inclusion in a List of Wetlands of International Importance (the List).⁷⁷ It further stipulates that, when designating such sites, "wetlands of international importance to waterfowl at any season should be included",⁷⁸ and that a party's "international responsibilities for the conservation, management and wise use of migratory stocks of waterfowl" shall be considered.⁷⁹ Over the years, various criteria have been developed to guide Parties in their designation of these "Ramsar sites", and criteria that use waterbirds as indicators of international importance have consistently appeared amongst these.⁸⁰ Of the nine current criteria, two focus explicitly on waterbirds: Criterion 5 provides that "[a] wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds"; while, according to Criterion 6, "[a] wetland should be considered internationally important if it regularly supports 1% of the individuals in a

77. Ramsar Convention, *supra* note 4, art. 2(1), 2(4).

78. *Id.* art. 2(2).

79. *Id.* art. 2(6).

80. MATTHEWS, *supra* note 55, at 42-46 (discussing the progression of various versions of the Ramsar criteria).

population of one species or subspecies of waterbird.”⁸¹ The articulation of these two standards by which to quantitatively assess a site’s significance to waterbirds itself constitutes an important contribution (at least insofar as congregatory species are concerned), having relevance beyond Ramsar implementation. Criteria 5 and 6 have, for instance, been included in BirdLife International’s criteria for identifying Important Bird and Biodiversity Areas,⁸² and are also considered to be relevant for determining which areas constitute key sites for migratory waterbirds in the AEWA context.⁸³

Even if Criterion 5 or 6 is not met, there are several qualitative Ramsar criteria that can apply to waterbirds (as well as to other taxa), depending on the circumstances. A site may qualify as internationally important if it supports a vulnerable, endangered or critically endangered species (Criterion 2 – indeed, the Ramsar CoP has urged Parties to select sites for globally threatened waterbirds⁸⁴); if it supports populations that are important for maintaining the biological diversity of a particular biographic region (Criterion 3); or if it either supports populations at a critical stage in their life cycles or provides refuge during adverse conditions (Criterion 4 – for instance, staging posts on long distance migrations, or sites in semi-arid/arid areas⁸⁵). Importantly, it is possible for even small or temporary sites to

81. See generally RAMSAR CONVENTION SECRETARIAT, THE RAMSAR SITES CRITERIA: THE NINE CRITERIA FOR IDENTIFYING WETLANDS OF INTERNATIONAL IMPORTANCE (2014), http://www.ramsar.org/sites/default/files/documents/library/ramsarsites_criteria_eng.pdf [<https://perma.cc/DY7Y-CH5N>].

82. *Global IBA Criteria*, BIRDLIFE INTERNATIONAL DATA ZONE, <http://www.birdlife.org/datazone/info/ibacritglob> [<https://perma.cc/2HEY-GW9M>].

83. WETLANDS INT’L, *supra* note 75, at 3 (advising that “[i]n the context of AEWA, a site should be considered to be a key site for migratory waterbirds if: it harbours one or more of the globally threatened species listed in Annex 2 to the Agreement” or “it meets the numerical Ramsar criteria [. . .], in particular the 1% threshold (criterion 6), for one or more of the species listed in Annex 2 to the Agreement”).

84. Ramsar Convention, Res. VIII.38, *Waterbird Population Estimates and the Identification and Designation of Wetlands of International Importance*, ¶ 15 (Nov. 18-26, 2002), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_viii_38_e.pdf [<https://perma.cc/5AD7-9Z5B>].

85. Ramsar Convention, *Strategic Framework*, *supra* note 62, ¶ 83 (providing guidance on the application of Criterion 4 in respect of critical sites for migratory species); see also *id.* ¶ 93 (on the use of Criterion 4 in instances where the prerequisites for listing under Criteria 5 and 6 are not met).

qualify for listing under these criteria,⁸⁶ as well as for clusters of small sites (such as those that are linked in their use by one waterbird population as alternative roost or feeding areas) to be grouped together under one listing.⁸⁷

2. International Designation of Key Sites

The identification of key sites, although an essential first step towards the conservation of site networks, is not a sufficient measure for achieving this objective. As noted above, the consequences (from a Ramsar Convention implementation perspective) of a site meeting one or more of the criteria for identifying Wetlands of International Importance is that the area can be listed as a Ramsar site. By providing a mechanism for the international designation of sites that are critical for waterbird conservation, the Convention plays an important role in drawing both international and national attention to these sites, thereby increasing support for their protection and management.⁸⁸ That said, the mere fact that a site meets one of the Ramsar criteria does not mean that the state in whose territory it occurs is under an *obligation* to designate the site for inclusion on the List. Parties have discretion over which sites to list and need only designate *one* Ramsar site in order to satisfy their Article 2 commitment (though the majority of parties have, admittedly, exceeded this minimum requirement⁸⁹). Further, although Article 2 refers explicitly to the designation of sites that are important to waterfowl and to the consideration of parties' international responsibilities regarding migratory stocks of waterfowl,⁹⁰ the weak wording of these

86. *Id.* ¶¶ 83, 222.

87. *Id.* ¶ 60.

88. See generally Royal C. Gardner et al., *African Wetlands of International Importance: Assessment of Benefits Associated with Designations under the Ramsar Convention*, 21 GEO. INT'L ENVTL. L. REV. 257, 258-59 (2009); Royal C. Gardner & Kim Diana Connolly, *The Ramsar Convention on Wetlands: Assessment of International Designations within the United States*, 37 ENVTL. L. REV. 10089, 10095-96 (2007) (both discussing the benefits arising from Ramsar designation).

89. *Country Profiles*, RAMSAR, <http://www.ramsar.org/country-profiles> [<https://perma.cc/QHY7-Q3G4>].

90. See also Ramsar Convention, *Strategic Framework*, *supra* note 62, ¶¶ 85, 94 (identifying the designation of all wetlands which meet Criteria 5 and 6 as a long-term target for the Convention); Ramsar Convention, Res. IX.1: Annex D,

provisions (“should” and “shall consider”) lessens their legal force, making it possible for a contracting party to comply with its obligations under the Convention without designating *any* sites on the basis of their importance for waterbirds. As is illustrated in Table 1 below, more than a quarter of the Convention’s parties have yet to designate a Ramsar site on the basis of either Criterion 5 or 6 – although it is, of course, possible that these parties have relied upon the Convention’s qualitative listing criteria to designate sites that are important to waterbirds.

While a relatively high proportion of the number of sites designated, and a remarkable proportion of the area included on the List, *has* been designated under the Convention’s waterbird-specific criteria,⁹¹ this percentage is gradually decreasing. For instance, in 1993, it was estimated that the regional percentages of Ramsar sites that had been designated on the basis of the waterbird criteria were 84 percent in Europe, 85 percent in Africa, 78 percent in Asia, 93 percent in the Neotropics, 97 percent in North America, and 73 percent in Oceania.⁹² The current regional percentages are significantly lower. This decrease in attention to the waterbird criteria is not particularly surprising given that these criteria have increasingly been de-emphasised by the Ramsar CoP – both because of the recognition that the protection of waterfowl habitat should not be the only aim of wetland management and because of the need to make the Convention more appealing to developing countries, for whom bird conservation will seldom be a top priority.⁹³ It could also conceivably be the case that, because of the Convention’s initial focus on waterbird conservation and the fact that the waterbird

Ecological “Outcome-oriented” Indicators for Assessing the Implementation Effectiveness of the Ramsar Convention, at 10 (Nov. 8–15, 2005), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_ix_01_anne xd_e.pdf [<https://perma.cc/C4SX-G84T>] (identifying the coverage of wetland-dependent bird populations by designated Ramsar sites as a possible indicator of the effectiveness of the Convention’s implementation).

91. Note that a site may be designated on the basis of more than one criterion, with the result that many of the sites reflected in Table 1 were not designated *solely* because of their value to waterbirds.

92. BOWMAN ET AL., *supra* note 10, at 409 n.43.

93. See, e.g., MATTHEWS, *supra* note 55, at 44-45, 52; Bowman, *supra* note 5. This shift in emphasis is further discussed *infra* Part VII.

criteria are relatively easy to apply,⁹⁴ some states first designated most/all of their key sites for waterbirds before moving on to wetlands that are valuable for other reasons.

Table 195

<i>Region</i>	<i>Number (no.) of sites listed on the basis of Criterion 5 and/or 6</i>	<i>Area covered (in ha.)</i>	<i>% of total no. of listed sites in region</i>	<i>% of total area of listed sites in region</i>	<i>No. of these sites for which a management plan is in place</i>	<i>No. of Ramsar Parties with no Criterion 5 or 6 designations</i>
<i>Europe</i>	505	22 989 767	47%	83%	277	8
<i>Africa</i>	157	47 999 798	42%	50%	61	12
<i>Asia</i>	156	14 694 200	50%	82%	73	8
<i>Latin America & the Caribbean</i>	65	28 781 983	35%	70%	32	10
<i>North America</i>	87	15 315 716	40%	65%	44	0
<i>Oceania</i>	46	7 660 391	58%	85%	37	6
<i>Total</i>	1 016	137 441 855	45%	64%	524	44

94. BOWMAN ET AL., *supra* note 10, at 409-10; M.J. Bowman, *International Treaties and the Global Protection of Birds: Part I*, 11 J. ENVTL. L. 87, 96-97 (1999) (both commenting on the wealth of data that exists concerning waterbird species and the relative ease with which the Ramsar Convention's quantitative waterbird criteria can consequently be applied).

95. The figures in this table were calculated on July 24, 2016 and are based on data from the Ramsar Sites Information Service. *Ramsar Sites Information Service*, RAMSAR <https://rsis.ramsar.org/ris-search> [<https://perma.cc/9HCD-B8DW>].

From a waterbird conservation perspective, it is problematic that, despite the fact that the initial motivation for negotiating a convention on wetlands was to ensure the effective and coordinated operation and maintenance of a *network* of wildfowl refuges,⁹⁶ the text of the Ramsar Convention itself does not explicitly encourage, let alone require, that a flyway approach be applied to the designation of Ramsar sites.⁹⁷ Article 5 of the Convention does, however, provide that:

[t]he Contracting Parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties. They shall at the same time endeavour to coordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna.⁹⁸

Article 5's emphasis is clearly on cooperation in the context of transboundary wetlands/water systems rather than intercontinental flyways. Indeed, in the late 1980s, states' decision to proceed with the negotiation of AEWA hinged largely on the conclusion that "Article 5 of the Ramsar Convention could hardly be applied to bring all countries and stakeholders together at a flyway level encompassing two or three continents."⁹⁹ Nevertheless, the Ramsar CoP has interpreted the second half of

96. PROCEEDINGS OF THE FIRST EUROPEAN MEETING ON WILDFOWL CONSERVATION OCTOBER 16-18, 1963, at 273-74 (J.J. Swift ed. 1964) (reflecting the First European Meeting on Wildfowl Conservation's request that the Council of Europe and the IUCN "seek the agreement of all Governments and other authorities concerned for the establishment so far as practicable by 1966 of a European *network of wildfowl refuges* . . . and the conclusion in due course of a *Convention to ensure the effective and co-ordinated operation and maintenance of this network*." (emphasis added)).

97. De Klemm, *supra* note 7, at 70 (identifying the "absence of a flyway approach to site designation" as one of the deficiencies of the Ramsar Convention as a tool for conserving migratory species).

98. Ramsar Convention, *supra* note 4, art. 5.

99. Boere, *supra* note 12, at 33; *see also id.* at 34 ("Article 5 was meant in the first place to stimulate cooperation, supported by the Ramsar Convention, among countries sharing a wetland or water system (lake, catchment area of a river, etc.) across the borders of two or, in a few cases, three or four countries and not over a long distance flyway which involves dozens of countries or even over one hundred").

this Article (which is qualified by the term “endeavor”) to encompass, *inter alia*, cooperation in respect of shared wetland-dependent species – including through the management of site networks along the flyways of migratory waterbirds.¹⁰⁰ The CoP has further recognized that the Convention is in a position to contribute to flyway conservation “by supporting the development of networks of wetland sites of international importance for migratory waterbirds”¹⁰¹ and has urged parties to designate such sites for inclusion on the List.¹⁰²

100. See, e.g., Ramsar Convention, *Guidelines for International Cooperation under the Ramsar Convention*, ¶ 15-20 (1999), <http://www.ramsar.org/sites/default/files/documents/pdf/guide/guide-cooperation.pdf> [https://perma.cc/6YLT-W2ZD] [hereinafter Ramsar Convention, *Guidelines for International Cooperation*] (providing guidance on the implementation of Article 5 through the management of shared wetland-dependent species).

101. Ramsar Convention, Recommendation 6.4, *The “Brisbane Initiative” on the Establishment of a Network of Listed Sites Along the East Asian-Australasian Flyway*, ¶ 12 (Mar. 19-27 1996), http://www.ramsar.org/sites/default/files/documents/library/key_rec_6.04e.pdf [https://perma.cc/C4YQ-36NJ]; see also Ramsar Convention, *The Ramsar Strategic Plan 2009-2015*, at 5 (2008), <http://www.ramsar.org/sites/default/files/documents/pdf/strat-plan-2009-e-adj.pdf> [https://perma.cc/HX9B-F92W] (identifying the development and maintenance of an international network of wetlands that are important for the conservation of global biological diversity, including waterbird flyways, as one of the Convention’s strategic goals). While the Convention’s current Strategic Plan makes no explicit mention of waterbird flyways, one of the Plan’s targets is the “significant increase in area, numbers and ecological connectivity in the Ramsar Site network, in particular under-represented types of wetlands including in under-represented ecoregions and [t]ransboundary [s]ites”, and the Plan identifies the International Waterbird Census as one of the sources of data that may prove useful in working towards this target. Ramsar Convention, *The 4th Strategic Plan 2016-2024, The Convention on Wetlands of International Importance Especially as Waterfowl Habitat - the “Ramsar Convention,”* at 10, 17 (2015), http://www.ramsar.org/sites/default/files/documents/library/4th_strategic_plan_2016_2024_e.pdf [https://perma.cc/TZ4E-A4BA] [hereinafter Ramsar Convention, *The 4th Strategic Plan 2016-2024*] (emphasis added).

102. E.g., Ramsar Convention, Recommendation 2.5, *Designation of the Wadden Sea for the List of Wetlands of International Importance* (May 7-12, 1984), http://www.ramsar.org/sites/default/files/documents/library/key_rec_2.05e.pdf [https://perma.cc/2KEG-UPVE] (recommending that Germany and Denmark designate their portions of the Wadden Sea as Ramsar Sites, “thereby making a significant contribution to the chain of reserves in the western Palearctic flyway.”); Ramsar Convention, Res. VIII.38, *supra* note 84, ¶ 14 (urging parties to cooperate in identifying and designating “coherent flyway-scale networks of Ramsar sites for migratory waterbirds”); Ramsar Convention, Res. X.22, *Promoting International Cooperation for the Conservation of Waterbird Flyways*, ¶ 21 (Oct. 28 - Nov. 4, 2008), <http://www.ramsar.org/sites/default/files/documents/>

Despite the relatively high reliance upon the waterbird criteria for Ramsar site designation and the CoP's exhortations concerning the designation of site networks, the Convention remains far from achieving comprehensive coverage of the critical sites on which waterbirds rely. A 2012 preliminary report¹⁰³ on the site network for waterbirds in AEWA's Agreement Area, for instance, concluded that, although Ramsar designations provided adequate site coverage for a greater number of AEWA populations (68 breeding populations and 172 non-breeding populations) than were covered by any of the other international designation types considered,¹⁰⁴ designations under the Convention still only accounted for 13 percent of the critical sites that had at that stage been identified.¹⁰⁵ A considerable majority (78 percent) of the sites that had been so designated are found in Europe,¹⁰⁶ despite this arguably being the region in which Ramsar designations are least needed, given the role played by, *inter alia*, the European Union's Natura 2000 network and the Bern Convention's Emerald

pdf/res/key_res_x_22_e.pdf [https://perma.cc/GG6R-MDRK] (urging parties to "identify and designate as Ramsar sites all internationally important wetlands for waterbirds on migratory flyways that meet [the current criteria for listing of wetlands of international importance]").

103. SZABOLCS NAGY ET AL., AEWA: PRELIMINARY REPORT ON THE SITE NETWORK FOR WATERBIRDS IN THE AGREEMENT AREA 5 (2012), http://www.unep-aewa.org/sites/default/files/document/mop5_15_preliminary_site_network_report_0.pdf [https://perma.cc/C788-Y6RG].

104. The preliminary report additionally assessed site designations under Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the Conservation of Wild Birds [hereinafter EU Birds Directive]; the Convention for the Protection of the World Cultural and Natural Heritage, Nov. 16, 1972, 11 I.L.M. (1972) 1358 [hereinafter World Heritage Convention]; and the Convention on the Protection of the Marine Environment of the Baltic Sea Area, Apr. 9, 1992, <http://helcom.fi/about-us/convention> [https://perma.cc/6MCJ-9T2B] [hereinafter Helsinki Convention]. It did not, however, assess designations under the Convention for the Protection of the Marine Environment of the North-East Atlantic, Sept. 22, 1992, 32 I.L.M. (1993) 1072 [hereinafter OSPAR Convention]; or the Convention on the Conservation of European Wildlife and Natural Habitats, Sept. 19, 1979, E.T.S. No. 104 [hereinafter Bern Convention].

105. NAGY ET AL., *supra* note 103, at 30, 45.

106. *Id.* at 5, 49; *see also* Davidson & Stroud, *supra* note 26, at 66-67 (assessing the position in 2004 and concluding that, although the Ramsar site network for migratory waterbirds was "greatly more developed" in Africa and western Eurasia than in other regions, there were nevertheless "major imbalances and gaps" in this network).

Network.¹⁰⁷ There thus exists a need to promote the Ramsar designation of critical sites in other areas – such as along the West Asian-East African flyway, where the largest number of declining waterbird populations in Africa and western Eurasia are found.¹⁰⁸

3. Protection and Management of Designated Sites and Other Wetlands

The Convention text does not require that Ramsar sites be formally designated as protected areas. It does, however, impose a general obligation to “promote the conservation of wetlands *and waterfowl* by establishing nature reserves on wetlands, whether they are included on the List or not,”¹⁰⁹ and further provides that a party that deletes a site from the List, or restricts its boundaries “should as far as possible compensate for any loss of wetland resources, and *in particular it should create additional nature reserves for waterfowl.*”¹¹⁰ The establishment of nature reserves is additionally a means through which parties can meet their Article 3(1) commitment to “formulate and implement their planning so as to promote the conservation of the wetlands included in the List, and as far as possible the wise use of wetlands in their territory.”¹¹¹

Though framed in weaker language than their obligation to promote the conservation of Ramsar sites, parties’ wise use

107. See also Jonathan Verschuuren, *The Case of Transboundary Wetlands Under the Ramsar Convention: Keep the Lawyers Out!*, 19 *COLO. J. INT’L ENVTL L. & POL’Y* 49, 128 (2007) (in which the author’s case study of the Scheldt River estuary revealed that the role of the Ramsar Convention is very limited because “its obligations have been elaborated in EU law in much greater detail and in a more legally binding way”). See generally *Natura 2000 Network*, EUROPEAN COMMISSION: ENVIRONMENT, http://ec.europa.eu/environment/nature/natura2000/index_en.htm [<https://perma.cc/7ZLS-EFE8>] (last updated Nov. 14, 2016); *Emerald Network of Areas of Special Conservation Interest*, COUNCIL OF EUROPE: BERN CONVENTION, <http://www.coe.int/de/web/bern-convention/emerald-network> [<https://perma.cc/AE64-T9M6>].

108. See NAGY ET AL., *supra* note 103, at 29 (commenting that “the generally low degree of site designation, combined with unsustainable use of waterbird populations may explain the dire situation in this flyway”).

109. Ramsar Convention, *supra* note 4, art. 4(1) (emphasis added).

110. *Id.* art. 4(2) (emphasis added).

