## THE CRITICAL NEED FOR A CIRCUMPOLAR NETWORK OF MARINE PROTECTED AREAS FOR THE ARCTIC<sup>1</sup>

Daniel J. Basta

#### AN ARCTIC NO LONGER PROTECTED BY ITS REMOTENESS

For most of its history the Arctic has been protected by its remoteness and inaccessibility. Today, however, very few areas are truly removed from the influences of human activities. Climate change has made the Arctic and its resources more accessible to exploitation than ever before in recorded human history. This isolation has also led to an Arctic ecosystem that is less resilient and more susceptible to disturbance than most ecosystems in other parts of the world. Similarly the peoples of the Arctic, who adapted well to a harsh arctic environment, are experiencing profound changes at an unprecedented rate, testing the limits of their capacity to adapt.

The increasing accessibility of the Arctic is also changing the geo-political landscape, driven by the increasing economic feasibility of exploiting the Arctic's valuable natural resources through advances in technology. This has begun to lead to potentially divisive assertions of sovereignty being made by Arctic countries both through the development of domestic policy and law and through the implementation of international agreements to bolster claims of national ownership over these resources. Consequently, there is the emergence of the strong voice of the Indigenous peoples, expecting to play a far greater role in determining the future of this region, to share in the benefits of exploiting the natural resources while preserving their cultural heritage, traditions, and life ways.

**Exploitation Efforts Are Outdistancing Planning For Preservation and Conservation.** Human uses of the Arctic that were only just being proposed a few years ago are now happening. For example, oil and gas exploration and development are occurring in places like the Chukchi Sea and off the Russian coast, and plans are underway for more exploration and development of the vast offshore areas of the Arctic. Shipping is increasing, with routine passages of the Northern Route and the Northwest Passage becoming more frequent and enabled by the construction and use of more icebreaking and ice-capable vessels. The Arctic is also quickly becoming a tourist venue, with more cruise ships seeking access to opening waters and some adjacent land areas where heritage resources of the Arctic are exposed and largely unprotected. As a result there is growing discussion of port and harbor development, as well as other infrastructure needed to support maritime transportation. At the same time, the northward movement of commercially valuable fish species is increasing interest in expanding Arctic-wide opportunities to exploit these resources. And new seabed resources, like methane hydrates and hard minerals, are being identified and plans are being laid to exploit these as well.

<sup>&</sup>lt;sup>1</sup> This essay is an abridged version of a larger essay originally written regarding U.S. Policy in the Arctic. The original essay was written by the author and colleagues. The author takes responsibility for the content of this essay. It was written circa 2015, but still equally relevant today.

But in stark contrast to these accelerating efforts, developing coordinated, effective, on-theground preservation and management plans for the Arctic is lagging far behind. There is no comprehensive and coordinated regional conservation and management framework. Ideas for more broadly implementing ecosystem-based approaches to management are still only being discussed and plans to reduce the risks of exploitation are yet to be developed (e.g. oil spills, disabled ships, or invasive species). One of the fundamental truths in the world of ocean conservation is that it is considerably harder to achieve consensus on which areas should be preserved and protected when specific proposals for use of these places are already on the table.

**Taking Advantage of a Window of Opportunity Exists for Arctic States.** Notwithstanding the rapid environmental and socioeconomic change occurring in the region, a window of opportunity still exists for Arctic states to work collaboratively to establish a new integrated place-based management regime before economic interests overwhelm the region. (Although, the "time to act" may emerge as the most threatened Arctic resource of all.) Creating such a regime would empower action despite the inherent uncertainties now faced. This would help to insure that needed economic development activities are pursued in a manner that will also protect the relatively fragile ecosystem of the Arctic, while providing opportunities for the Indigenous inhabitants of the Arctic to preserve their way of life. Because the process for planning for the protection and management of natural and cultural resources does not happen quickly and given the unprecedented rate of change in the Arctic, it maybe that new and potentially unorthodox approaches will need to be undertaken to meet these daunting and imminent challenges. Our best ideas are needed from around the world.

Adding to this need to act now is the long-standing goal of the **Arctic Council** that additional MPAs need to be put in place to ensure the resources of the Arctic are preserved. MPA networks are particularly important in places like the Arctic where the cultural and natural resource components of that system are managed by multiple sovereign states. The few MPAs that do exist in the region are not currently part of coherent networks or systems. However, these few may be sufficient to form a foundation for an integrated Circumpolar Arctic MPA network design, established and managed cooperatively by the Arctic nations.