111. *Id.* art. 3(1); see also Ramsar Convention, Recommendation 4.2, *supra* note 63, at 5 (commenting that the “[e]stablishment of nature reserves (whether strict or less strict) is one way of maintaining the ecological character of listed wetlands”).

commitment is significant insofar as it applies not only to sites on the List, but also to internationally important wetlands that have yet to be designated under the Convention (arguably ameliorating, to some extent, the current gaps in Ramsar's coverage of site networks); as well as to sites that are *nationally* important despite not meeting any of the Ramsar criteria; and to complexes of wetlands at the landscape scale that provide habitat for dispersed populations. The Ramsar CoP has interpreted "conservation" to mean the maintenance of a site's ecological character;¹¹² and the "wise use" of wetlands has similarly been defined as "the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development."¹¹³ The CoP has further adopted a large body of guidance on the conservation and wise use of wetlands, which touches upon an extremely broad range of policy areas and encourages, *inter alia*, the preparation of national inventories of wetlands, development and implementation of management plans, rehabilitation and restoration of wetlands, control of exotic species, and performance of environmental impact assessments (EIAs) for projects which might affect wetlands.¹¹⁴ Support for achieving conservation and wise use is provided through the Ramsar Small Grants Fund, Ramsar Advisory Missions, and Ramsar Regional Initiatives.¹¹⁵

112. Ramsar Convention, Recommendation 4.2, *supra* note 63, at 5 (explaining that the "principal undertaking of Contracting Parties with respect to listed wetlands is to promote their conservation with the aim of preventing changes to their ecological character").

113. Ramsar Convention, Res. IX.1: Annex A, *A Conceptual Framework for the Wise use of Wetlands and the Maintenance of Their Ecological Character*, ¶ 22 (Nov. 8-15 2005), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_ix_01_annexa_e.pdf [<https://perma.cc/4CZP-6VHH>].

114. See generally *Ramsar Guidelines*, RAMSAR, [http://www.ramsar.org/search?f\[0\]=type%3Adocument&f\[1\]=field_document_type%3A541&search_api_views_fulltext](http://www.ramsar.org/search?f[0]=type%3Adocument&f[1]=field_document_type%3A541&search_api_views_fulltext) [<https://perma.cc/6KE8-VXBY>] (providing links to the various guidance documents that have been approved by the Ramsar CoP). The legal status of these guidelines is discussed *infra* Part IV.B.

115. Bowman, *supra* note 94, at 97 (considering the Convention's implementation mechanisms from a bird conservation perspective specifically). See generally RAMSAR CONVENTION, www.ramsar.org [<https://perma.cc/BB4X-EE6F>] (providing information on each of these mechanisms for supporting the Convention's implementation).

In line with the wise use definition's emphasis of ecosystem approaches, the Ramsar CoP has recognized the need for a "multi-scalar approach to wise use planning and management," with site-based management planning being linked to "broad-scale landscape and ecosystem planning;"¹¹⁶ and has adopted guidance on incorporating wetland issues into both river basin management and integrated coastal zone management.¹¹⁷ As a treaty aimed predominantly at conserving a particular ecosystem type rather than a particular ecosystem function or value,¹¹⁸ the Ramsar Convention is indeed well-positioned to promote the application of ecosystem approaches¹¹⁹ and, in the course thereof, to assist in building the cross-sectoral cooperation necessary for successful wetland conservation¹²⁰ (such cooperation being more difficult to coordinate under a purely species-based approach to management).¹²¹ However, a shortcoming of ecosystem approaches is that they can permit some species to be significantly reduced or lost entirely – particularly if the ecological role of one species can

116. Ramsar Convention, *New Guidelines for Management Planning for Ramsar Sites and Other Wetlands*, ¶ 5 (2002), <http://www.ramsar.org/sites/default/files/documents/library/new-mgt-guide.pdf> [https://perma.cc/FHJ4-3DSQ] [hereinafter Ramsar Convention, *New Guidelines for Management Planning*].

117. See Ramsar Convention, *Guidelines for Integrating Wetland Conservation and Wise Use into River Basin Management* (1999), <http://www.ramsar.org/sites/default/files/documents/library/guide-basins.pdf> [https://perma.cc/A48D-2SVH]; see also Ramsar Convention, *River Basin Management: Additional Guidance and a Framework for the Analysis of Case Studies* (2005), <http://www.ramsar.org/sites/default/files/documents/library/guide-basins-add-e.pdf> [https://perma.cc/22XK-57CP]; Ramsar Convention, *Principles and Guidelines for Incorporating Wetland Issues into Integrated Coastal Zone Management (ICZM)* (2002), <http://www.ramsar.org/sites/default/files/documents/pdf/guide-iczm.pdf> [https://perma.cc/B87E-WGRZ].

118. This distinction being drawn by Royal C. Gardner in *Rehabilitating Nature: A Comparative Review of Legal Mechanisms that Encourage Wetland Restoration Efforts*, 52 CATH. U. L. REV. 573, 578 (2003).

119. See generally C. Max Finlayson et al., *The Ramsar Convention and Ecosystem-Based Approaches to the Wise Use and Sustainable Development of Wetlands*, 14 J. INT'L WILDLIFE L. & POL'Y 176 (2011).

120. Indeed, the Ramsar CoP has repeatedly stressed the need to mainstream the consideration of wetlands into a wide variety of sectors. See, e.g., Ramsar Convention, *The 4th Strategic Plan 2016-2024*, *supra* note 101, at 4, 5, 10.

121. See Aramde Fetene et al., *Approaches to Conservation and Sustainable Use of Biodiversity – A Review*, 10 NATURE & SCI. 51, 58-59 (2012) (discussing features of ecosystem approaches, as compared to species approaches); Verschuuren, *supra* note 107, at 120 (discussing the difficulties involved in coordinating cross-sectoral cooperation in wetland management).

be substituted for by that of another.¹²² Ecosystem approaches can, in other words, be insufficient for achieving the goal of *species conservation*, for which more targeted approaches are often necessary.¹²³ Indeed, the Ramsar CoP itself has acknowledged that, in respect of waterbirds, “flyway conservation should combine species- and ecosystem-based approaches.”¹²⁴ A question thus arises concerning whether the Convention ever requires its parties to take a species-based approach to wetland management.

As seen from the CoP’s definitions of conservation and wise use, the objective of wetland management under the Ramsar Convention is the maintenance of ecological character. “Ecological character” has, in turn, been defined as “the combination of ecosystem components, processes and benefits [meaning the benefits received by people] /services that characterise the wetland at a given point in time.”¹²⁵ The presence of waterbirds may clearly constitute a component of a wetland, as well as a benefit received by people; while species migration may be one of the processes that a wetland supports.¹²⁶ Where such presence/support constitutes an important feature of a site’s ecological character (the most obvious

122. See, e.g., John G. Robinson, *Using “Sustainable Use” Approaches to Conserve Exploited Populations*, in CONSERVATION OF EXPLOITED SPECIES 485, 494 (John D. Reynolds et al. eds., 2001); J. Baird Callicott & Karen Mumford, *Ecological Sustainability as a Conservation Concept*, 11 CONSERVATION BIOLOGY 32, 36-37 (1997); Daniel Simberloff, *Flagships, Umbrellas, and Keystones: Is Single-Species Management Passé in the Landscape Era?*, 83 BIOLOGICAL CONSERVATION 247, 253-54 (1998) (all discussing the drawbacks of ecosystem approaches from a species conservation perspective).

123. See also Robinson, *supra* note 122, at 495 (observing that “[m]anagement approaches are most effective when they are matched to the appropriate management goal,” and that species management approaches are thus “most effective where the goal is species conservation”).

124. Ramsar Convention, Res. X.22, *supra* note 102, ¶ 6; see also *The Edinburgh Declaration: Waterbirds Around the World Conference*, RAMSAR (April 2004), <http://www.ramsar.org/news/the-edinburgh-declaration-waterbirds-around-the-world-conference-april-2004> [<https://perma.cc/BKM4-AGZE>] (in which the waterbird conservation community had previously stressed the need for both ecosystem-based and species-based approaches).

125. Ramsar Convention, Res. IX.1, *supra* note 113, ¶ 15.

126. See generally Ramsar Convention, Res. X.15, *Describing the Ecological Character of Wetlands, and Data Needs and Formats for Core Inventory: Harmonized Scientific and Technical Guidance* (Oct. 28 - Nov. 4 2008), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_x_15_e.pdf [<https://perma.cc/7VZ6-CQUT>] (providing detail on describing the ecological character of wetlands).

example being where the site has been designated for the List on the basis of the waterbird criteria), the site should thus arguably, per Article 3(1), be managed in a manner that promotes the maintenance of this feature. Indeed, while the Convention's CoP-adopted guidance on site management planning does not explicitly call for site management to be aimed at the conservation of migratory waterbirds, it does state that "[i]t is essential that management objectives be defined for each important feature of the ecological character of the site"¹²⁷ and that the maintenance of biodiversity, and protection of rare habitats or species, will frequently constitute important management objectives.¹²⁸ The inclusion of waterbird conservation in the objectives of site management plans is further supported by Article 4(4) of the Convention, which requires that parties "endeavour through management to increase waterfowl populations on appropriate wetlands." This provision does not specify whether it is referring to habitat management or population management, but its use of the words "on appropriate wetlands" suggests the former.

Of course, the development of management plans for Ramsar sites is a work in progress (this being evident from Table 1 above) and, regardless of the Convention text's emphasis on management for waterfowl, the Ramsar guidance on management planning fails to provide advice concerning *how* to manage wetlands in a manner that meets the needs of these species specifically. Further, neither Article 3(1) nor Article 4(4) is expressed in legally rigorous language, requiring merely that parties "promote" conservation, promote wise use "as far as possible," and "endeavor" to increase waterfowl populations through management. The Convention thus falls short of requiring its parties to *ensure* that wetlands are managed in a manner that serves the needs of waterbirds. The

127. Ramsar Convention, *New Guidelines for Management Planning*, *supra* note 116, ¶ 28.

128. *Id.* ¶¶ 91, 94; see also Ramsar Convention, *Guidelines for the Management of Groundwater to Maintain Wetland Ecological Character*, ¶ 67 (Nov. 8-15, 2005), <http://www.ramsar.org/sites/default/files/documents/pdf/guide/guide-groundwater-e.pdf> [<https://perma.cc/YU67-QS7R>] (commenting that "the objectives for management of a wetland may be focused on part of the life cycle of a particular species" (for instance, the conservation of waders during their breeding season), but that "[e]ven so, the general ecosystem and its needs for water throughout the year must be considered," given that wetlands' "overall vegetation structure is also important" for the maintenance of species' habitat).

concept of ecological character also encompasses far more than the presence of waterbirds, including human-focused wetland benefits. Article 3(1) thus arguably leaves parties with considerable discretion in determining the limits of human activity within wetlands. Indeed, Wiersema, after pointing to, *inter alia*, the current definition of ecological character and the Ramsar CoP's recent emphasis on linking wise use and poverty alleviation,¹²⁹ has argued that "it is now unclear that meeting the obligations of the Ramsar Convention is the same as ensuring the long-term protection [of the natural aspects] of wetlands;"¹³⁰ and that "either the treaty text or those charged with interpreting the treaty text should specify the particular interests to be taken into account by decision makers."¹³¹

4. Issues Concerning the Boundaries of Ramsar Sites: Coverage of Additional Habitat Types and Flexibility to Respond to Species' Range Shifts

The sites included on the List are described with precise site boundaries, which Article 2(1) requires parties to delimit on a map at the time of each site's designation. For the purposes of this article, there are two issues regarding Ramsar site boundaries that deserve mention. The first is that Article 2(1) allows for a site's boundaries to "incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands, *especially where these have importance as waterfowl habitat.*"¹³² This provision enables site listing to be used as a tool for conserving even non-wetland habitat, provided that such habitat lies adjacent to or

129. See *infra* Part VII.

130. Annecoos Wiersema, *A Train Without Tracks: Rethinking the Place of Law and Goals in Environmental and Natural Resources Law*, 38 ENVTL. L. 1239, 1290 (2008).

131. *Id.* at 1296.

132. Ramsar Convention, *supra* note 4, art. 2(1) (emphasis added); see also Ramsar Convention, *Strategic Framework*, *supra* note 62, ¶ 57 (advising that "[i]n determining the boundaries of sites identified as habitat for animal species, these should be established so as to provide adequately for all the ecological and conservation requirements of those populations," and that, in particular, species "with large home-ranges, or with feeding or resting areas that are widely separated, will generally require substantial areas to support viable populations").

within an area which satisfies both the Convention's definition of "wetland" and at least one of its listing criteria.

Secondly, as has been highlighted by Boere and Taylor, the Ramsar Convention's approach of fixing site boundaries at the international level appears to reduce the Convention's flexibility to respond to the impacts of climate change – including climate-induced range shifts by migratory birds.¹³³ Article 2(5) of the Convention, which permits parties to extend the boundaries of listed wetlands, or to delete or restrict such boundaries because of "urgent national interests," clearly was not drafted with climate change in mind; and the guidance which the Ramsar CoP has thus far adopted regarding climate change is silent on the issue of altering site boundaries.¹³⁴ The CoP has, however, adopted guidance on the deletion or restriction of Ramsar site boundaries in situations not foreseen by the treaty text – including situations in which all or part of a site "loses the components, processes, and services of its ecological character as a wetland for which it was listed" – and has prescribed a procedure to be followed in such instances.¹³⁵ Where a site's boundaries are deleted or restricted in response to climate change, it should be remembered that Article 4(2) of the Convention calls for the creation of "additional nature reserves for waterfowl and for the protection, either in the same area or elsewhere, of an adequate portion of the original habitat." Indeed, where a waterbird population's reliance has shifted from a Ramsar site to an area for which no protections are in place, efforts should be made to protect the population's new habitat.

133. Boere & Taylor, *supra* note 30, at 114.

134. See generally Ramsar Convention, Res. VIII.3, *Climate Change and Wetlands: Impacts, Adaptation and Mitigation* (Nov. 18-26, 2002), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_viii_03_e.pdf [<https://perma.cc/B4DJ-DVC6>]; Ramsar Convention, Res. X.24, *Climate Change and Wetlands* (Oct. 28 - Nov. 4, 2008) http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_x_24_e.pdf [<https://perma.cc/639L-SC5J>]; Ramsar Convention, Res. XI.14, *Climate Change and Wetlands: Implications for the Ramsar Convention on Wetlands* (July 6-13, 2012), <http://www.ramsar.org/sites/default/files/documents/pdf/cop11/res/cop11-res14-e.pdf> [<https://perma.cc/7PDU-YBDZ>].

135. Ramsar Convention, Res. IX.6, *Guidance for Addressing Ramsar Sites or Parts of Sites which No Longer Meet the Criteria for Designation* (Nov. 8-15, 2005), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_ix_06_e.pdf [<https://perma.cc/38U6-D7N6>].

B. Ways in which AEWA's Habitat Provisions Interact With, and Add Value to, the Framework Provided by the Ramsar Convention

While the Ramsar Convention's articulation of criteria by which to identify important sites for waterbirds, its provision of a mechanism for the international designation of such sites, its exhortations and assistance concerning the protection and management of both designated sites and other wetlands, and its promotion of ecosystem approaches and intersectoral cooperation all have the potential to contribute to the conservation of waterbird habitat, the above analysis demonstrates that it is possible for a state to be in full compliance with its Ramsar commitments without ensuring that adequate habitat is available to meet the ecological requirements of these species. From a habitat conservation perspective, the Convention's shortcomings include the vague and qualified nature of its legal provisions (leaving parties with significant discretion regarding which sites to designate and how these are managed), and that it is not applicable to all relevant habitat types, does not require the designation of networks of important sites, and has limited flexibility to respond to climate-induced range shifts. Guidance developed under the Convention has gone some way towards addressing gaps in its legal text, but provides little advice on species-based approaches to habitat management. How does AEWA compare, and in what ways does the Agreement compensate for the shortcomings of the Ramsar Convention as a tool for habitat conservation?

1. Overview of AEWA's Habitat Provisions

AEWA's Agreement text requires parties to "identify sites and habitats for migratory waterbirds occurring within their territory and encourage the protection, management, rehabilitation and restoration of these sites".¹³⁶ Parties must further "coordinate their efforts to ensure that a network of suitable habitats is maintained or, where appropriate, re-established throughout the entire range of each migratory waterbird species concerned, in particular where wetlands extend over the area of more than one

136. AEWA, *supra* note 9, art. III(2)(c).

Party to [the] Agreement.”¹³⁷ Where problems are posed (or are likely to be posed) by human activities, parties must “endeavour to implement remedial measures, including habitat rehabilitation and restoration, and compensatory measures for loss of habitat.”¹³⁸ Part 3 of the AEWA Action Plan is dedicated to “Habitat Conservation” and requires that parties undertake and publish national inventories of habitats that are important to AEWA populations,¹³⁹ and that they “endeavor” to: identify all sites of international or national importance for AEWA populations; establish protected areas to conserve important habitats and develop and implement management plans therefor; “give special protection to those wetlands which meet internationally accepted criteria of international importance”; make wise and sustainable use of all wetlands in their territories; develop strategies, according to an ecosystem approach, for the conservation of habitats of AEWA populations (including the habitats of dispersed populations); and rehabilitate or restore, where feasible and appropriate, degraded areas that were previously important for AEWA populations. Other parts of the Action Plan call for measures to address particular activities that may adversely affect waterbird habitat, such as the introduction of non-native species, pollution, and aquaculture; in addition to requiring that parties assess the impacts of proposed projects in areas of habitat important to AEWA populations where these are likely to lead to conflicts between AEWA populations and human interests.¹⁴⁰ The Agreement’s legal provisions are supplemented by various guidance documents, including a collection of International Single Species Action Plans (ISSAPs), which identify appropriate conservation measures on a species-by-species (or even population-by-population) basis; and implementation support is provided through, *inter alia*, a Small Grants Fund, an Implementation

137. *Id.* art. III(2)(d).

138. *Id.* art. III(2)(e).

139. In this article, the term “AEWA populations” is used to refer to the populations listed in Table 1 of AEWA’s Annex 3 – these being the populations to which the AEWA Action Plan applies and covering all populations of Annex 2 species that occur within AEWA’s Agreement Area.

140. AEWA, *supra* note 9, annex 3, ¶¶ 2.5, 4.3.9, 4.3.11, 4.3.1.

Review Process, the AEWA African Initiative, and International Species Working Groups.¹⁴¹

2. The Mutually Supportive Nature of AEWA's and Ramsar's Habitat Provisions and their Potential for Joint Implementation

The first observation that can be made about AEWA's provisions on habitat is that these provisions are at least partially designed to support and complement the Ramsar Convention rather than to introduce an entirely separate regime for habitat conservation. Thus, the Action Plan directs AEWA parties to endeavor to make wise use of wetlands and to provide special protection to "wetlands which meet internationally accepted criteria of international importance" – an obvious reference to the criteria developed for designating Ramsar sites,¹⁴² although it is noteworthy that the AEWA provision is not restricted to sites that have actually *been* designated for the List and is consequently more onerous than the Ramsar Convention's requirement to promote the conservation of designated sites.

In considering the relationship between the two treaties' provisions, it is further relevant that although the Ramsar Convention pre-dates AEWA by more than two decades, the Convention requires its Parties to consider their international responsibilities for waterfowl conservation when designating entries to the List.¹⁴³ Such "international responsibilities" would appear to include responsibilities of a legal nature – especially considering that, at the time of the Ramsar Convention's adoption, examples of international legal responsibilities for waterfowl conservation already existed in the form of both bilateral and multilateral treaties.¹⁴⁴ The Convention thus arguably requires

141. See generally AEWA: AGREEMENT ON THE CONSERVATION OF AFRICAN-EURASIAN MIGRATORY WATERBIRDS, <http://www.unep-aewa.org> [<https://perma.cc/Y8DU-BJ99>] (providing information on AEWA's various guidance documents, and on each of the mechanisms for supporting the Agreement's implementation).

142. See also Lewis, *supra* note 10, at 33-34 (providing a broader discussion of the manner in which AEWA's provisions are designed to support those of other legal instruments).

143. Ramsar Convention, *supra* note 4, art. 2(6).

144. See, e.g., Convention between the United States of America and Great Britain for the Protection of Migratory Birds, Gr. Brit.-U.S., Aug. 16, 1916, T.S.

parties that have also ratified AEWA to take their AEWA commitments (including the commitment to ensure the maintenance of a suitable network of waterbird habitat) into consideration when designating Ramsar sites. Indeed, the Ramsar guidance urges parties, when considering the designation of Wetlands of International Importance, to consider the opportunities that this may provide for contributing to other environmental conventions and programmes, including AEWA.¹⁴⁵ Parties' international responsibilities concerning waterfowl must similarly be considered when changing entries to the List.¹⁴⁶ This would include instances in which site boundaries need to be amended (and, where the amendment takes the form of a restriction/deletion, additional nature reserves established as compensation) in response to climate change.

AEWA's Agreement text calls for site identification, protection, management and rehabilitation to be pursued in liaison with other relevant treaties – including the Ramsar Convention.¹⁴⁷ The Agreement's habitat provisions were, in other words, drafted with joint implementation in mind.¹⁴⁸ The level of cooperation thus far established between the two treaties is less than one might expect given their areas of mutual interest, and there is room for improvements in this regard.¹⁴⁹ Nevertheless, several examples of collaboration do exist, including AEWA participation in several

No. 628; Convention between the United States of America and the United Mexican States for the Protection of Migratory Birds and Game Mammals, Mex.-U.S., Feb. 7, 1936, T.S. No. 912; International Convention for the Protection of Birds, Oct. 18, 1950, 638 U.N.T.S. 186.

145. Ramsar Convention, *Strategic Framework*, *supra* note 62, ¶ 63.

146. Ramsar Convention, *supra* note 4, art. 2(6).

147. AEWA, *supra* note 9, arts. III(2)(c), IX(a).

148. *See also* Adam, *supra* note 53, at 112-115 (providing a broader analysis of AEWA's potential for joint implementation); AEWA, Res. 5.19, *Encouragement of Further Joint Implementation of AEWA and the Ramsar Convention* (May 14-18, 2012), http://www.unep-aewa.org/sites/default/files/document/res_5_19_joint_impl_aewa Ramsar_0.pdf [<https://perma.cc/RJM6-99VK>] (encouraging various measures to achieve joint implementation of the Agreement and the Convention); Ramsar Convention, Res. VIII.38, *supra* note 84, ¶ 14 (urging cooperation with AEWA in the identification and designation of coherent flyway-scale networks of Ramsar sites for migratory waterbirds).

149. Lewis, *supra* note 10, at 57-58 (commenting on the absence of formal arrangements for cooperation between the Agreement and the Convention).

Ramsar Advisory Missions¹⁵⁰ and the Wings Over Wetlands (WOW) Project, which developed an interactive online portal for identifying critical sites for migratory waterbirds within the AEWA Agreement Area, supported field projects, and developed a Flyway Training Programme and Flyway Training Kit to facilitate the training of stakeholders in both wetlands management and waterbird conservation.¹⁵¹

While the mutually supportive nature of AEWA's and Ramsar's provisions and the potential for cooperation in their implementation are certainly relevant issues, more important for the purposes of the present article is the question of whether (and if, so, in what ways) AEWA's habitat provisions can be *distinguished* from those of the Ramsar Convention. AEWA's provisions are clearly more detailed than Ramsar's and prescribe a wide variety of measures on which the text of the Ramsar Convention is silent. However, a comparison of the measures required by AEWA and those called for by the body of guidance that supports implementation of the Ramsar Convention reveals significant overlap. What, then, is the added value of AEWA from a habitat conservation perspective? The discussion below attempts to answer this question.

3. The Legal Weight of AEWA's Provisions

The first distinction between AEWA's habitat conservation requirements and the various activities called for in the Ramsar Convention's resolutions, recommendations and other guidance

150. AEWA, *Report of the Secretariat on the 4th Session of the Meeting of the Parties*, at 10, AEWA/MOP Doc. 4.16 (Aug. 22, 2008), http://www.unep-aewa.org/sites/default/files/document/mop4_16_report_%20secretariat_0.pdf [<https://perma.cc/UVS2-X978>] (reporting on the AEWA Secretariat's participation in a Ramsar Advisory Mission concerning Lake Natron, Tanzania); AEWA, *Report of the Secretariat on the 5th Session of the Meeting of the Parties*, at 12-13, AEWA/MOP Doc. 5.9 (May 7, 2012), http://www.unep-aewa.org/sites/default/files/document/mop5_9_report_secretariat_0.pdf [<https://perma.cc/JDZ5-CHMQ>] (reporting on the AEWA Secretariat's participation in Ramsar Advisory Missions to the Marromeu Complex Ramsar Site, Mozambique; the Cayo-Loufoualeba Ramsar Site, Congo; and the Embouchure de la Moulouya Ramsar Site, Morocco).

151. See WINGS OVER WETLANDS, <http://www.wingsoverwetlands.org> [<https://perma.cc/7QZZ-L447>] (providing further information on the WOW Project and its outputs).

documents is that the former are incorporated into a legally binding text, and thus ostensibly carry more weight than the latter. However, this proposition requires further analysis. Firstly, although the body of guidance that has been developed under the Ramsar Convention is not directly binding,¹⁵² it informs the interpretation of provisions of the Convention text which *are* binding – at least insofar as such guidance has received the unanimous approval of the Ramsar CoP;¹⁵³ and bearing in mind

152. Article 6(2)(d) of the Ramsar Convention mandates the CoP “to make general or specific recommendations to the Contracting Parties regarding the conservation, management and wise use of wetlands and their flora and fauna”, but fails to authorize the adoption of legally binding decisions on these issues. *See* RAMSAR CONVENTION SECRETARIAT, *THE RAMSAR CONVENTION MANUAL: A GUIDE TO THE CONVENTION ON WETLANDS* 15, 79 (6th ed. 2013) <http://www.ramsar.org/sites/default/files/documents/library/manual6-2013-e.pdf> [<https://perma.cc/277R-49WJ>] (explaining that resolutions of the Ramsar CoP “do not have the same legal force as commitments specified in the convention text itself”).

153. In its judgment in *Whaling in the Antarctic*, the International Court of Justice (ICJ) expressed the view that, although resolutions adopted by a treaty’s governing body (in this case, the International Whaling Commission) may be relevant for the interpretation of the treaty when they are adopted by consensus or unanimous vote, resolutions that are adopted without the support of all states parties cannot be regarded as subsequent agreement to an interpretation of the treaty’s provisions “nor as subsequent practice establishing an agreement of the parties regarding the interpretation of the treaty within the meaning of subparagraphs (a) and (b), respectively, of paragraph (3) of Article 31 of the Vienna Convention on the Law of Treaties.” *Whaling in the Antarctic* (Austl. v Japan, N.Z. intervening), Judgment, 2014 I.C.J. Rep 226, ¶¶ 46, 83 (Mar. 31). This is a sensible interpretation of the Vienna Convention and is consistent with the Commentary that accompanied the International Law Commission’s original draft of the Convention. *Report of the International Law Commission on the Work of its Eighteenth Session*, 1966 Y.B. Int’l L. Comm’n 172, at 221-22, U.N. Doc. A/CN.4/191 (commenting, in respect of Article 31(3)(b), that the Commission “considered that the phrase ‘the understanding of the parties’ necessarily means ‘the parties as a whole’”). It should, however, be noted that, while the ICJ in the *Whaling in the Antarctic* case appears to have equated consensus with unanimity, this cannot be done in the context of all treaties. *See, e.g.,* Antto Vihma & Kati Kulovesi, *Strengthening Global Climate Change Negotiations: Improving the Efficiency of The UNFCCC Process* 20-21 (Nordic Working Papers, Paper No. NA2012L902 2012), <http://norden.diva-portal.org/smash/get/diva2:701694/FULLTEXT01.pdf> [<https://perma.cc/SX3W-7KBQ>] (explaining that, even though “[t]he mainstream opinion of international lawyers would have it that consensus is denoted by the Chair’s perception that there is no stated objection”, “[i]nternational negotiations seem to develop their own contextual interpretation of consensus” and there are examples of environmental treaties whose CoP Presidencies have been prepared to adopt consensus decisions despite a degree of opposition). Indeed, controversies over the meaning of “consensus” have spilled

that the language in which each resolution/recommendation is framed provides an indication of its intended normative force.¹⁵⁴ While not creating *independent* legal obligations, CoP-adopted guidance, in other words, has the potential to enrich the obligations in the treaty text and, to the extent that it does so, can be viewed as being “inextricably intertwined” with these obligations.¹⁵⁵ Thus, in a 2007 decision of the Netherlands Crown involving the interpretation of the Ramsar Convention,¹⁵⁶ the

over into discussions of the Ramsar CoP, which has a history of adopting decisions by consensus, despite it being permissible for the CoP to take decisions by a simple majority vote if consensus is unattainable. See Royal C. Gardner, *Perspectives on Wetlands and Biodiversity: International Law, Iraqi Marshlands, and Incentives for Restoration*, 15 COLO. J. INT’L ENVTL. L. & POL’Y 1, 2-9 (2003) for further discussion of such controversies. There has also been at least one instance in which a party to the Ramsar Convention registered a reservation in respect of parts of a resolution that was adopted by consensus, stating that it did not consider the resolution to be a legally binding document insofar as these aspects were concerned. Ramsar Convention, Res. VII.19, *Guidelines for International Cooperation Under the Ramsar Convention*, at n.1 (May 10-18, 1999), http://www.ramsar.org/sites/default/files/documents/library/key_res_vii.19e.pdf [<https://perma.cc/FYV6-AV6V>]; Ramsar Convention, *Conference Report of the 7th Meeting of the Conference of the Contracting Parties*, ¶¶ 135, 137 (May 10-18, 1999), http://www.ramsar.org/sites/default/files/documents/library/cop7_conf_rpt_final.pdf [<https://perma.cc/W6NY-STMK>]. The wording of this reservation, in addition to arguably reducing the interpretive value of portions of the resolution, is interesting insofar as it suggests that the party in question (Turkey) considered the remainder of the resolution *to be* legally binding.

154. There is, for instance, a significant difference between a resolution that “adopts” a particular guidance document and one that merely “notes” such document. See Annecoos Wiersema, *The New International Law-makers? Conferences of the Parties to Multilateral Environmental Agreements*, 31 MICH. J. INT’L L. 231, 250-257 (2009) (arguing that the legal status of a particular CoP resolution or decision can be determined on the basis of four axes: (i) the degree of consent achieved in passing the resolution/decision; (ii) the degree of specific authorization contained in the treaty; (iii) the normative force with which the resolution/decision is phrased; and (iv) the extent to which it is implemented/treated as binding by the parties).

155. *Id.* at 262 (arguing that “to the extent that COP resolutions and decisions thicken treaty obligations, it is no longer possible to argue that the treaty obligation is hierarchically superior to the COP obligation. Instead, they are inextricably intertwined”).

156. See Jonathan Verschuuren, *Bonaire; Verdrag van Ramsar verplicht tot m.e.r. [Ramsar Soft Law is Not Soft at All]* 35 MILIEU & RECHT [ENV’T & L.] 28 (2008) (Neth.), translated in RAMSAR DOCUMENT DATABASE, <http://www.ramsar.org/document/ramsar-soft-law-is-not-soft-at-all> [<https://perma.cc/7EXE-QT9Y>] (translating and summarizing the Netherlands Crown Decision of 11 September 2007 in the case lodged by the Competent Authority for the Island of

Crown went so far as to conclude that CoP recommendations and resolutions *add to the duties* articulated in the Convention text, being especially important given that Article 3 of the Convention is so thin in content.¹⁵⁷ On this basis, the Crown interpreted Article 3 (which commits parties to not only promoting the conservation of sites on the List, but also arranging to be informed of changes/potential changes in the ecological character thereof) as requiring the performance of EIAs for developments that would either occur within, or potentially have effects that would be felt within, the boundaries of Ramsar sites.¹⁵⁸ It is quite remarkable that the Crown was prepared to place such weight on CoP-adopted guidance in this instance.¹⁵⁹ However, the decision is not necessarily indicative of the approach that will be taken by other countries when faced with similar legal questions.¹⁶⁰ Even if a similar approach *is* taken by other Ramsar parties, the requirements that can be read into provisions of the Ramsar Convention will presumably be limited by the qualified language in which most of the provisions are themselves formulated. As already highlighted in part IV.A above, Article 3 of the Convention does not go so far as to require that parties *ensure* the conservation/wise use of particular sites, while Articles 4 (on management for waterfowl) and 5 (on international cooperation) are both qualified by the term “endeavor.” The current author holds the view that an undertaking to endeavor to implement a particular measure or achieve a particular outcome requires that parties attempt in good faith to act towards this end and cannot simply decide *not* to do so without falling into breach of their commitment.¹⁶¹ Nevertheless, it is clear that an obligation to

Bonaire on the annulment of two of its decisions on the Lac wetland by the Governor of the Netherlands Antilles).

157. *Id.* at 2 (incidentally, the Crown’s decision also highlights the importance of resolutions and recommendations having been adopted unanimously).

158. *Id.* at 3.

159. *See id.* at 3-5; Wiersema, *supra* note 154, at 268-270 (both providing detailed commentaries of the significance of this decision of the Netherlands Crown).

160. Arie Trouwborst, *Climate Change Adaptation and Biodiversity Law*, in *RESEARCH HANDBOOK ON CLIMATE CHANGE ADAPTATION LAW* 298, 299 (J.M. Verschuuren ed., 2013).

161. *See also Commonwealth of Australia v. Tasmania* (Tasmanian Dam case) (1983) 158 CLR 1, at Justice Mason’s Opinion ¶ 31 (Austl.) (interpreting the

endeavor to do something is not as strong as an obligation *to do* it and that this type of weakness in legal drafting cannot simply be interpreted away by the Ramsar CoP.

Returning to the habitat-related provisions in AEWA's legal text, many of these can also be criticized for only being obligations to "endeavor" to do something.¹⁶² However – regardless of the legal implications of this qualification¹⁶³ and even if one accepts that the guidance adopted by the Ramsar CoP adds to the duties expressed in the Convention text, thereby reducing the relevance of AEWA's level of detail – a fundamental distinction between the Convention and the Agreement is the *unqualified* provisions that are found in the latter. These include a central, results-oriented obligation to "take co-ordinated measures to maintain migratory waterbird species in a favourable conservation status or restore them to such a status;"¹⁶⁴ as well as more specific, though equally rigorous, requirements that parties identify important sites and habitats and coordinate their efforts to "*ensure*" the maintenance of networks of habitat along entire flyways¹⁶⁵ (the latter obligation being a key feature of the Agreement, as is discussed below). No reservations are permitted in respect of these provisions, since they appear in the Agreement text rather than the Action Plan;¹⁶⁶

word "endeavour," in the context of a provision of the World Heritage Convention, to amount to more than "a mere statement of intention", and to create a justiciable legal obligation). Note, however, that this interpretation is not universally accepted and that even the judgments in *Commonwealth v. Tasmania* were not unanimous on this point. *See id.* Justice Wilson's Opinion ¶ 20, taking the position that "the word 'endeavour' reflects a mutual willingness to strive towards the goals that are set out in the Article but . . . falls far short of creating an obligation").

162. AEWA, *supra* note 9, art. III(2)(e), annex 3, ¶¶ 3.1.2, 3.2.1-4, 3.3 (all of which are qualified by the term "endeavor"); *see also id.* art. III(2)(c) (qualified by the term "encourage").

163. In the AEWA context specifically, it is noteworthy that several reservations have been entered in respect of a provision of the Agreement's Action Plan that requires parties to "endeavour" to phase out the use of lead shot for hunting in wetlands, suggesting that at least some AEWA parties consider qualified provisions to create meaningful obligations. *Id.* annex 3, ¶ 4.1.4.

164. AEWA, *supra* note 9, art. II(1).

165. *Id.* art. III(2)(c)-(d) (emphasis added).

166. *Id.* art. XV (providing that the provisions of the Agreement "shall not be subject to general reservations", but permitting specific reservations in respect of particular species or provisions of the AEWA Action Plan); *see also* Lewis, *supra* note 10, at 42-43 (examining the extent to which reservations have thus far been relied upon in the AEWA context).

though the Action Plan itself also includes several unqualified provisions relating to habitat, such as those on non-native species, impact assessments and pollution control.¹⁶⁷

The fact that more legally rigorous habitat provisions have been agreed under AEWA than under the Ramsar Convention (or under any of the other global conservation treaties, for that matter) is arguably at least partially attributable to the Agreement's more directed focus on the conservation of a particular group of shared species within a limited region. States' willingness to agree to such provisions could also perhaps have been influenced by the fact that AEWA fails to provide for the imposition of sanctions as a response to non-compliance.¹⁶⁸ However, the absence of punitive non-compliance responses at the multilateral level does not render the stringency of AEWA's provisions irrelevant. The concrete manner in which several of the Agreement's provisions are drafted may, for instance, make it easier for local pressure groups to establish that their governments have failed to comply with international law (this being an especially important strategy in monist systems, where treaty commitments can be invoked before national courts), or for one state to demonstrate the non-compliance of another in the course of bilateral dispute settlement procedures.¹⁶⁹ Further, even if not supported by sanctions, the potential implications of international pronouncements of non-compliance should not be underestimated; a recent illustration of this being the European Bank for Reconstruction and Development's decision to accept recommendations of the Bern Convention's Standing Committee in respect of a hydropower project in Mavrovo National Park and not

167. AEWA, *supra* note 9, annex 3, ¶¶ 2.5, 4.3.1, 4.3.9.

168. See Lewis, *supra* note 10, at 51-52 (discussing the criticism that AEWA's Implementation Review Process is an entirely facilitative – rather than coercive – form of compliance mechanism).

169. AEWA, *supra* note 9, art. XII(2) (providing that if parties are unable to resolve a dispute through negotiation, they may agree to “submit the dispute to arbitration, in particular that of the Permanent Court of Arbitration at The Hague, and the Parties submitting the dispute shall be bound by the arbitral decision.”); see also Arie Trouwborst, *Global Large Carnivore Conservation and International Law*, 24 *BIODIVERSITY CONSERVATION* 1567, 1573 (2015) (discussing the possible advantages of international legal obligations generally).

take further activities on the project until the Macedonian government has complied therewith.¹⁷⁰

4. Establishing Site Networks Along Waterbird Flyways

AEWA's hallmark is that its parties are required to take a flyway approach to waterbird conservation. Insofar as habitat conservation is concerned, this is seen in parties' unambiguous and unqualified commitment to ensure the maintenance of networks of suitable habitat; and their less stringent commitment to ensure, "where appropriate", the restoration of such networks – neither of these undertakings being restricted to wetlands.

Although connectivity conservation in general, and the flyway approach in particular, has been endorsed by the governing bodies of several global MEAs,¹⁷¹ none of these (not even the CMS itself) includes a rigorous, results-oriented commitment to habitat networks in its legal text. Such a requirement can be read into broader provisions of regional treaties outside the CMS Family,¹⁷² though the geographic scope of these is significantly smaller than AEWA's, failing to encompass the entire flyways of most inter-continental migrants.¹⁷³ The tendency of many waterbird populations to congregate during parts of their annual cycles places AEWA in a particularly good position to promote the identification, protection and management of site networks. That said, AEWA itself does not provide a mechanism for the international designation of sites and, as noted in part IV.A above, many of the critical sites that have been identified for African-Eurasian migratory waterbirds remain undesignated under the Ramsar Convention and other international instruments.

170. *EBDR Implements Recommendations of the Bern Convention for Mavrovo National Park*, MACEDONIAN INFO. AGENCY (Dec. 9, 2015) <http://www.mia.mk/en/Inside/RenderSingleNews/363/132935272> [<https://perma.cc/WYL5-Q4U2>].

171. See Lausche et al., *supra* note 27, at 57-64 (providing an overview of the relevance of various global MEAs to connectivity conservation).

172. See *id.* at 65-68 (providing an overview of the relevance of various regional MEAs to connectivity conservation).

173. See generally Lewis, *supra* note 10, at 26-27 (discussing the manner in which the geographic scope of regional conservation treaties limits their contribution to the conservation of migratory waterbirds).

International designation is not a prerequisite for site protection and management (processes in respect of which the AEWA *does* contain provisions to support its requirement concerning habitat networks). Nevertheless, such designations have the potential to generate a variety of benefits. Gardner *et al.*, for instance, have concluded that, within Africa, site designation under the Ramsar Convention has not only resulted in increased support for the protection and management of particular sites (including by enhancing both government officials' and users' awareness of the value of such sites), but also increased scientific interest, funding opportunities, and ecotourism;¹⁷⁴ while de Klemm and Shine make the broader observation that

an international site-specific conservation system has many advantages compared to a simple obligation to establish protected areas. In particular, it enables international attention, as well as the efforts of the Parties concerned, to be focused on the need to preserve particularly valuable ecosystems as a matter of international and national priority.¹⁷⁵

A question thus arises concerning whether it would be appropriate to establish a system for the international designation of "AEWA sites" – this being a suggestion that has been made by several stakeholders throughout the Agreement's history.¹⁷⁶

To answer the above question, it is necessary to briefly consider the collection of site designation mechanisms that already operate within AEWA's Agreement Area. A variety of mechanisms exist at the regional level – including Special Protected Areas (SPAs or Natura 2000 sites) under the EU Birds Directive, Areas of Special Conservation Interest (Emerald sites) under the Bern Convention, and designation mechanisms under the various regional seas conventions.¹⁷⁷ This patchwork of regional

174. Gardner *et al.*, *supra* note 88, at 285-290.

175. De Klemm & Shine, *supra* note 31, at 151.

176. Conversation with Dr. Gerard C. Boere, Honorary Patron of AEWA, in Tilburg, Neth.

177. See *Regional Sea Conventions at the Fore-front for Our Understanding of MPAs and MPA Networks*, EIONET FORUM, <http://forum.eionet.europa.eu/nrc-marine-coastal-and-maritime/library/2015-consultations/marine-protected-areas/4.-regional-sea-conventions-fore-front-our-understanding-mpas-and-mpa-networks> [<https://perma.cc/MHV5-SY4W>] (providing an overview of the

designation mechanisms does not cover the entire area of the migration systems of African-Eurasian migratory waterbirds. However, wetlands throughout these flyways can be designated under the Ramsar Convention, with Criteria 5 and 6 being used to designate the most important “mega-sites” for migratory waterbirds and it being possible to designate smaller sites – such as those that provide key stepping stones between larger areas – under the Convention’s other criteria. The entirety of AEWA’s Agreement Area is also covered by the World Heritage Convention, the application of which is not restricted to wetlands. Although the focus of designations under this Convention is on large sites that have outstanding universal value in their own right, it is also permissible for serial designations along species’ migration routes to encompass smaller sites that fail to meet this criterion independently.¹⁷⁸ It therefore appears that the problem is not a lack of suitable mechanisms through which to designate sites, but rather that the application of these mechanisms to waterbird flyways has thus far been limited. It follows that, instead of cluttering the international landscape with yet another designation tool¹⁷⁹ (not to mention diverting AEWA’s already-

establishment of networks of marine protected areas under the various regional seas conventions).

178. See Lewis, *supra* note 10, at 58 (discussing the potential value of World Heritage Site designations in the waterbird conservation context).

179. Should the AEWA MoP ever decide that a mechanism for designating AEWA sites is desirable, it would be possible to establish such a mechanism via resolution; a precedent for this approach being the Bern Convention Standing Committee’s establishment of the Emerald Network. See Bern Convention, Res. 3, *Concerning the Setting Up of a Pan-European Ecological Network* (Jan. 26, 1996), <https://wcd.coe.int/ViewDoc.jsp?p=&id=1475203&Site=&BackColorB9BDEE&BackColorIntranet=FFCD4F&BackColorLogged=FFC679&direct=true> [<https://perma.cc/TW28-B7C9>]; Bern Convention, Res. 5, *Concerning the Rules for the Network of Areas of Special Conservation Interest (Emerald Network)* (Dec. 4, 1998), <https://wcd.coe.int/ViewDoc.jsp?p=&id=1475223&Site=&BackColorInternet=B9BDEE&BackColorIntranet=FFCD4F&BackColorLogged=FFC679&direct=true> [<https://perma.cc/M5VT-BX2M>]; Bern Convention, Recommendation 16, *Areas of Special Conservation Interest* (June 9, 1989), <https://wcd.coe.int/ViewDoc.jsp?p=&id=1485727&Site=&BackColorInternet=B9BDEE&BackColorIntranet=FFCD4F&BackColorLogged=FFC679&direct=true> [<https://perma.cc/T29G-3GS6>]. However, a more appropriate route might be to amend AEWA’s Action Plan, since such amendments carry greater legal weight than ordinary MoP resolutions. In establishing a mechanism for designating AEWA sites, the MoP would need to reach agreement on the following issues:

- i. The criteria that a site needs to meet in order to qualify for designation.

stretched resources towards the administration of such a tool), AEWAs should arguably concentrate its efforts on promoting and supporting a flyway approach in the application of both national protection mechanisms (including for nationally important sites that fail to meet the relevant criteria for international designation) and the designation mechanisms provided by *other* international/regional instruments. The limited progress that has thus far been made towards the establishment of a comprehensive and coherent flyway network of protected sites for AEWAs populations¹⁸⁰ suggests that this issue should receive greater attention in the future. Further, while AEWAs parties have repeatedly been urged to designate key sites for waterbirds as SPAs and Ramsar sites,¹⁸¹ other designation mechanisms receive

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- ii. The process for site designation – in particular, whether designation is an entirely unilateral decision of the state under whose jurisdiction the site falls, or whether some form of external approval is necessary (as is the case for World Heritage Sites).
 - iii. The consequences of a site’s designation – in particular, whether designation is accompanied by more stringent requirements concerning the site’s protection, management and/or monitoring (and the reporting thereon) than currently appear in the AEWAs Action Plan.
 - iv. The process for removing a site’s designation – including whether (and in what circumstances) this can be done unilaterally by the state under whose jurisdiction the site falls; and whether it is possible for the AEWAs MoP or Standing Committee to revoke a site’s designation if a state is failing to comply with its international obligations in respect of such site. The latter could potentially provide an important “stick” for enforcing the Agreement.

180. See generally NAGY ET AL., *supra* note 103 (providing a preliminary assessment of the coverage of critical sites by various site protection instruments).

181. See AEWAs, Res. 5.19, *supra* note 148, ¶ 1 (urging AEWAs parties to use the Critical Site Network tool developed under the WOW Project to identify and designate further SPAs and Ramsar sites). The use of these designation types is also encouraged by several AEWAs ISSAPs. See, e.g., AEWAs, *International Single Species Action Plan for the Conservation of the Madagascar Pond-heron Ardeola idea*, at 24 (AEWAs Technical Ser. No. 39, Dec. 2008), http://www.unep-aewa.org/sites/default/files/publication/ts39_ssap_madag_pond_heron_0.pdf [https://perma.cc/YDS6-UD4Q]; AEWAs, *International Single Species Action Plan for the Conservation of the Eurasian Spoonbill Platalea leucorodia*, at 33 (AEWAs Technical Ser. No. 35, Nov. 2008), http://www.unep-aewa.org/sites/default/files/publication/ssap_eurasian_spoonbill_ts35_complete_0.pdf [https://perma.cc/3Y4N-DLFS]; AEWAs, *International Single Species Action Plan for the Conservation of the Light-bellied Brent Goose (East Canadian High Arctic Population) Branta bernicla hrota*, at 30, 35-43 (AEWAs Technical Ser. No. 11, June 2006), http://www.unep-aewa.org/sites/default/files/publication/ts11_ssap_light-bellied_brent_goose_complete_0.pdf [https://perma.cc/FA7U-VHH9]; AEWAs, *International*

virtually no mention in the Agreement's existing guidance documents. For instance – despite the World Heritage Convention's designation mechanism arguably being stronger than that of the Ramsar Convention insofar as (i) the World Heritage Committee can require that measures for a site's protection and management be in place before the site is inscribed on the World Heritage List,¹⁸² and (ii) a state that allows a World Heritage Site to deteriorate and fails to take corrective measures may be penalized through revocation of the site's status¹⁸³ – only one of AEWA's ISSAPs currently urges the Agreement's parties to make use of this type of international designation.¹⁸⁴ Similarly,

Single Species Action Plan for the Conservation of the Ferruginous Duck Aythya nyroca, at 32 (AEWA Technical Ser. No. 7, June 2006), http://www.unep-aewa.org/sites/default/files/publication/ts7_ssap_ferruginous_duck_complete_0.pdf [<https://perma.cc/Y37A-4PF2>]; AEWA, *International Single Species Action Plan for the Conservation of the White-headed Duck Oxyura leucocephala*, at 48 (AEWA Technical Ser. No. 8, June 2006), http://www.unep-aewa.org/sites/default/files/publication/ts8_ssap_white-headed-duck_complete_0.pdf [<https://perma.cc/RE5E-S284>]; AEWA, *Draft International Single Species Action Plan for the Conservation of the Eurasian Curlew*, at 48-49, AEWA/MOP Doc. 6.28 (Sept. 2015), http://www.unep-aewa.org/sites/default/files/document/mop6_28_draft_issap_eurasian_curlew.pdf [<https://perma.cc/5NEF-68GH>].

182. See e.g., United Nations Educational, Scientific and Cultural Organization [UNESCO], *Convention Concerning the Protection of the World Cultural and Natural Heritage*, at Decision 37 COM 8B.17, ¶ 2(a), 170, WHC-13/37.Com/20 (July 5, 2013), <http://whc.unesco.org/archive/2013/whc13-37com-20-en.pdf> [<https://perma.cc/P8ZD-EZ6T>] (deferring the examination of the nomination of the Bijagós Archipelago – an extremely important site for migratory waders – so as to give Guinea Bissau an opportunity to, *inter alia*, strengthen the site's legal protection status and establish an appropriate management system).

183. See Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, UNESCO, *Operational Guidelines for the Implementation of the World Heritage Convention*, ¶¶ 192-198, WHC.15/01 (July 8, 2015), <http://whc.unesco.org/en/guidelines> [<https://perma.cc/E2HH-CZDG>] (explaining the procedure for deletion of properties from the World Heritage List); Gerard C. Boere & Theunis Piersma, *Flyway Protection and the Predicament of Our Migrant Birds: A Critical Look at International Conservation Policies and the Dutch Wadden Sea*, 68 OCEAN & COASTAL MGMT. 157, 158, 166 (2012) (arguing that Germany and the Netherlands' World Heritage Convention commitments concerning the Wadden Sea are “strong” insofar as these countries risk losing the site's international designation if the Convention is not properly implemented, and that “it would be an absolute embarrassment for the Dutch and German Governments if the nomination, for whatever reason, would be withdrawn”).

184. AEWA, *International Single Species Action Plan for the Conservation of the Lesser Flamingo Phoeniconaias minor*, at 13 (AEWA Technical Ser. No. 34, Dec. 2008), http://www.unep-aewa.org/sites/default/files/publication/ts34_ssap_

only one ISSAP explicitly calls for sites to be included in the Emerald Network.¹⁸⁵ There is thus scope for AEWA to be significantly more active in promoting the use of other designation tools and assisting states to coordinate their designations across flyways. Depending on the habitats and states involved, this may include the use of a collection of diverse designation types across one flyway,¹⁸⁶ thus allowing AEWA to act as a bridge between different instruments in the mutual quest for connectivity.

5. Managing Sites to Meet the Ecological Needs of Waterbirds

The respective roles of the Ramsar Convention and AEWA in regard to site management are essentially determined by the *purpose* of management under each instrument. The purpose of management under the Convention is the maintenance of wetlands' overall ecological character, of which it is possible for waterbirds to constitute a component. The Ramsar CoP does not deny the importance of species-based management approaches, but such approaches do not receive significant attention in the contemporary functioning of the Convention, which places a greater emphasis on ecosystem-based approaches. In contrast, the purpose of management under AEWA is ultimately to ensure that sites meet the ecological needs of waterbirds *per se*.¹⁸⁷ The

lesser_famingo_0.pdf [https://perma.cc/53FT-CAXF] (explaining that the aim of this ISSAP is to be achieved by, *inter alia*, “[e]nsuring that all key breeding and feeding sites are designated as protected areas, Ramsar sites, BirdLife IBAs, and where appropriate, World Heritage Sites”).

185. AEWA, *International Single Species Action Plan for Conservation of the Great Snipe Gallinago media*, at 29 (AEWA Technical Ser. No. 5, Nov. 2004), http://www.unep-aewa.org/sites/default/files/publication/ts5_great_snipe_0.pdf [https://perma.cc/2JYP-JSCV] (providing as follows in respect of sites of importance for Great Snipe: “[f]or EU (or accession) countries sites of international importance should be declared SPA according to the EU Birds Directive. For other countries the sites should be included in the Emerald Network (Bern Convention) and/or as Ramsar sites”).

186. Indeed, this is already alluded to by the call in several ISSAPs to designate SAPs within the EU while using designations under other legal instruments in non-EU range states. *See, e.g., id.*

187. AEWA, *supra* note 9, art. III(2)(c), annex 3, ¶ 3.2.1 (calling for the management of sites that are important for migratory waterbirds); *id.* art. II(1) (providing that the end that the measures prescribed in Article III and Annex 3 of the Agreement seek to achieve is to maintain migratory waterbird species in a

Agreement does not ignore the value of ecosystem approaches,¹⁸⁸ but, rather than aiming to maintain a broad array of ecosystem services, its mandate is restricted to the conservation of sites *as waterbird habitat*. While the Ramsar Convention has been criticized for failing to specify the interests that decision makers should take into account in their endeavor to maintain a site's ecological character, any discretion afforded to states under the Convention is curtailed to some extent through AEWA parties' more directed commitment to maintain/restore the favorable conservation status of waterbirds. Further, while the Convention is well-positioned to promote ecosystem approaches, the Agreement is well-positioned to promote the consideration of waterbirds in site management by, for instance, developing guidance on how to manage sites from a waterbird conservation perspective specifically¹⁸⁹ and supporting projects aimed at achieving this objective. Finally, the connections that migratory waterbirds provide *between* sites place AEWA in a good position to promote networking and the exchange of information and expertise between the managers of different sites along the same flyway, thereby contributing to both capacity-building and the coordination of site management at the flyway scale.¹⁹⁰

favorable conservation status or to restore them to such status); *see also* AEWA, *Conservation Guidelines No. 4: Guidelines on the Management of Key Sites for Migratory Waterbirds*, at 3 (AEWA Technical Ser. No. 18, April 2005), http://www.unep-aewa.org/sites/default/files/publication/cg_4new_0.pdf [<https://perma.cc/R37T-K3W3>] [hereinafter AEWA, *Guidelines on the Management of Key Sites for Migratory Waterbirds*] (explaining that “[t]he reason that the AEWA Action Plan calls for the preparation of site management plans is that management aimed specifically at the conservation of migratory waterbirds may at times differ from general site management”).

188. AEWA, *supra* note 9, annex 3, ¶ 3.2.4 (requiring that parties “endeavour to develop strategies, according to an ecosystem approach, for the conservation of the habitats of all populations listed in Table 1”).

189. Such guidance is provided in AEWA's *Guidelines on the Management of Key Sites for Migratory Waterbirds*, *supra* note 187, as well as the various AEWA ISSAPs. *See generally* *Technical Publications*, AEWA, <http://www.unep-aewa.org/en/publications/technical-publications> [<https://perma.cc/N7HU-QPQL>] [hereinafter *AEWA Technical Publications*] (currently providing links to all of the AEWA ISSAPs that had been adopted prior to MoP6).

190. One way of achieving this is through the establishment of “twinning” schemes between sites in different regions of the same flyway. *See* AEWA, Res. 5.20, *Promote Twinning Schemes Between the Natural Sites Covered by the AEWA and the Network of Sites Listed Under the Ramsar Convention* (May 14-18 2012), http://www.unep-aewa.org/sites/default/files/document/res_5_20_twinning_sites

6. Wider Habitat Measures for Dispersed Populations

In addition to their obligations concerning important *sites*, AEWA parties undertake broad commitments concerning the identification,¹⁹¹ conservation¹⁹² and rehabilitation¹⁹³ of waterbird “habitats”, including habitats relied upon by dispersed populations. The MoP has additionally urged parties and other range states “to provide wider habitat protection for species with dispersed breeding ranges, migration routes or winter ranges where the site conservation approach would have little effect, especially under climate change conditions”.¹⁹⁴ That said, the Agreement’s current habitat-related priorities – as articulated in its Strategic Plan – focus on site-based conservation,¹⁹⁵ failing to place any emphasis on habitat conservation in the wider environment. This omission is arguably problematic, given the significant threat that agriculture, forestry and a range of other

_aewa_ramsar_0.pdf [<https://perma.cc/TNJ3-YUDH>]; AEWA, AEWA PLAN OF ACTION FOR AFRICA 2012-2017, 23 (May 14-18, 2012), http://www.unep-aewa.org/sites/default/files/basic_page_documents/african_plan_of_action_2012-2017.pdf [<https://perma.cc/52R4-HEMX>]. In the context of the East Atlantic Flyway specifically, the Wadden Sea Flyway Initiative is working to strengthen cooperation in conservation, management and research, including by promoting the designation of, and strengthening the links between, World Heritage Sites. *See generally* *Wadden Sea Flyway Initiative (WSFI)*, COMMON WADDEN SEA SECRETARIAT, <http://www.waddensea-secretariat.org/management/projects/wadden-sea-flyway-initiative-wsfi> [<https://perma.cc/5CCF-D4F6>]. AEWA both provides a useful inter-governmental framework to support the work of this Initiative and could potentially draw lessons from the Initiative for application in other parts of the Agreement Area. SIMON DELANY, *THE FUTURE OF THE WADDEN SEA FLYWAY INITIATIVE: ASSESSMENT OF THE PLAN OF ACTION AND PRELIMINARY PRIORITIZATION OF ACTIVITIES* 9 (2014), https://www.researchgate.net/publication/292943515_The_Future_of_the_Wadden_Sea_Flyway_Initiative_Assessment_of_the_Plan_of_Action_and_preliminary_prioritization_of_activities [<https://perma.cc/GJ7N-5ZG6>].

191. AEWA, *supra* note 9, art. III(2)(c), annex 3, ¶ 3.1.1.

192. *Id.* art. III(2)(d), annex 3, ¶ 3.2.4.

193. *Id.* art. III(2)(e).

194. AEWA, Res. 4.14, *The Effects of Climate Change on Migratory Waterbirds*, ¶ 7 (Sept. 2008), http://www.unep-aewa.org/sites/default/files/document/res4_14_climate_change_final_0.pdf [<https://perma.cc/QKJ4-Z2GB>].

195. AEWA, AEWA STRATEGIC PLAN 2009-2017 14 (2008), http://www.unep-aewa.org/sites/default/files/basic_page_documents/strategic_plan_2009-2017_1.pdf [<https://perma.cc/N5CZ-55ZX>] (identifying as a target for the Agreement the establishment and management of “[a] comprehensive and coherent flyway network of protected and managed sites, and other adequately managed sites, of international and national importance for waterbirds”).

activities pose to the habitats of many AEWA species, such as the grassland-breeding waders discussed in part II.A above.¹⁹⁶ On the other hand, it can also be argued that the activities that impact the wide mosaics of habitat on which dispersed populations rely are too numerous and varied to be addressed directly by a species-specific instrument like AEWA.¹⁹⁷ Before asserting that this issue should be given higher priority under the Agreement, it therefore needs to be considered *how* AEWA might realistically contribute to conserving and managing the habitats relied upon by dispersed populations other than through broadly-phrased commitments.

As in the context of site management, AEWA is obviously in a position to develop guidance on how various habitat types can be managed to meet the ecological needs of waterbirds. Indeed, the Agreement has already taken several steps in this direction: the *AEWA Guidelines on Measures Needed to Help Waterbirds to Adapt to Climate Change* emphasize the need to ensure not only networks of protected areas, but also a “permeable landscape” to facilitate species’ dispersal, and suggest several means through which to improve management of the wider countryside;¹⁹⁸ while the *Guidelines on the Management of Key Sites for Migratory Waterbirds* also make several suggestions regarding how to

196. The failure to include wider habitat measures in the current Strategic Plan has meant that such measures are not prioritized in the current activities of the Agreement and also are not reported on in the national reports that parties submit to each MoP, the questions for which are largely designed to assess progress towards achieving the Strategic Plan’s objectives.

197. See, e.g., de Klemm, *supra* note 7, at 75 (expressing the view that “international agreements cannot go any further than imposing a general obligation to conserve and monitor” dispersed habitats); de Klemm & Shine, *supra* note 31, at 134 (commenting that “it is almost impossible to implement an extensive system of species-based land-use controls”); Tim Jones & Taej Mundkur, *A Review of CMS and Non-CMS Existing Administrative and Management Instruments for Migratory Birds Globally*, in *A REVIEW OF MIGRATORY BIRD FLYWAYS AND PRIORITIES FOR MANAGEMENT*, *supra* note 26, at 9, 28 (commenting that, given the enormous variety of factors that underlie habitat loss and degradation, “[i]t is not within the capacity of even the largest and best-resourced of the existing flyway-based instruments to address directly all of these issues”).

198. AEWA, *Guidelines on Measures Needed to Help Waterbirds to Adapt to Climate Change*, at 19-20 (AEWA Technical Ser. No. 27, Sept. 2008), http://www.unep-aewa.org/sites/default/files/publication/cg_12_0.pdf [<https://perma.cc/SC22-K2CV>].

manage the habitats relied upon by dispersed species.¹⁹⁹ The need for habitat action plans, containing recommendations for each key habitat type, was recognized at the first session of the AEWA MoP and reaffirmed at the MoP's second, third, fourth and fifth sessions;²⁰⁰ and Resolution 5.2 instructed the AEWA Secretariat

funding permitting, to coordinate the development of habitat action plans in Africa and West and Central Asia to address the conservation requirements of AEWA populations during those life cycle stages when site-based approaches to conservation are ineffective, requiring management of their habitats in the wider countryside.²⁰¹

However, no such plans have yet been developed – the Agreement's activities having instead focused predominantly on the development of *single species* action plans, the preparation of which, unlike habitat action plans, is explicitly required by AEWA's legal text.²⁰² While those ISSAPs that have been prepared for dispersed populations provide *some* guidance on habitat

199. AEWA, *Guidelines on the Management of Key Sites for Migratory Waterbirds*, *supra* note 187, at 10-11.

200. See AEWA, Res. 1.4, *International Implementation Priorities for 2000-2004* (Oct. 23-27 1999), http://www.unep-aewa.org/sites/default/files/document/r4_0.pdf [https://perma.cc/98QX-WDWT]; AEWA, *International Implementation Priorities for 2000-2004*, activity 8, UNEP/AEWA/MOP Doc. 1.9 (Oct. 23-27, 1999), <http://www.unep-aewa.org/en/meeting/1st-session-meeting-parties-aewa> [https://perma.cc/D29Z-28NB]; AEWA, Res. 2.4, *International Implementation Priorities for 2003-2007* at app. I, priority 7 (Sept. 25-27, 2002), http://www.unep-aewa.org/sites/default/files/document/resolution2_4_0.pdf [https://perma.cc/5UPZ-PAAJ]; AEWA, Res. 3.11, *AEWA International Implementation Priorities for 2006-2008*, at app. I, priority 7 (Oct. 23-27, 2005), http://www.unep-aewa.org/sites/default/files/document/res3_11_iip_2006-2008_0.pdf [https://perma.cc/E56K-3HN9]; AEWA, Res. 4.10, *AEWA International Implementation Tasks for 2009-2016*, at ap., priority 6 (Sept. 15-19, 2008), http://www.unep-aewa.org/sites/default/files/document/res4_10_iit_2009_2016_final_0.pdf [https://perma.cc/9PNK-SQ6B]; AEWA, Res. 5.3, *AEWA International Implementation Tasks for 2012-2015*, at ap., priority 5 (May 14-18, 2012), http://www.unep-aewa.org/sites/default/files/document/res_5_3_iit_12-15.pdf [https://perma.cc/7URB-UJDD].

201. AEWA, Res. 5.2, *Addressing Gaps in Knowledge of and Conservation Action for Waterbird Populations and Sites Important for Them*, at ¶ 13 (May 14-18, 2012), http://www.unep-aewa.org/sites/default/files/document/res_5_2_gaps_in_knowledge_and_cons_0.pdf [https://perma.cc/F8ZN-7LDY].

202. AEWA, *supra* note 9, annex 3, ¶ 2.2.1 (“Parties shall cooperate with a view to developing and implementing international single species action plans for populations listed in Category 1 of Column A of Table 1 as a priority and for those populations listed with an asterisk in Column A of Table 1.”).

conservation measures in the broader landscape, this tends to take the form of extremely generalized policy recommendations, such as ensuring that species' habitat requirements are included in relevant governmental land-use policies, requiring that EIAs be performed for activities that may impact habitat, and engaging in the planning of agricultural development.²⁰³ The development of more detailed habitat action plans – or, for that matter, *multi-species* action plans²⁰⁴ – to address threats that affect multiple species in a given habitat would be more cost-effective, and arguably more useful, than the development of a fragmented collection of action plans for individual species.²⁰⁵ Despite the MoP having endorsed the use of both of these types of plans, it might also be sensible to amend the AEWA Action Plan's provision on single species action planning so that the legal text itself provides a mandate for the development of habitat or multi-species plans in those instances in which ISSAPs are inappropriate.

203. See, e.g., AEWA, *International Single Species Action Plan for the Conservation of the Corncrake *Crex crex**, at 36, 40, 43, 46 (AEWA Technical Ser. No. 9, June 2006), http://www.unep-aewa.org/sites/default/files/publication/ts9_ssap_corncrake_complete_0.pdf [<https://perma.cc/S8EJ-75GQ>]; AEWA, *International Single Species Action Plan for the Sociable Lapwing *Vanellus gregarius** (AEWA Technical Ser. No. 47, May 2012), http://www.unep-aewa.org/sites/default/files/publication/ts_47_ssap_sola.pdf [<https://perma.cc/9SF2-5NP5>].

204. AEWA, Res. 2.1, *Amendments to the Annexes to the Agreement*, at ¶ 5 (Sept. 25-27, 2002), http://www.unep-aewa.org/sites/default/files/document/resolution2_1_0.pdf [<https://perma.cc/BWN2-K95Z>] (encouraging parties to “consider, where appropriate, the development and implementation of international multi-species action plans for populations of two or more species listed in column A of Table 1 when those populations share the same habitat (ecosystem), are exposed to similar threats, and require similar measures for their conservation”). Only one multi-species action plan has thus far been adopted under the Agreement. AEWA, Res. 6.8, *Adoption and Implementation of International Single Species and Multi-species Action and Management Plans*, at ¶ 2 (Nov. 9-14, 2015), http://www.unep-aewa.org/sites/default/files/document/aewa_mop6_res8_speciesplans_en.pdf [<https://perma.cc/6ZS9-ANJ7>].

205. Indeed, the respective advantages and disadvantages of each type of plan, and the roles that they should play in AEWA's implementation, are currently being examined by the AEWA Technical Committee in the context of the Committee's intersessional tasks on addressing regional multi-species declines and developing additional criteria to prioritize species for action planning. AEWA, *Work Plan for the AEWA Technical Committee 2016-2018*, at 8-9, Doc. No. TC13.6 (Mar. 14-17, 2016), http://www.unep-aewa.org/sites/default/files/document/aewa_tc13_6_tc_work_plan_2016_2018_en.pdf [<https://perma.cc/S84Y-WREP>].

Through its Implementation Review Process (which can involve on-the-spot assessment missions, followed by recommendations²⁰⁶), AEWA has some capacity to challenge projects that pose a threat to the habitat of dispersed populations. For instance, one of the cases currently being addressed under this Process involves plans for large-scale lowland afforestation in Iceland, which threaten the breeding habitats of several AEWA species.²⁰⁷ The Icelandic case specifically has also been addressed under the Bern Convention's case file system.²⁰⁸ However, for much of the African and Asian portions of AEWA's Agreement Area, the Implementation Review Process is the only treaty implementation/compliance mechanism available for addressing threats of this nature. In contrast, threats to key sites relied upon by congregatory populations can be addressed by assessment missions of the Ramsar and/or World Heritage Conventions, provided that the site has been listed thereunder.²⁰⁹

In theory, AEWA's Small Grants Fund could also be used to support habitat conservation projects in the broader landscape, though the contribution of this tool has thus far been severely constrained by lack of resources.²¹⁰ Given that many waterbirds are popular quarry species and that habitat loss can limit their

206. See Lewis, *supra* note 10, at 50-52 (discussing the functioning of AEWA's Implementation Review Process).

207. AEWA, *Implementation Review Process – Report to MOP6*, at 10-11, UNEP/AEWA/MOP Doc. 6.17 (Nov. 9-14, 2015), http://www.unep-aewa.org/sites/default/files/document/mop6_17_irp_report.pdf [https://perma.cc/R47R-ETSB].

208. Bern Convention, *Afforestation of Low Land in Iceland: Report of an On-the-Spot Appraisal Undertaken for the Council of Europe*, Doc No. T-PVS/Files (2002) 3 (May 29 - June 2, 2002), <https://wcd.coe.int/com.instranet.InstraServlet?command=com.instranet.CmdBlobGet&InstranetImage=1326334&SecMode=1&DocId=1450498&Usage=2> [https://perma.cc/M8MK-BUN3].

209. See *Ramsar Advisory Missions*, RAMSAR <http://www.ramsar.org/activity/ramsar-advisory-missions> [https://perma.cc/UQL4-M6JK]; Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, *supra* note 183, at 6 nn.1-2.

210. Indeed, a new project cycle has not been initiated under the Small Grants Fund for 2016, following the MoP's adoption of a core budget that allocates no money to the Fund for the period 2016-2018. AEWA, Res. 6.18, *Financial and Administrative Matters*, at app. Ia (Nov. 9-14, 2015), http://www.unep-aewa.org/sites/default/files/document/aewa_mop6_res18_financial_admin_en.pdf [https://perma.cc/MW39-NV4N].

harvest potential considerably,²¹¹ it might be worth considering whether it is possible for AEWA to facilitate the creation of a mechanism for channeling contributions from hunters (even if only made on a voluntary basis) into the financing of habitat conservation efforts throughout the Agreement Area. At the national level, this approach has achieved remarkable success in some countries – most notably within North America;²¹² though the *international* coordination of such an approach is more challenging. There are examples of non-governmental initiatives attempting to achieve this. During the 1990s, for instance, the European Waterfowl Habitat Fund (Euroducks International) aimed to conserve or restore wetland habitats on the migration routes of European migratory waterbirds, with activities spanning across the western palaeartic.²¹³ This initiative has since become the European Landowners' Organization (ELO) Water and Habitat Fund, which encourages habitat conservation projects through its annual ELO Water and Habitat Award.²¹⁴ Though no such initiative has had the success seen in North America or operated

211. AEWA, *Conservation Guidelines No. 5: Guidelines on Sustainable Harvest of Migratory Waterbirds*, at 66 (AEWA Technical Ser. No. 62, Nov. 2015), http://www.unep-aewa.org/sites/default/files/publication/ts62_cg5_sustainable%20_harvest_guidelines_0.pdf [<https://perma.cc/S8FB-Z575>] (“Loss or degradation of breeding habitat has led to the decrease of European meadow bird populations, such as Northern Lapwing (*Vanellus vanellus*), Black-tailed Godwit (*Limosa limosa*) and Eurasian Curlew (*Numenius arquata*), to a level that presents a significant limitation to the harvest potential of these species without jeopardizing the effectiveness of conservation efforts elsewhere.”).

212. See, e.g., Michael G. Anderson & Paul I. Padding, *The North American Approach to Waterfowl Management: Synergy of Hunting and Habitat Conservation*, 72 INT’L J. ENVTL. STUD. 810, 819-20 (2015); 2016 *Canadian Wildlife Habitat Conservation Stamp*, ENV’T & CLIMATE CHANGE CAN., <https://www.ec.gc.ca/mbc-com/default.asp?lang=En&n=9B4EEB34-1> [<https://perma.cc/9HS7-NXLC>]; *Duck Stamp*, U.S. FISH & WILDLIFE SERV., <https://www.fws.gov/birds/get-involved/duck-stamp.php> [<https://perma.cc/D9X8-V2XS>].

213. *Euroducks*, EUR. LANDOWNERS’ ORG., www.elo.org/UserFiles/File/Euroducks.doc [<https://perma.cc/W5YF-QWAA>].

214. *Wetlands & Water*, EUROPEAN LANDOWNERS’ ORG., <http://www.europeanlandowners.org/awards/wetlands-water> [<https://perma.cc/R7DE-AGV3>]. Another example is the British Association for Shooting and Conservation’s Wildlife Habitat Trust, which directs funding to habitat conservation projects in both Britain and countries that share waterbird populations with the United Kingdom. See WILDLIFE HABITAT TRUST 25TH ANNIVERSARY 10 (2011), <http://www.wht.org.uk/wp-content/uploads/2011/09/WHT-Leaflet-2011.pdf> [<https://perma.cc/4NSF-UMTK>].

at the level of the entire African-western Eurasian flyway, one wonders whether this might be attainable now that – under AEWA – an intergovernmental framework for waterbird conservation is in place at the flyway level and (as alluded to in part V.B below) the European hunting community and other non-governmental stakeholders are actively engaging with this framework.

In addition to the above contributions, there is considerable scope for AEWA to enhance its cooperation with treaties that promote the integration of habitat/biodiversity conservation into relevant sectoral/cross-sectoral plans, programmes and policies (important examples being the Ramsar Convention²¹⁵ and the Convention on Biological Diversity²¹⁶) and, for that matter, treaties aimed at addressing particular threats to habitat (such as marine pollution), so as to ensure that the needs of migratory waterbirds are taken into consideration in initiatives spearheaded by such instruments. Opportunities also exist for cooperation with other instruments in the CMS Family – in particular, the African-Eurasian Migratory Landbirds Action Plan,²¹⁷ which, given the broad-front migration strategy of many landbirds,²¹⁸ is arguably the most appropriate of the CMS's bird-related instruments to spearhead the promotion of wider habitat measures (at least insofar as these involve terrestrial habitats). A final point to note in this regard is that if AEWA evolves in the future to become a framework birds Agreement for *all* types of migratory birds in Africa and western Eurasia – as has been suggested is a possibility²¹⁹ – greater weight will presumably need to be placed

215. See Ramsar Convention, *The 4th Strategic Plan 2016-2024*, *supra* note 120 and accompanying text.

216. CBD, *supra* note 50, art. 6(b).

217. African-Eurasian Migratory Landbirds Working Grp., *African-Eurasian Migratory Landbirds Action Plan (AEMLAP): Improving the Conservation Status of Migratory Landbird Species in the African-Eurasian Region*, UNEP/CMS/COP11/Doc No.23.1.4/Rev.1 (Apr 28, 2014), http://www.cms.int/sites/default/files/document/cop11_Doc_23_1_4_Rev1_Landbirds_AP_E.pdf [<https://perma.cc/M9EK-PJZ7>]; see also CMS, Res. 11.17, *Action Plan for Migratory Landbirds in the African-Eurasian Region* (Nov. 4-9 2014), http://www.cms.int/sites/default/files/document/Res_11_17_Action_Plan_Migratory_Landbirds_Eng.pdf [<https://perma.cc/CCW8-WBKG>].

218. See Kirby, *supra* note 26, at 60-61 (providing an overview of migration techniques).

219. CMS, Res. 11.14, *Programme of Work on Migratory Birds and Flyways*, at annex 1, action 19 (Nov. 4-9, 2014), <http://www.cms.int/sites/default/>

on broader landscape measures. Indeed, if one compares the text of AEWA's Action Plan with that of the Landbirds Action Plan, the most significant difference is that the latter contains more detailed provisions on addressing land use changes and achieving integrated land use management.

7. Interpreting AEWA's Habitat Provisions in the Face of Climate-induced Range Shifts

What are parties' responsibilities under AEWA when a waterbird population's range shifts as a result of climate change? Given that the Agreement's text expresses a result-oriented commitment regarding habitat networks rather than a commitment that is linked to strictly-defined site boundaries, it would appear that, even when a population's range has shifted, parties will continue to be obliged to ensure the availability of a suitable network of habitats, and that measures to protect and manage newly important sites/habitats may therefore be required. Are there, however, any arguments that could be advanced *against* this interpretation? A treaty's provisions must be interpreted "in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose."²²⁰ AEWA's central objective – which itself is framed as a central, result-based commitment, rather than simply the aspiration underlying the Agreement's more detailed provisions – is to "maintain migratory waterbird species in a favourable conservation status or to restore them to such a status."²²¹ So far, so good. A complication, however, arises when one considers the definition of "favourable conservation status." This term is not explicitly defined by AEWA, which instead incorporates by reference the definition provided by the CMS.²²² The CMS definition encompasses several conditions, including that "the

files/document/Res_11_14_PoW_on_Migratory_Birds_Flyways_En.pdf [https://perma.cc/8UU6-8QRT] (envisaging the preparation of "a review to explore options to extend AEWA as a framework for other migratory bird species/species groups in the Africa-Eurasian region").

220. Vienna Convention, *supra* note 76, art. 31(1).

221. AEWA, *supra* note 9, art. II(1).

222. *Id.* art. I(2) (providing that "the terms defined in Article I, subparagraphs 1(a) to (k), of [the CMS] shall have the same meaning, *mutatis mutandis*, in [the] Agreement").

distribution and abundance of the migratory species *approach historic coverage* and levels to the extent that potentially suitable ecosystems exist and to the extent consistent with wise wildlife management.”²²³ Does it follow that parties to AEWA are only required to maintain habitat networks to the extent that these fall within species’ historic ranges (and, for that matter, that more proactive adaptation assistance, such as translocation, runs the risk of *contravening* AEWA’s provisions²²⁴)?

For the purposes of the CMS itself, the CoP has addressed the issue of historic coverage by agreeing that “favourable conservation status” can be interpreted as follows in light of climate change:

According to Article I (1) (c) (4) of the Convention, one of the conditions to be met for the conservation status of a species to be taken as “favourable” is that: “the distribution and abundance of the migratory species approach historic coverage and levels to the extent that potentially suitable ecosystems exist and to the extent consistent with wise wildlife management”. Whereas there is a continued need to undertake conservation action within the historic range of migratory species, such action will increasingly also need to be taken beyond the historic range of species in order to ensure a favourable conservation status, particularly with a view to climate-induced range shifts. Such action beyond the historic range of species is compatible with, and may be required in order to meet the objectives and the obligations of Parties under the Convention.²²⁵

Since AEWA is an independent treaty and not all of her parties are also parties to the CMS,²²⁶ this resolution does not constitute

223. CMS, *supra* note 6, art. I(1)(c)(4) (emphasis added).

224. See Arie Trouwborst, *Transboundary Wildlife Conservation in A Changing Climate: Adaptation of the Bonn Convention on Migratory Species and Its Daughter Instruments to Climate Change*, 4 DIVERSITY 258, 278-281 (2012) (discussing potential difficulties arising from the CMS definition of “favourable conservation status”, and proposing possible legal solutions thereto).

225. CMS, Res. 11.26, *Programme of Work on Climate Change and Migratory Species*, UNEP/CMS/Resolution 11.26, ¶ 7 (Nov. 4-9, 2014), http://www.cms.int/sites/default/files/document/Res_11_26_POW_on_Climate_Change_E_0.pdf [<https://perma.cc/S68K-BJDS>].

226. Iceland, Lebanon and Sudan are parties to the Agreement but not the Convention. *Parties and Range States*, AEWA, *supra* note 59; *Parties and Range*

a subsequent agreement between parties regarding the interpretation of AEWA. The approach agreed to in the CMS context is, however, consistent with the guidance that AEWA's MoP has adopted concerning climate change adaptation measures for waterbirds, which urges parties "to designate and establish comprehensive and coherent networks of adequately managed protected sites as well as other adequately managed sites, to accommodate range-shifts and facilitate waterbirds' dispersal[.]"²²⁷ and advises that the conservation of sites that, while not currently relied upon by migratory waterbirds, are "located in [a] better future climate space" may constitute an appropriate adaptation measure.²²⁸ It can arguably be implied from this guidance that AEWA's parties are in agreement that the maintenance/restoration of a species' favorable conservation status may require conservation measures outside of its historic range. Ideally, however, the AEWA MoP should provide clarity on the issue by adopting a resolution that explicitly endorses the CMS CoP's interpretation of this term.

V. ADDRESSING SPECIES THREATS

The effective long-term conservation of migratory waterbirds depends not only on the availability of suitable habitat, but also the implementation (across entire flyways) of measures to address a wide spectrum of species threats, such as disturbance, unsustainable harvest and other direct causes of mortality. This part of the article begins by demonstrating that, despite the Ramsar Convention's concentration on a particular habitat type, the Convention nevertheless has some applicability to species threats. It then proceeds to examine the more dominant role played by AEWA in relation to such threats, as well as the ways in which the Agreement provides a framework for the implementation of certain broadly-phrased Ramsar provisions, through its very

States, CONVENTION ON MIGRATORY SPECIES (CMS), <http://www.cms.int/en/parties-range-states> [<https://perma.cc/2TQL-4VNM>].

227. AEWA, Res. 4.14, *supra* note 194, at ¶ 4 (emphasis added); *see also* AEWA, AEWA STRATEGIC PLAN, *supra* note 195, at 14 (highlighting the need to take climate change into account in the establishment of site networks).

228. AEWA, *Guidelines on Measures Needed to Help Waterbirds to Adapt to Climate Change*, *supra* note 198, at 16-17.

directed species conservation commitments and the mechanisms that it provides to support parties in implementing conservation measures and to coordinate these across waterbird flyways.

A. The Ramsar Convention's Applicability to Species Threats

By the 1960s, the international community was well aware that waterfowl faced a variety of threats other than habitat loss, the most significant of which was unsustainable hunting.²²⁹ In early discussions regarding an international convention on wetlands, a representative of the Soviet Union therefore argued that this instrument should address not only wetlands, but also “the direct protection of waterfowl and in particular the questions of reduction of hunting periods, restriction of capture of waterfowl and prohibition of capture of waterfowl by means of traps and other instruments”.²³⁰ However, other delegates believed that attempting to advance *all* aims at the same time, and focusing on negative restrictions rather than framing requirements in a positive way, would result in the Convention's failure.²³¹ Thus,

229. See e.g., Swift, *supra* note 96, at 275-276 (illustrating that the outcomes of the First European Meeting on Wildfowl Conservation, held in 1963, included recommendations covering, *inter alia*, the issuance of shooting licenses; cold weather closure of shooting; collection of shooting statistics; prohibition of shooting from mechanically propelled boats; and prohibition of spring shooting).

230. PROCEEDINGS OF THE SECOND EUROPEAN MEETING ON WILDFOWL CONSERVATION 171-72 (Z. Salverda ed. 1967); see also MATTHEWS, *supra* note 55, at 20, 24 (explaining that, in 1969, the USSR presented a draft text for “An International Convention on Wildfowl and Wetlands”, which placed a stronger emphasis on wildfowl conservation than on wetlands and describing how the IUCN also supported the inclusion in the Convention text of precise criteria for species protection).

231. Salverda, *supra* note 230, at 174 (expressing the view of the International Council for Game and Wildlife Conservation (CIC) that “trying to achieve all our aims at the same time would be an error”); *Id.* at 181 (reflecting the following suggestion by a representative of Ireland: “our proposed recommendation for a convention should concentrate on a statement of *positive* aims, omitting negative restrictions against Government authority. Positive aims will take us a long way ahead. *Negative* restrictions hold the seed of general frustration. It is the result that matters. If you aim too high, you miss the target.”); *Id.* at 184 (reflecting the following comment by a participant from the United Kingdom: “a convention for action ‘to do’ is more likely to prove acceptable than a convention restricting action by specifying what Governments are ‘not to do’”).

although the need for international cooperation in respect of hunting was acknowledged,²³² it was ultimately decided that this issue should not be a core focus of the Ramsar Convention, but should instead be addressed by a complementary treaty.²³³ That said, it would be a mistake to assume that (as Lyster suggested²³⁴) the Ramsar Convention concerns itself *exclusively* with habitat.

Firstly, as discussed in part IV.A above, to the extent that the presence of waterbirds constitutes an important component of a wetland's ecological character, parties should arguably manage human activities (whether through site management plans or other means) in a manner that retains this feature so as to promote the site's conservation-wise use. This should be the case regardless of whether the activities in question have direct impacts on habitat, since even activities that don't degrade/destroy habitat may impact the number of waterbirds at the site by, for instance, causing significant levels of mortality or disturbance.²³⁵ Indeed,

232. See, e.g., PROCEEDINGS OF THE INTERNATIONAL REGIONAL MEETING ON CONSERVATION OF WILDFOWL RESOURCES 419-20 (Y.A. Isakov ed. 1968) (reproducing a resolution in which the 1968 International Regional Meeting on Conservation of Wildfowl Resources considered that one of the solutions to the problem of declining numbers of many wildfowl species would be the conclusion of international agreements concerning, *inter alia*, hunting regulation).

233. MATTHEWS, *supra* note 55, at 50-51 (explaining that, while issues relating to hunting were "at first very much the concern of those developing the Ramsar Convention", it ultimately became "obvious that a different framework was needed to underpin international agreements on migratory birds, especially where hunting harvests were involved"); PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON CONSERVATION OF WETLANDS AND WATERFOWL 50 (E. Carp ed. 1971) (reflecting the comment by G.V.T. Matthews (Director of what was then the International Wildfowl Research Bureau) at the conference adopting the Ramsar Convention that "hopefully, one Convention satisfactorily evolved, we are taking the first steps on the long hard road towards drawing up an international agreement on the rationalization of waterfowl hunting in Eurasia and Africa").

234. SIMON LYSTER, INTERNATIONAL WILDLIFE LAW 206 (1985) (commenting that the Ramsar Convention was the first conservation treaty "to concern itself exclusively with habitat").

235. See, e.g., Carsten Egevang & David Boertmann, *The Greenland Ramsar Sites: A Status Report*, at 18, 82 (NERI Technical Report No. 346, 2001), http://www.dmu.dk/1_viden/2_publicationer/3_fagrappporter/rapporter/FR346.pdf [<https://perma.cc/UB5X-7Q4L>] (commenting that, in Greenland, the primary function of establishing Ramsar sites should be to create areas in which waterbird hunting and disturbance are limited; and offering the Aqajarua and Sullorsuaq Ramsar site as an example of an area that has lost its significance to moulting king eiders, *Somateria spectabilis*, largely as a result of hunting and disturbance from boating and scallop fishing; Niels Kanstrup, *Sustainable Harvest of*

the Ramsar Convention's various guidance documents recognize that a site's ecological character may be negatively impacted by, *inter alia*, the unsustainable harvest of fauna,²³⁶ the bycatch of non-target species in fisheries operations,²³⁷ and bird collisions with/electrocutions by energy infrastructure;²³⁸ and encourage parties to take measures to address such threats. Little guidance has, however, been developed under the Convention regarding *how* to address these species threats. An exception is the threat posed by highly pathogenic avian influenza (HPAI), on which the Ramsar Convention has developed detailed guidance²³⁹ in cooperation with, *inter alia*, the CMS and AEWA.²⁴⁰ In addition to posing a direct threat of mortality, HPAI can reduce support for conservation initiatives, and misguided responses to the virus have

Waterbirds: A Global Review, in WATERBIRDS AROUND THE WORLD, *supra* note 2, at 105 (discussing the need to sustainably manage waterbird harvest at the Lake Chilwa Ramsar site in Malawi).

236. Ramsar Convention, *Guidelines for International Cooperation*, *supra* note 100, ¶ 54 (advising that if the harvesting of animal products “is taking place at a Ramsar-listed site, then the Contracting Party has a clear obligation to ensure that the impact of the harvesting will not threaten or alter the ecological character of the site”); Ramsar Convention, Res. VII.10, *Wetland Risk Assessment Framework*, at annex, ¶ 4(d) (May 10-18, 1999), http://www.ramsar.org/sites/default/files/documents/library/key_res_vii.10e.pdf [<https://perma.cc/C4AG-C5V>] (identifying the exploitation of biological products as one of the broad categories of causes of adverse change in wetlands' ecological character).

237. Ramsar Convention, Res. IX.4, *The Ramsar Convention and Conservation, Production and Sustainable Use of Fisheries Resources*, ¶ 25 (Nov. 8-15, 2005), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_ix_04_e.pdf [<https://perma.cc/8YGG-ZV7P>] (addressing the management of fisheries “within, adjacent to, or associated with Ramsar sites”); Ramsar Convention, *The 4th Strategic Plan 2016-2024*, *supra* note 101, at 32 (linking the maintenance of wetlands' ecological character/their wise use to Aichi Biodiversity Target 6, on the sustainability of fisheries).

238. Ramsar Convention, Res. XI.10, *Wetlands and Energy Issues*, at annex, ¶ (B)(5)(v) (July 6-13, 2012), <http://www.ramsar.org/sites/default/files/documents/pdf/cop11/res/cop11-res10-e.pdf> [<https://perma.cc/JC35-LNGD>] (explaining that energy sector activities can potentially have negative impacts on the ecological character of wetlands through, *inter alia*, “direct impacts on wetland fauna, especially birds and bats, due to collision and electrocution”).

239. See RAMSAR CONVENTION SECRETARIAT, HANDBOOK 4: AVIAN INFLUENZA AND WETLANDS (4th ed. 2010), <http://www.ramsar.org/sites/default/files/documents/pdf/lib/hbk4-04.pdf> [<https://perma.cc/JJ75-SYPL>] [hereinafter RAMSAR HANDBOOK 4].

240. See Ruth Cromie et al., *Responding to Emerging Challenges: Multilateral Environmental Agreements and Highly Pathogenic Avian Influenza H5N1*, 14 J. INT'L WILDLIFE L. & POL'Y 206, 217-19, 223-24 (2011).

sometimes involved the destruction of waterbirds and wetlands.²⁴¹ The Ramsar CoP has stressed that such destruction does not amount to wise use;²⁴² and the guidance adopted under the Convention is directed towards the conservation of both wetlands and waterbirds – emphasizing, in particular, the need to reduce the level of risk to species of high conservation importance.

Also important from a species threat perspective is Article 5 of the Ramsar Convention, which requires that parties “endeavour to coordinate and support present and future policies and regulations” concerning the conservation of not only wetlands themselves, but also their flora and fauna. In the *Guidelines for International Cooperation under the Ramsar Convention*, emphasis is placed on, *inter alia*, the sustainable harvest of fauna that are found in transboundary wetlands or are subject to international trade,²⁴³ and the cooperative management of shared wetland-dependent species.²⁴⁴ Insofar as the management of shared species is concerned, the Convention’s focus has, however, been on conserving networks of habitat²⁴⁵ rather than on developing a framework for cooperation in managing species threats, such as hunting, across entire flyways.²⁴⁶ As noted above,

241. See generally RAMSAR HANDBOOK 4, *supra* note 239, at 8 (outlining the concerns regarding HPAI in terms of nature conservation, potential implications for human health, and impacts on the livelihoods of persons who rely upon domestic poultry).

242. Ramsar Convention, Res. X.21, *Guidance on Responding to the Continued Spread of Highly Pathogenic Avian Influenza*, ¶¶ 4, 12 (Oct. 28 - Nov. 4, 2008), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_x_21_e.pdf [<https://perma.cc/B2AA-M9BE>].

243. Ramsar Convention, *Guidelines for International Cooperation*, *supra* note 100, ¶¶ 53-59.

244. *Id.* ¶¶ 15-18.

245. *Id.* ¶ 19. See, e.g. Ramsar Convention, Recommendation 6.4, *supra* note 101, ¶ 13 (on the “Brisbane Initiative” on the establishment of a network of Ramsar sites along the East Asian-Australasian Flyway).

246. Interestingly, the Convention’s 2003-2008 Strategic Plan *did* call upon parties to, *inter alia*, “[e]nsure that national hunting legislation is consistent with the wise use principle for migratory waterbird and other wetland-dependent species, taking into account geographical range, life-history characteristics of species, and research on sustainable harvesting.” RAMSAR CONVENTION, THE RAMSAR STRATEGIC PLAN 2003-2008, at operational objective 1, action 12.2.5 (2002), http://www.ramsar.org/sites/default/files/documents/pdf/key_strat_plan_2003_e.pdf [<https://perma.cc/8H3Z-TG9S>]. However, similar exhortations do not appear in the Convention’s subsequent two Strategic Plans or in its other guidance documents.

the drafters of the Ramsar Convention did not intend for it to provide such a framework and, instead of evolving in a manner that does so, the CoP's guidance on Article 5 encourages Ramsar parties to develop, and actively support and participate in, international arrangements (including bilateral and multilateral agreements) for the conservation of shared migratory waterbirds.²⁴⁷ Through such guidance, the Ramsar CoP has explicitly promoted AEWA,²⁴⁸ and has further pointed to the Agreement as a potential model for cooperation in other regions.²⁴⁹ The Convention has a particularly important role to play in encouraging the development of flyway agreements in regions in which there are significant gaps in CMS membership.²⁵⁰ Given its global scope, the Convention also provides a framework for encouraging cooperation *between* flyway initiatives – especially since several existing initiatives²⁵¹ were not developed as part of

247. See, e.g., Ramsar Convention, Recommendation 4.12, *Cooperation between Contracting Parties for the Management of Migratory Species* (June 27–July 4, 1990), http://www.ramsar.org/sites/default/files/documents/library/key_rec_4.12e.pdf [<https://perma.cc/UZ4P-2UZQ>]; Ramsar Convention, Recommendation 7.3, *Multilateral Cooperation on the Conservation of Migratory Waterbirds in the Asia-Pacific Region*, ¶ 17 (May 10–18, 1999), http://www.ramsar.org/sites/default/files/documents/library/key_rec_7.03e.pdf [<https://perma.cc/94Q5-7LWB>]; Ramsar Convention, Res. X.22, *supra* note 102, at ¶ 19.

248. See Ramsar Convention, Recommendation 4.12, *supra* note 247 (supporting the development of the Western Palearctic Waterfowl Agreement, which was ultimately to be adopted as AEWA); Ramsar Convention, Res. X.22, *supra* note 102, ¶ 20 (encouraging Ramsar parties to join the Agreement).

249. Ramsar Convention, Recommendation 4.12, *supra* note 247; Ramsar Convention, Recommendation 7.3, *supra* note 247, ¶ 12.

250. Indeed, the Brisbane Initiative (referred to in footnote 245), while only addressing habitat conservation, was initiated under the Ramsar Convention following the failure to establish a CMS Agreement for migratory waterbirds in the East Asian-Australasian Flyway. Clare Shine & Cyrille de Klemm, *Wetlands, Water and the Law: Using Law to Advance Wetland Conservation and Wise Use*, in IUCN ENVTL. POL'Y & L. PAPER No. 38, at 293 (1999); see also *id.*, at 294 (raising the possibility of the Ramsar Convention and CMS collaborating in the development of flyway agreements, which could “have a dual status as CMS Agreements and Article 5 instruments” – this being especially useful within regions in which the Ramsar Convention has strong membership, but the CMS does not). Although it is legally possible (per CMS, *supra* note 6, art. V(2)) for a state to participate in one of the CMS's daughter instruments without being a party to the Convention itself, such participation is uncommon.

251. See, e.g., EAST ASIAN-AUSTRALASIAN FLYWAY P'SHIP, <http://www.eaaflyway.net> [<https://perma.cc/FCZ5-XZTC>]; WESTERN HEMISPHERE SHOREBIRD RESERVE NETWORK, <http://www.whsrn.org> [<https://perma.cc/EHW6-HWXR>].

the CMS Family. Indeed, the Ramsar CoP has urged the sharing of knowledge and expertise between flyway initiatives, and encouraged the Secretariats of Ramsar, the CMS and AEWA²⁵² to “work together with their governance and scientific subsidiary bodies and other interested organizations to establish a mechanism for such sharing of knowledge and experience.”²⁵³ In 2011, an international workshop was convened for this purpose, and the decision was made to establish a Global Interflyway Network to facilitate future inter-flyway cooperation.²⁵⁴

B. AEWA’s Leading Role in Addressing Species Threats at the Flyway Level

Rather than being restricted to habitat conservation, AEWA’s legal text and supporting guidance documents attempt to address the full range of threats faced by migratory waterbirds in Africa and western Eurasia. Because the Agreement’s provisions apply across entire flyways, most of its requirements concerning measures to address species threats are not restricted to activities which occur within, or are associated with, particular sites or habitat types. As a result, the scope of the Agreement’s definition of “waterbird” has important practical implications.

The Agreement’s most intricate and stringent provisions relate to the harvest of waterbirds, with various types of taking restrictions/prohibitions being required depending on each population’s conservation status.²⁵⁵ While many of these restrictions overlap with those of other treaties which operate in parts of the Agreement Area (such as the Bern Convention²⁵⁶), AEWA again distinguishes itself by requiring the application of a flyway approach²⁵⁷ – this being essential insofar as sustainable

252. As well as the biodiversity programme of the Arctic Council.

253. Ramsar Convention, Res. X.22, *supra* note 102, at ¶ 24.

254. See generally GLOBAL INTERFLYWAY NETWORK, WATERBIRD FLYWAY INITIATIVES: OUTCOMES OF THE 2011 GLOBAL WATERBIRD FLYWAYS WORKSHOP TO PROMOTE EXCHANGE OF GOOD PRACTICE AND LESSONS LEARNT (Chang Yong Choi et al eds., 2012), <http://www.ramsar.org/sites/default/files/documents/pdf/lib/rtr8-flyways.pdf> [<https://perma.cc/2EUK-7ME3>].

255. See AEWA, *supra* note 9, annex 3, ¶¶ 2.1, 4.1.

256. See Bern Convention, *supra* note 104, arts. 5-9.

257. AEWA, *supra* note 9, annex 3, ¶ 4.1.1 (“Parties shall cooperate to ensure that their hunting legislation implements the principle of sustainable use

levels of taking in any one country can only be determined by considering the volume of taking in all other range states. In recent years, the Agreement has also been active in establishing the institutions, and fostering the multi-stakeholder collaboration, necessary to coordinate harvest management at the flyway level – both for huntable populations that require recovery and for populations that are considered to be overabundant but that need to be managed in a manner that ensures long term sustainability.²⁵⁸ Regulating the use of waterbird populations is thus an area in which the Agreement has a particularly strong role to play; and, while the negative restrictions contained in AEWA were not considered to be politically feasible at the time at which the Ramsar Convention was negotiated, the Agreement clearly provides the type of framework that Ramsar’s drafters envisaged would ultimately complement the Convention. This is not to say that AEWA’s takings provisions were *easily* won, or that they are uncontroversial. The topic of waterbird hunting and how to achieve sustainable harvest was enormously contentious during AEWA’s negotiation²⁵⁹ and the Agreement’s provisions on this issue continue to generate controversy and to contribute to the refusal of some range states to become parties – most notably the Russian

as envisaged in this Action Plan, *taking into account the full geographic range of the waterbird populations concerned and their life history characteristics.*” (emphasis added).

258. See AEWA INTERNATIONAL WORKING GROUP FOR THE PINK-FOOTED GOOSE, <http://pinkfootedgoose.aewa.info> [https://perma.cc/6XHH-MHWX] (providing information on the international working group that has been established to coordinate the implementation of the International Species Management Plan for the Svalbard Population of Pink-footed Goose, *Anser brachyrhynchus* – this being the first AEWA management plan to attempt to achieve adaptive harvest management at the flyway level); AEWA, Res. 6.4, *Conservation and Sustainable Use of Migratory Waterbirds*, ¶ 9 (Nov. 9-14, 2015), http://www.unep-aewa.org/sites/default/files/document/aewa_mop6_res4_cons_sust_use_mwb_en_0.pdf [https://perma.cc/4T65-KEW2] (requesting the “establishment of a European multispecies goose management platform and process to address sustainable use of goose populations and to provide for the resolution of human-goose conflicts”); AEWA, *Declaration of the Intergovernmental Meeting on the Establishment of a European Goose Management Platform under the Auspices of AEWA* (May 11-2, 2016), http://www.unep-aewa.org/sites/default/files/aewa_egmp_paris_may-2016_final_declaration.pdf [https://perma.cc/HU4Q-SQCC] (expressing range states’ agreement with the establishment of a common European Goose Management Platform).

259. See generally BOERE, *supra* note 12 (discussing the history of AEWA’s development).

Federation,²⁶⁰ which is somewhat ironic given that it was the Soviet Union that most strongly supported the inclusion of hunting restrictions during the drafting of the Ramsar Convention! Achieving the full implementation of these provisions is also challenging. Not all parties have yet incorporated the requisite restrictions into their national legislation and, where restrictions exist, enforcement is often problematic.²⁶¹ Nevertheless, there is evidence suggesting that hunting regulation is better in AEWA parties than in non-party range states;²⁶² and the Agreement has been active in assisting states to address the illegal killing of birds through its International Species Working Groups²⁶³ and Implementation Review Process,²⁶⁴ as well as its role in the establishment of an Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean.²⁶⁵

260. *Id.* at 68 (outlining the main hurdles to Russia's accession to AEWA).

261. *See generally* AEWA, *Review on Hunting and Trade Legislation in Countries Relating to the Species Listed in Annex 2 to the African-Eurasian Migratory Waterbird Agreement* (AEWA Technical Ser. No. 29, Sept. 2008), http://www.unep-aewa.org/sites/default/files/publication/ts_29_review_hunting_0.pdf [<https://perma.cc/H5UK-R3B9>] (reviewing range states' national hunting and trade legislation and the enforcement thereof).

262. *See, e.g., id.* at 12 (commenting that, insofar as the strict protection of populations listed in Table 1, Column A is concerned, "[t]he overall situation looks better in the case of Parties than in Non-Party Range States" – note, however, that a relatively low percentage of non-parties was considered in this review).

263. *See, e.g.,* AEWA, *Report of the Secretariat on the 6th Session of the Meeting of the Parties*, at 11, AEWA/MOP Doc. 6.9 (Sept. 10, 2015), http://www.unep-aewa.org/sites/default/files/document/mop6_9_secretariat_report_0.pdf [<https://perma.cc/KU7R-24G2>] (explaining that projects facilitated by the AEWA Secretariat under the framework of its International Working Group for the Lesser White-fronted Goose, *Anser erythropus* have included "projects to lessen the impact of illegal killing in Kazakhstan, Azerbaijan, Russia and Iran").

264. *See e.g.,* AEWA, *AEWA Implementation Review Process: Conservation of the Sociable Lapwing in Syria*, AEWA Doc. StC6.12 (May 31, 2010), http://www.unep-aewa.org/sites/default/files/document/stc6_12_irp_syria_0.pdf [<https://perma.cc/A6UJ-RJRS>] (providing the report from an on-the-spot mission aimed at addressing the illegal hunting of the critically endangered Sociable Lapwing in Syria).

265. *Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean*, CONVENTION ON MIGRATORY SPECIES (CMS), <http://www.cms.int/en/taskforce/mikt> [<https://perma.cc/72NY-H5PH>]; *see also* AEWA, *Report of the Secretariat on the 6th Session of the Meeting of the Parties*, *supra* note 263, at 6, 11 (explaining that the idea for establishing this

Other threats explicitly addressed by AEWA's Action Plan include, *inter alia*, the planning and construction of structures, human disturbance, lead poisoning, bycatch, and overfishing;²⁶⁶ and the body of guidance developed under the Agreement has elaborated upon how to address several of these threats from a bird conservation perspective (including from the perspective of specific species/populations).²⁶⁷ Again, the Agreement's various means of implementation support can be used to assist parties in implementing such measures; and, even in respect of those cross-cutting issues on which it is more appropriate for a broader treaty, such as the CMS, to take the lead, there are examples of AEWA playing a key role in the creation and functioning of additional international mechanisms to improve implementation. For instance, the idea for establishing the CMS Energy Task Force²⁶⁸ originated from AEWA²⁶⁹ and the Agreement's Secretariat is an active member of the CMS Scientific Council Working Group on Bird Poisoning, in which it leads on the issue of lead poisoning.²⁷⁰

AEWA thus makes up for the dearth of species-based commitments and guidance under the Ramsar Convention and provides an important international framework for supporting and coordinating states' responsibilities in this regard. At the same time, however, the two instruments are linked insofar as participation in AEWA provides one means through which Ramsar parties can implement Article 5 of the Convention; and may also contribute to the implementation of Article 3(1). This link between the two treaties should arguably receive greater emphasis than it has to date. Especially considering that the Ramsar Convention has a larger membership than AEWA within the latter's Agreement Area, an appeal to Ramsar parties' Article 5 commitment in particular is potentially a means of encouraging

Task Force – which was convened under the CMS in collaboration with several other instruments – originated from AEWA).

266. AEWA, *supra* note 9, annex 3, ¶¶ 4.3.5, 4.3.6, 4.1.4., 4.3.12, 4.3.7, 4.3.8.

267. AEWA *Technical Publications*, *supra* note 189 (providing links to AEWA's various conservation guidelines and species action plans).

268. See *Energy Task Force*, CONVENTION ON MIGRATORY SPECIES (CMS), <http://www.cms.int/en/taskforce/energy-task-force> [<https://perma.cc/3LKB-MLDB>].

269. See AEWA, *Report of the Secretariat on the 6th Session of the Meeting of the Parties*, *supra* note 263, at 6, 10.

270. *Id.* at 11.

additional accessions to AEWA, or – at the very least – the participation of non-party range states in selective initiatives being spearheaded by the Agreement, such as the development and implementation of species action and management plans.²⁷¹ In other words, the Ramsar Convention has the potential to bridge AEWA with not only different sectors, but also different *countries*.

VI. ADDRESSING KNOWLEDGE GAPS

As explained in part II, there currently exist significant gaps in knowledge concerning waterbird population sizes, trends, migration patterns, habitats and threats, and addressing these lacuna is an important prerequisite for identifying appropriate conservation responses. The continued monitoring of waterbird populations is also necessary for evaluating the success of conservation measures once these have been implemented. This part of the article briefly considers the needs and roles of the Ramsar Convention and AEWA in respect of data collection, highlighting in particular the possibility for collaboration between the two treaties, as well as the issues in respect of which AEWA is better positioned to support data collection than is the Ramsar Convention.

Information on waterbird population sizes, trends and distributions is necessary for implementing various aspects of the Ramsar Convention. Such data plays a role in the identification of sites that require conservation action,²⁷² the description and monitoring of sites' ecological character,²⁷³ and the development of site management plans aimed at maintaining sites' ecological character.²⁷⁴ Further, both trends in the status of waterbird biogeographic populations and trends in the status of globally threatened wetland-dependent birds have been identified as ecological indicators for assessing the Convention's

271. See also Lewis, *supra* note 10, at 54-55 (discussing the involvement of non-party range states in the development and implementation of AEWA's species action and management plans).

272. Especially in the application of Criteria 5 and 6 for including sites on the List; although such data may also be relevant for applying Criteria 2 and 4.

273. See generally Ramsar Convention, Res. X.15, *supra* note 126, at annex, (providing guidance on the description of wetlands' ecological character).

274. See generally Ramsar Convention, *New Guidelines for Management Planning*, *supra* note 116, (providing guidance on site management planning).

implementation effectiveness.²⁷⁵ The Convention text requires parties to arrange to be informed of changes/likely changes in the ecological character of sites on the List²⁷⁶ (implying an obligation to monitor the ecological character of Ramsar sites); and further contains a broad commitment to “encourage research and the exchange of data and publications regarding wetlands and their flora and fauna.”²⁷⁷ The Ramsar CoP has adopted guidance on the monitoring of wetlands,²⁷⁸ and has also repeatedly emphasized the importance of waterbird population data.²⁷⁹ The CoP has paid particular attention to the application of Criterion 6 (the so-called “1% criterion”) for designating Ramsar sites, urging parties to use the 1% thresholds contained in Wetlands International’s *Waterbird Population Estimates* as the basis for applying this criterion, and further urging parties and others to both financially support the production of such international assessments and support the International Waterbird Census, which contributes thereto.²⁸⁰ On occasion, the CoP has also encouraged the collection of data on species threats, such as hunting,²⁸¹ though the attention afforded to such data under the Convention has been neither significant nor consistent.

275. Ramsar Convention, Res. IX.1, annex D, *supra* note 90, at tbl.1.

276. Ramsar Convention, *supra* note 4, art. 3(2); *see also* BAAKMAN, *supra* note 17, at 136-139 (on shortfalls in the implementation of this provision).

277. Ramsar Convention, *supra* note 4, art. 4(3).

278. *E.g.*, Ramsar Convention, *An Integrated Framework for Wetland Inventory, Assessment and Monitoring (IF-WIAM)* (Nov. 8-15, 2005), <http://www.ramsar.org/sites/default/files/documents/pdf/guide/guide-ifwiam-e.pdf> [<https://perma.cc/4AX9-AKEY>].

279. *See, e.g.*, Ramsar Convention, Recommendation 3.2, *Need for Further Studies of Flyways* (May 27 - June 5, 1987), http://www.ramsar.org/sites/default/files/documents/library/key_rec_3.02e.pdf [<https://perma.cc/AF7F-62PU>]; Ramsar Convention, Res. VI.4, *Adoption of Population Estimates for Operation of the Specific Criteria Based on Waterfowl* (Mar. 19-27, 1996), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_vi.04e.pdf [<https://perma.cc/Z9JE-VZBW>]; Ramsar Convention, Res. VIII.38, *supra* note 84, ¶ 1.

280. *E.g.* Ramsar Convention, Res. VIII.38, *supra* note 84, ¶ 13 (urging the use of the 1% thresholds contained in *Waterbird Population Estimates*); Ramsar Convention, Res. X.22, *supra* note 101, ¶ 25 (urging the provision of financial support for the production of *Waterbird Population Estimates* and support for the International Waterbird Census).

281. *E.g.* Ramsar Convention, Recommendation 3.2, *supra* note 279 (recommending that “waterfowl hunting statistics be collected, to allow better management of flyway populations of waterfowl”).

As is the case for most of AEWA's provisions, the Agreement's commitments concerning research and monitoring are both firmer and more detailed than the corresponding provisions of the Ramsar Convention. Both the Agreement itself²⁸² and the priorities that the MoP has identified for the Agreement's implementation²⁸³ emphasize the need to improve knowledge regarding waterbird populations' habitats, trends, migration routes and dynamics, as well as the threats to such populations and appropriate techniques for their conservation and management. In addition to the obligations placed upon parties, AEWA requires its Secretariat to prepare a series of international reviews necessary for implementing the Agreement's Action Plan – including a review of the status and trends of waterbird populations, which is to be updated for each session of the MoP.²⁸⁴ The production of this “Conservation Status Review” every three years (which the Secretariat outsources to Wetlands International) is itself an important contribution to knowledge;²⁸⁵ and the Agreement has proved to be very responsive to the science presented in the Review, with each session of the MoP amending the AEWA categorizations of relevant populations on the basis thereof.²⁸⁶ The MoP has further adopted guidelines on appropriate waterbird monitoring practices²⁸⁷ and has repeatedly urged the creation of a long-term international funding regime for waterbird

282. See AEWA, *supra* note 9, arts. III.2(h), (k) and (l), and annex 3, ¶ 5.

283. *E.g.* AEWA, AEWA STRATEGIC PLAN, *supra* note 195, at 16-18 (articulating one of AEWA's strategic objectives as being to “increase knowledge about species and their populations, flyways and threats to them as a basis for conservation action,” and identifying several targets aimed at achieving this).

284. AEWA, *supra* note 9, annex 3, ¶¶ 7.4-7.5.

285. See also Adam, *supra* note 53, at 125-126 (on waterbird monitoring under AEWA).

286. See AEWA, *supra* note 9, art. VI(8)(a) (requiring the MoP to “consider actual and potential changes in the conservation status of migratory waterbirds and the habitats important for their survival” at each of its ordinary sessions).

287. See AEWA, *Conservation Guidelines No. 9: Guidelines for a Waterbird Monitoring Protocol* (AEWA Technical Ser. No. 24, Apr. 2005), http://www.unep-aewa.org/sites/default/files/publication/cg_9new_0.pdf [<https://perma.cc/76K7-H7A6>].

monitoring;²⁸⁸ while the AEWA Secretariat participates in the African-Eurasian Waterbird Monitoring Partnership.²⁸⁹

Clearly, there exists significant overlap in the information needs of AEWA and the Ramsar Convention, and thus significant potential for cooperation. Indeed, the AEWA MoP, recognizing that the operation of both treaties relies upon regular waterbird monitoring data, recently invited their scientific bodies and secretariats to identify possible synergies with respect to waterbird monitoring.²⁹⁰ Since AEWA places a greater emphasis on improving knowledge regarding species threats, and appropriate conservation techniques for addressing these, than does the Ramsar Convention, the Agreement is well-positioned to promote and (where possible) facilitate research on these issues. The same can be said in respect of knowledge on habitat types other than wetlands.

VII. ATTRACTING ACCESSIONS FROM DEVELOPING COUNTRIES: DOES THE RAMSAR CONVENTION OFFER ANY LESSONS FOR AEWA?

In order for international efforts towards conserving and managing populations of migratory species to have a meaningful chance of success, the participation of all range states is obviously necessary. Indeed, in the negotiations towards the Ramsar Convention, this was one of the justifications provided for addressing wetland conservation and waterfowl conservation in two complementary treaties rather than one instrument; the argument

288. AEWA, Res. 3.6, *Developing an International Partnership for Support of Waterbird Population Assessments*, ¶¶ 1-3, (Oct. 23-27 2005), http://www.unep-aewa.org/sites/default/files/document/res3_6_partnership_wpa_0.pdf [https://perma.cc/SZ95-BNDH]; AEWA, Res. 6.3, *Strengthening Monitoring of Migratory Waterbirds*, ¶¶ 3-4 (Nov. 9-14 2015), http://www.unep-aewa.org/sites/default/files/document/aewa_mop6_res3_mw_monitoring_en.pdf [https://perma.cc/P7TG-SB35].

289. See generally *African-Eurasian Waterbird Monitoring Partnership*, WETLANDS INT'L, <http://archive.wetlands.org/AfricanEurasianWaterbirdCensus/WaterbirdMonitoringPartnership/tabid/2789/Default.aspx> [https://perma.cc/9EC H-Z5WN] (explaining that this Partnership is a coalition of organizations, which “supports the development of national monitoring systems and improvement of monitoring information available for internationally important population size and trend estimates”).

290. AEWA, Res. 6.3, *supra* note 288, pmb1., ¶ 14.

being that, while “a wetland convention, being essentially a commitment to protect one’s own wetlands, would work satisfactorily with a small number of Parties,” “a convention to protect migratory wildfowl would need to cover all the countries through which the various species ranged.”²⁹¹ In light of this reasoning, it is ironic that, at present, the Ramsar Convention enjoys significantly stronger support than AEWA within the latter’s Agreement Area, with some range states even holding the view that membership of Ramsar negates the need to accede to AEWA. This view is problematic insofar as the Ramsar Convention on its own fails to provide a sufficient framework for state cooperation in the conservation of migratory waterbirds; and there clearly exists a need to improve awareness that AEWA both supports the Ramsar Convention and addresses various gaps therein.

Of course, the above disparity in numbers of parties is probably partially attributable to the Ramsar Convention’s and AEWA’s respective ages – with the latter having more than a twenty year head start in attracting membership. When the Convention was younger, its membership suffered – as AEWA’s does now – from significant gaps outside of Europe.²⁹² One of the strategies for addressing this problem has been to decrease Ramsar’s emphasis on waterbirds and increasingly emphasize the other reasons for which wetlands are valuable to humans. This shift began with the deliberate de-emphasis of the Convention’s waterbird criteria,²⁹³ and can also be seen in the progression of Strategic Plans adopted under the Convention. Unlike its predecessors, the targets identified in the recently adopted Strategic Plan for the period 2016-2024²⁹⁴ make no mention whatsoever of wetland-dependent species – either in the context of designating sites for the List or in the context of international cooperation. Over the past two decades, the Ramsar CoP has placed particular emphasis on such

291. MATTHEWS, *supra* note 55, at 16 (referring to an argument put forward by Cyril de Klemm, who was at the time a legal consultant for the IUCN).

292. LYSTER, *supra* note 234, at 200-203 (discussing, in 1985, the need for more non-European countries to become parties to the Convention).

293. See BOWMAN ET AL., *supra* note 10, at 409; MATTHEWS, *supra* note 55, at 44-45.

294. Ramsar Convention, *The 4th Strategic Plan 2016-2024*, *supra* note 101.

issues as the cultural value of wetlands,²⁹⁵ their link to poverty reduction,²⁹⁶ and the role of local communities in their management;²⁹⁷ and both the CoP's definition of "wise use" and the objectives of the Convention's successive Strategic Plans have highlighted the link between wetlands and sustainable development.²⁹⁸

The need for the Ramsar Convention to shift away from its original waterbird focus is understandable – both from the perspective of attracting parties and that of promoting implementation thereafter.²⁹⁹ For many developing countries, bird conservation *per se* is not considered to be a priority, with the focus instead being on wider sustainable development issues.³⁰⁰ Moreover, for wetland conservation to receive meaningful

295. *E.g.*, Ramsar Convention, Res. VIII.19, *Guiding Principles for Taking into Account the Cultural Values of Wetlands for the Effective Management of Sites* (Nov. 18-26, 2002), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_viii_19_e.pdf [<https://perma.cc/C288-Z32T>]; Ramsar Convention, Res. IX.21, *Taking into Account the Cultural Value of Wetlands* (Nov. 8-15, 2005), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_ix_21_e.pdf [<https://perma.cc/6UL5-CHQ7>].

296. *E.g.*, Ramsar Convention, Res. IX.14, *Wetlands and Poverty Reduction* (Nov. 8-15, 2005), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_ix_14_e.pdf [<https://perma.cc/NC94-LZSH>]; Ramsar Convention, Res. X.28, *Wetlands and Poverty Eradication* (Oct. 28 - Nov. 4, 2008), http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_x_28_e.pdf [<https://perma.cc/XNV7-UDHY>].

297. *E.g.*, Ramsar Convention, Recommendation 6.3, *Involving Local and Indigenous People in the Management of Ramsar Wetlands* (Mar. 19-27 1996), http://www.ramsar.org/sites/default/files/documents/library/key_rec_6.03_e.pdf [<https://perma.cc/UXX2-47QT>]; Ramsar Convention, Res. VII.8, *Guidelines for Establishing and Strengthening Local Communities' and Indigenous People's Participation in the Management of Wetlands* (May 10-18, 1999), http://www.ramsar.org/sites/default/files/documents/library/key_res_vii.08e.pdf [<https://perma.cc/G6QM-479N>].

298. *See also* Ramsar Convention, Res. XI.21, *Wetlands and Sustainable Development* (July 6-13, 2012), <http://www.ramsar.org/sites/default/files/documents/pdf/cop11/res/cop11-res21-e.pdf> [<https://perma.cc/3FK9-Q4L7>].

299. The shift also, of course, reflects the ecological reality that wetlands offer a multitude of benefits/services other than the provision of waterbird habitat.

300. This is, for instance, reflected in several of the regional conservation instruments that operate within Africa, which place a strong emphasis on the socio-economic value of wildlife and the contribution of conservation to sustainable development. *See, e.g.*, S. AFR. DEV. CMTY., *PROTOCOL ON WILDLIFE CONSERVATION AND LAW ENFORCEMENT* pmb. (1999), http://www.sadc.int/files/4813/7042/6186/Wildlife_Conservation.pdf [<https://perma.cc/D25U-C3RY>].

consideration alongside such concerns as economic growth, poverty alleviation, and food, water and energy security, it is clearly necessary to emphasize that wetlands have value beyond their importance as waterbird habitat.³⁰¹ Given the multitude of drivers of wetland loss and degradation (and hence the variety of decisions that have the potential to impact the ecological character of wetlands), this value needs to be appreciated not only by government departments responsible for environmental protection, but across all sectors of society. In light of these challenges, it is, in retrospect, arguably a good thing that more direct/detailed species protections were *not* included in the Ramsar Convention, as the CoP's ability to dilute the Convention's waterbird focus appears to have enhanced its potential to engage with a wide range of sectors and countries. Nevertheless, the argument can also be made (especially in light of the most recent Ramsar Strategic Plan) that there has been *too* dramatic a departure from parties' original mandate under the Convention – the text (indeed, the very *title*) of which places a clear emphasis on waterfowl conservation.³⁰² The lack of clarity concerning parties' commitment to the long-term protection of the natural aspects of wetlands is also worrying. Indeed, a criticism that has been levelled against the Ramsar Convention's increasingly anthropocentric focus is that this “leads to concerns that a focus on short-term economic development is finding its way into the Convention's work.”³⁰³ As Wiersema explains, the Convention's recent emphasis on wetlands as a tool for achieving poverty reduction:

reflects a shift in rhetoric in international environmental law that stresses the need to ensure development as much as, or more than, the need to stress protection of the environment over the long-

301. See Davidson & Stroud, *supra* note 26, at 71 (commenting that “species-focused arguments are unlikely to have any influence on decision-making on trade-offs between the maintenance of wetland ecosystems and sustainable development”).

302. An exploration of the extent to which it is permissible for a treaty's governing body to depart from its original terms falls beyond the scope of this article. For some interesting observations on this issue, see, however, Geoffrey Wandesforde-Smith, *On the Life and Death of Wildlife Treaties*, 18 J. INT'L WILDLIFE L. & POLY 84 (2015).

303. Wiersema, *supra* note 130, at 1293.

term, leaving a strong risk that poverty reduction projects will be seen as synonymous with economic development.³⁰⁴

Are there any lessons that AEWA might learn from the Ramsar Convention's approach to attracting additional accessions, and the critiques thereof? As a treaty that has been designed specifically to promote the conservation of a particular *group of species* (as opposed to a particular ecosystem type), AEWA is obviously unable to shift its emphasis in a manner similar to Ramsar. Nor should it, given that the Agreement's value lies in its very directed, species-based approach. The Ramsar experience does, however, illustrate the potential benefits of emphasizing the links between waterbird conservation and the issues that developing countries consider to be priorities – such as poverty alleviation, livelihoods, and the broader sustainable development agenda.³⁰⁵ Given the attention that had been paid to such issues by various conservation treaties which preceded AEWA,³⁰⁶ it is somewhat surprising that they initially received no mention at all in the Agreement text and Action Plan. A 2012 amendment to the Action Plan does, however, allude to the fact that the consumptive

304. *Id.*

305. Such links include, for instance, the value of waterbirds as indicators of the health of wetland ecosystems, which in turn provide services that support human livelihoods (*see* Davidson & Stroud, *supra* note 26, at 71); the value of sustainably managed waterbird populations as a source of protein (Stroud et al., *supra* note 28, at 34); and the economic benefits that local communities may gain from avitourism and/or hunting tourism.

306. The Convention on Biological Diversity, for instance, (which was adopted three years prior to AEWA) explicitly recognizes that “economic and social development and eradication of poverty are the first and overriding priorities of the developing country Parties” and that developing countries’ implementation of the Convention is dependent upon the provision of, *inter alia*, financial resources by developed country parties. CBD, *supra* note 50, art. 20(4). By the time of AEWA’s adoption, the Ramsar CoP had already begun to highlight the importance of wetland conservation for local communities in developing countries. *See, e.g.*, Ramsar Convention, Recommendation 3.6, *Further Contracting Parties in Africa*, at pmbl (May 27–June 5, 1987), http://www.ramsar.org/sites/default/files/documents/library/key_rec_3.06e.pdf [<https://perm.a.cc/63C6-VHKN>]. As noted above this issue has received increased attention under the Ramsar Convention in recent years. Interestingly, the Convention’s CoP has also stressed “the urgent need to integrate *waterbird conservation* fully as part of sustainable development, to the greater benefit of local communities and other stakeholders dependent on wetlands as well as for the conservation of wetland biodiversity.” Ramsar Convention, Res. X.22, *supra* note 102, ¶ 18 (emphasis added).

use of waterbirds supports livelihoods in parts of the Agreement Area;³⁰⁷ while one of the objectives of AEWA's current Strategic Plan is to improve awareness about, *inter alia*, the role of migratory waterbirds in alleviating poverty;³⁰⁸ and the Agreement's Plan of Action for Africa has a strong livelihoods component.³⁰⁹ In 2015, at its sixth session, the AEWA MoP further adopted a resolution which outlines the contributions that the Agreement's implementation can make to achieving the recently-adopted Sustainable Development Goals (SDGs).³¹⁰⁻³¹¹ In developing and developed countries alike, the explicit linkage of AEWA-implementation to the SDGs is potentially a strategy for attracting development funding for projects that benefit waterbirds. Indeed, the MoP proceeded to urge parties

307. AEWA, *supra* note 9, annex 3, ¶ 2.1.2(b) (allowing parties to grant exemptions to certain prohibitions on modes of taking "to accommodate use for livelihood purposes, where sustainable").

308. AEWA, AEWA STRATEGIC PLAN, *supra* note 195, at 18; *see also* AEWA, Res. 6.21, *Resource Mobilisation for the Implementation of the African Eurasian Waterbird Agreement (AEWA)*, at pmb. (Nov. 9-14, 2015), http://www.unep-aewa.org/sites/default/files/document/aewa_mop6_res21_resource_mobilization_en.pdf [<https://perma.cc/79D9-2EQJ>] (recognizing that the eradication of poverty is the greatest global challenge and an indispensable requirement for sustainable development for developing countries).

309. *See generally* AEWA PLAN OF ACTION FOR AFRICA 2012-2017, *supra* note 190.

310. On the SDGs, *see Sustainable Development Knowledge Platform*, UNITED NATIONS, <https://sustainabledevelopment.un.org/?menu=1300> [<https://perma.cc/V3M8-CEAC>].

311. *See* AEWA, Res. 6.15, *Update on AEWA's Contribution to Delivering the Aichi 2020 Biodiversity Targets and the Relevance of the Sustainable Development Goals* (Nov. 9-14, 2015), http://www.unep-aewa.org/sites/default/files/document/aewa_mop6_res15_cntr_aichi_en_0.pdf [<https://perma.cc/L5DZ-J33N>]. The resolution additionally outlines AEWA's contribution to delivering the Aichi Biodiversity Targets. *See Aichi Biodiversity Targets*, CBD, <https://www.cbd.int/sp/targets> [<https://perma.cc/YA3N-465B>]. Target 2 emphasizes the need to integrate biodiversity values into development and poverty reduction strategies. *Id.* AEWA's relevance to the broader sustainable development and biodiversity conservation agendas is further emphasized in the Agreement's current Communication Strategy. AEWA, *Draft Communication Strategy*, UNEP/AEWA/MOP Doc. 6.21 (Sept. 9, 2015), http://www.unep-aewa.org/sites/default/files/document/mop6_21_draft_communication_strategy_0.pdf [<https://perma.cc/8LJB-DRLF>] (this Draft Communication Strategy was adopted through AEWA, Res. 6.10, *Communication Strategy*, ¶ 1 (Nov. 9-14, 2015), http://www.unep-aewa.org/sites/default/files/document/aewa_mop6_res10_comm_strategy_en.pdf [<https://perma.cc/VL6T-JNYL>]).

to highlight to their development agencies, as appropriate, the relevance of AEWA implementation in the context of SDG-delivery, and to stress the need to better integrate actions for waterbird and wetland conservation within relevant development projects so as to achieve benefits, not just for waterbirds but also for human communities.³¹²

Thus, although AEWA was not adopted as an instrument for addressing sustainable development/livelihoods issues, a recognition of such issues is gradually developing under the Agreement. While this evolution is arguably necessary and will hopefully contribute to the improvement of both AEWA's membership and implementation, caution should be taken not to allow broader policy agendas to detract from AEWA's core mandate. Although AEWA recognizes that waterbirds have a variety of values,³¹³ the purpose of the Agreement is to maintain waterbird species at, or restore them to, a favorable conservation status; not to further human efforts to reduce poverty.³¹⁴ Ideally, these two objectives should be pursued in a mutually supportive manner and, to the extent that framing waterbird conservation in a way that highlights these species' usefulness to humans can increase support for conservation initiatives, it makes sense to do so. Care should, however, be taken not to frame the issue in *exclusively* utilitarian terms³¹⁵ or to develop the Agreement in a manner that permits development/livelihoods considerations to

312. AEWA, Res. 6.15, *supra* note 311, ¶ 4.

313. AEWA, *supra* note 9, pmbl (expressing parties' awareness of "the economic, social, cultural and recreational benefits accruing from the taking of certain species of migratory waterbirds and of the environmental, ecological, genetic, scientific, aesthetic, recreational, cultural, educational, social and economic values of waterbirds in general").

314. See also André Nollkaemper, *Framing Elephant Extinction*, 3 ESIL REFLECTIONS 1 (2014), <http://www.esil-sedi.eu/node/643> [<https://perma.cc/V683-THY7>] (discussing the various ways in which wildlife protection can be framed, and the normative implications that follow therefrom).

315. See also Felix Rauschmayer et al., *Participation in EU Biodiversity Governance: How Far Beyond Rhetoric?*, 27 ENV'T & PLAN. C: GOV'T & POL'Y 42, 55-56 (2009) (arguing that, even though the ecological focus in biodiversity discourses is "not sufficient to maintain the issue on the agenda, let alone to ensure that governments and people act upon it," the approach of framing biodiversity in purely utilitarian terms "ultimately comes down to another monodimensional framing of the issue, hence replacing one monodimensional framing (purely ecological) with another (purely economic)").

trump conservation. Theoretically, Article II of the Agreement text should act as a safeguard against amendments to the AEWA Action Plan (or interpretations thereof) that rank other objectives above conservation.³¹⁶ Indeed, the MoP's current awareness of this limitation is reflected in its single livelihoods amendment to date, which only permits the use of waterbirds for livelihood purposes to the extent that this is sustainable.³¹⁷

A final point to highlight about developing countries' willingness to accede to a treaty, and their ability to implement it thereafter, is that this is obviously influenced by the availability of financial and other support. Unlike the Convention on Biological Diversity, neither the Ramsar Convention nor AEWA explicitly links developing countries' obligations to implement conservation measures to the provision of support. As noted in the course of this article, various mechanisms have, nevertheless, been developed under both treaties with the purpose of supporting implementation. AEWA has benefitted from Ramsar's experiences in this regard. For instance, the first session of the AEWA MoP – when instructing the Agreement's Secretariat to develop proposals for the operation of an AEWA Small Grants Fund – specified that the experience of the Ramsar Small Grants Fund must be taken into account.³¹⁸ There is also considerable scope for the two treaties to collaborate in improving implementation through the provision of advice and capacity-building – an example of this already having been seen in the WOW Project.

VIII. ECOSYSTEM-BASED TREATIES VERSUS SPECIES-BASED TREATIES: BROADER LESSONS TO BE DRAWN FROM THE COMPARISON OF THE RAMSAR CONVENTION AND AEWA

Does the comparison of the Ramsar Convention and AEWA offer any lessons about the roles, advantages, and disadvantages

316. This provision explicitly states that the purpose of applying the actions determined in the AEWA Action Plan is to maintain migratory waterbird species in a favorable conservation status or return them to such a status. AEWA, *supra* note 9, art. II(1).

317. *Id.* annex 3, ¶ 2.1.2(b).

318. AEWA, Res. 1.7, *Establishment of a Small Conservation Grants Fund*, ¶ 2 (Oct. 23-27, 1999), http://www.unep-aewa.org/sites/default/files/document/r7_0.pdf [<https://perma.cc/3XY6-LV82>].

of ecosystem-based and species-based treaties more broadly? In a critique of the problems that the categorization of species in some MEAs poses for the protection of biodiversity, Couzens argues that “the world ought, in international law, to be moving away from the categorization of species; and toward an approach which *protects ecosystems rather than species*.”³¹⁹ The importance of ecosystem approaches in the conservation of biodiversity is indeed indisputable; and, as this article’s discussion of the Ramsar Convention has illustrated, ecosystem-focused treaties have an important role to play in promoting such approaches and in mainstreaming the consideration of biodiversity into a wide variety of sectors. As is also illustrated by the Convention, however, it is not uncommon for the provisions of ecosystem-based treaties to be framed in broad, heavily qualified language (a more recent example of this being the Convention on Biological Diversity). Further, an approach that focuses exclusively on the protection of ecosystems may allow some species to fall through the cracks, being insufficiently targeted to address their needs. Insofar as the international community continues to consider the conservation of shared species to be a worthwhile objective, ecosystem approaches should consequently be complemented by species-based approaches, rather than discarding such approaches entirely, as Couzens’ comment might be read to suggest.³²⁰ AEWA provides a good example of how focusing on a particular group of shared species can enable states to agree upon legally rigorous provisions directed towards the conservation of these species and

319. Ed Couzens, *The Problem that Categorization of Species in MEAs Poses for the Protection of Biodiversity*, in *INT’L ENVTL. LAW-MAKING AND DIPL. REV.* 2006, at 185 (Ed Couzens & Tuula Kolari eds., 2007) (emphasis added); see also ED COUZENS, *WHALES AND ELEPHANTS IN INTERNATIONAL CONSERVATION LAW AND POLITICS: A COMPARATIVE STUDY* 227 (2014).

320. See, however, Ed Couzens & Melissa Lewis, *Learning From the Past: A Reflection on the Roles of People and Problems in the Development of International Environmental Law*, in *INT’L ENVTL. LAW-MAKING & DIPL.: INSIGHTS & OVERVIEWS* 122-123 (Tuomas Kuokkanen et al. eds., 2016) (commenting not that the species-based approach should be done away with entirely, but rather that it may be a hindrance in “some situations” and that “[b]alance is difficult to achieve, but it needs to be found between the more detailed and legally rigorous commitments often present in single-issue treaties and the ‘softer’, more widely embracing approaches taken in wider-issue treaties”).

their habitats.³²¹ However, this example also suggests that the extent to which a species-focused treaty is able to contribute to the maintenance or recovery of species' conservation status will be largely determined by the type of threats involved. In instances in which *species threats* are having a significant impact on conservation status, or in which major conservation gains can be made by identifying and protecting a *limited number of sites* and managing these for the species in question (as in the case of congregatory species), it appears that a species-based treaty will have the potential to make a considerable contribution. Where, however, the dominant threat is habitat loss/degradation in the wider environment, the role of this type of treaty is likely to be more limited.

IX. CONCLUSIONS

This article set out to examine the overlap and interplay between the provisions of the Ramsar Convention and AEWa, and to distill their respective roles in the conservation of migratory waterbirds, with the ultimate goal of identifying areas in which AEWa does, or can, make up for the various shortcomings of the Ramsar Convention as a tool for waterbird conservation. A normative framework within which to conduct this analysis was provided by outlining priority measures for achieving the effective long-term conservation of migratory waterbirds, these being divided into measures aimed at ensuring the availability of adequate habitat, addressing species threats, and addressing gaps in knowledge. The article is grounded on the premise that, if international instruments are to make a meaningful contribution to waterbird conservation, they should require and, to the extent possible, facilitate these priority measures, and provide mechanisms through which they can be coordinated across entire flyways.

An assessment of the Ramsar Convention's legal text and CoP-adopted guidance and support mechanisms against the abovementioned framework illustrated that, although the Convention makes several important contributions towards the

³²¹. The implementation of which will have ancillary benefits for other species.

conservation of migratory waterbirds, it is possible for parties to be in full compliance with their Ramsar commitments without adequately providing for the ecological needs of these species. The Convention's most pronounced contributions relate to the conservation of waterbird habitat. For congregatory populations in particular, Ramsar contributes to the identification of critical sites by providing criteria by which to identify wetlands that are important to waterbirds, and enhances the likelihood of protection and management of these sites through its provision of an international designation process. The protection and management of both Ramsar sites and other wetlands (including those relied upon by dispersed populations) are further supported by the Convention's provisions on the establishment of nature reserves, management for waterfowl, and promotion of conservation and wise use; with the Convention playing an especially important role in promoting ecosystem approaches, and thus the multi-scalar management of wetlands and establishment of intersectoral cooperation. Nevertheless, the Convention's requirements concerning the designation of Ramsar sites are very limited (indeed, it is possible for parties to comply with these without designating, *any* sites on the basis of their importance to waterbirds, let alone *networks* of sites) and restrict the Convention's flexibility to respond to species' climate-induced range shifts. Many of its legal provisions are also heavily qualified, and the guidance that has been adopted to enrich these commitments cannot remedy their qualified nature and is scant in its advice on species-based approaches to wetland management. Finally, the Convention's habitat-related contributions are concentrated on wetlands, with parties' commitments only having direct application to non-wetland habitat to the extent that this is included within the boundaries of Ramsar sites.

Turning to AEWA's provisions on habitat conservation, these are (at least partially) designed to support those of the Ramsar Convention and be jointly implemented therewith. However, the Agreement makes a significant legal contribution through its articulation of several unqualified commitments to habitat conservation – including a commitment to ensure the maintenance of networks of habitats along waterbird flyways, which (like most of the Agreement's habitat provisions) is not restricted to wetlands. AEWA therefore compensates for the lack of legal rigor that

characterizes many of the Ramsar Convention's provisions, as well as the Convention's failure to require the conservation of site networks and non-wetland habitats. Further, because AEWA includes results-based habitat commitments, these arguably remain applicable regardless of species' shifts in range (albeit desirable that the AEWA MoP clarify the meaning of "favourable conservation status" in instances in which species move beyond their historic ranges). The existence of such commitments under AEWA also arguably influence states' obligations under the Ramsar Convention insofar as the Convention requires that "international responsibilities for the conservation, management and wise use of migratory stocks of waterfowl"³²² be considered when designating or changing entries to the List. As an instrument whose hallmark is the flyway approach, AEWA is in a strong position to promote the identification, protection and management of site networks – including by promoting the application of various national and international site protection/designation mechanisms along waterbird flyways, and assisting to coordinate site management at the flyway scale. Because of its species-based approach, the Agreement is also well-positioned to promote the consideration of specific species in the management of both individual sites and broader habitats, not only through the provision of guidance and support for national projects, but also through advisory missions aimed at remedying specific threats to waterbird habitat. It follows that, despite its overlaps with the Ramsar Convention, AEWA clearly has a distinct role to play in relation to habitat conservation. However, this niche has arguably received insufficient attention in the Agreement's activities to date – a shortcoming that will hopefully be rectified in AEWA's next Strategic Plan through the articulation of clear habitat-related targets that specify the Agreement's role in relation to other MEAs and possibly also identify innovative means of channeling additional funding towards habitat conservation.

Through the Ramsar Convention's provisions on wise use and international cooperation, its parties undertake broad, qualified commitments to address species threats. However, these commitments have not been supplemented by detailed Ramsar guidance, and the Convention does not (and was never intended to)

322. Ramsar Convention, *supra* note 4, art. 2(6).

provide a framework for cooperation in managing species threats at the flyway level. Instead, the role of the Ramsar Convention has been to encourage the development of, and cooperation between, flyway initiatives, of which AEWA is an example. Indeed, it is in relation to species threats that AEWA has played its most visible role to date, not only through its comprehensive legal provisions and guidance on such threats as unsustainable harvest, but also through its role in the creation of innovative mechanisms (under both AEWA itself and the CMS) to support states in implementing measures to address various causes of waterbird mortality and in coordinating these across flyways. This legal and institutional framework for addressing species threats provides an important justification for states to accede to the Agreement. Indeed, AEWA accession, and/or participation in various AEWA initiatives, are means through which states can satisfy their Article 5 commitment under the Ramsar Convention, once again illustrating the close link between these two treaties.

Insofar as data collection is concerned, the overlap in information needs and commitments of the Ramsar Convention and AEWA result in significant opportunities for cooperation between these treaties in their support of waterbird monitoring. There are, however, certain knowledge gaps (in particular, gaps in knowledge concerning the threats facing species and appropriate means of addressing these) that have received little attention under the Convention, and in respect of which the Agreement is arguably better placed to promote and facilitate research.

Although AEWA, by addressing various gaps in the Ramsar regime, has the potential to add (and, in many ways, is *already* adding) considerable value to the international framework for conserving migratory waterbirds, as the younger treaty, the Agreement has had the benefit of learning from the Convention's experiences and the critiques thereof. As AEWA works towards expanding both its influence and its parties' capacity to implement their commitments, there remain opportunities to learn from the Ramsar Convention, as well as to collaborate therewith.

Finally, the comparison of the Ramsar Convention and AEWA illustrates that, despite the current trend towards ecosystem approaches and the advantages offered by ecosystem-based treaties, such treaties should continue to be complemented by species-based instruments insofar as states continue to desire to

conserve shared species. Indeed, it is clear that a significantly more comprehensive international framework for waterbird conservation is provided by the Ramsar Convention and AEWA in combination than either instrument would be able to provide on its own, and that states' reliance on membership of one of these treaties as an excuse for failing to accede to the other is therefore misguided. States throughout Africa and western Eurasia should become parties to *both* treaties if the long-term conservation of waterbirds is to be achieved at the flyway level.