# EFFORTS TO ESTABLISH A CIRCUMPOLAR MPA NETWORK HAVE LONG BEEN UNDER CONSIDERATION.

Throughout its history the Arctic Council has identified establishment of a Circumpolar MPA network as one of its principal goals. The work of its **Circumpolar Marine Protected Areas Network** (CPAN) **Expert Group** (inactive since 2009) offers much that can be built upon. Extensive documentation including thirteen documents describing the intended network design and how it should be implemented is available on the Arctic Council's web pages. Even a cursory review of these reports reveals that most of the system development steps have been identified and received endorsement from the Arctic Council. In addition, the earlier 1996 CPAN Strategy and Action Plan document is quite similar to many of the protected area system development initiatives produced since that time. Much progress has been made over the intervening two decades with regard to Arctic protected areas and the underlying principles and approaches to establish them. There have also been some very recent efforts, through the Council's **Protection of the Arctic Marine Environment** (PAME) Working Group, as a part of the implementation of the Arctic Marine Shipping Assessment (AMSA), to identify "Areas of Heightened Ecological and Cultural Significance."

For more than two decades the Arctic Council, has been deeply invested in the concept of establishing a network of protected areas in the Arctic. Perhaps most importantly, this investment involved achieving consensus and "buy-in" among the Arctic states on the approaches and strategies they would pursue toward this goal. These consensus-based approaches and strategies developed by CPAN, and endorsed by the Council, are no less relevant nor likely to be less potentially effective today than they were in 2009, or even a decade or more ago.

Several Studies have Identify Potential MPAs Across The Arctic. A number of other studies over the past decade have also addressed the issue of protected areas in the Arctic. Each has recognized the present lack of information and knowledge of the socio-ecological systems of the Arctic, but each has sought ways to prioritize new marine protected areas throughout this region with information available at the circumpolar scale. The studies point to a number of valid approaches for identifying areas where enhanced protection provided by MPAs is likely to be required. Two notable efforts include: UNEP/GRID-Arendal (2005) "Vital Arctic Graphics: People and Global Heritage on our Last Wild Shores;" and IUCN/NRDC (2010) report identifying and describing Ecologically and Biologically Significant Areas (EBSA) in the Arctic Region. Other recent analyses also offer additional perspectives within this circumpolar context that have potential value. Arctic states, engaged in their own national MPA system planning and implementation, have produced some potentially important contributions.

All Arctic States have Already Established One or More MPAs. All of the Arctic states have MPA authorities and programs that establish and manage marine protected areas, and most have implemented or are developing national systems of MPAs. The Arctic Council's Conservation of Arctic Flora and Fauna (CAFF) Working Group recently produced a comprehensive inventory of MPAs in the region

(http://www.caff.is/publications/view\_category/21-circumpolar-protected-areas-networkcpan). This report was the most recent work of the Council in a long history of interest and involvement in developing a circumpolar system of MPAs for the Arctic and concludes: "An effective network of Arctic protected areas requires a coordinated circumpolar approach that needs to be linked with other jurisdictions globally and coordinated with Indigenous Peoples across the Arctic."

### HOW CAN THE CHALLENGES TO CREATING A CIRCUMPOLAR MPA NEWORK BE OVERCOME?

Designing MPA networks is now routinely done around the world, and the essential steps and elements are well understood. The process involved in creating a collaborative, integrative system of protected areas is straightforward, at least on one level. However, the most challenging, time-consuming, but essential elements of system development relate to seeking

agreement and consensus on implementation actions, achieving "buy-in" by each of the network's constituent programs. Given the urgency of the need for place-based protection in the Arctic and the years - occasionally decades – required for planning and implementation of a collaborative protected area system it is critical that an international process be initiated as soon as possible.

The recommendations below provide a little more perspective on several of the key challenges facing a circumpolar Arctic MPA system. Perhaps the most important challenge to overcome will be that all interested parties will have to relax long-held assumptions and approaches to place-based management in order to maintain the flexibility to anticipate and adapt to change to sustain these invaluable ecosystems.

### Undertake "Special Efforts" to Effectively Engage the Circumpolar Indigenous Community.

Humans have occupied the Arctic for thousands of years and possess vast knowledge about the structure and function of Arctic ecosystems and their importance to human endeavors. Given their unique knowledge and long standing "ownership role" in the region, these groups must play a central and sustained role in the design and adaptive management of a circumpolar MPA system. For example they should: 1) routinely provide MPA planning efforts their traditional and expert knowledge about ecosystems and their response to environmental change as they have witnessed it over centuries; 2) they must be participants

in the design and execution of the MPA planning process to ensure inclusion and transparency and respect for indigenous issues; 3) where appropriate they must be managers or comanagers of MPA sites; and 4) they must have a continuing voice in decisions affecting their communities and traditional cultural practices.

#### Develop a Flexible Approach to "Manage" the Challenge of Multiple-jurisdictions and

**Collaboration.** It is clear that MPA planning can easily become mired in disputes over jurisdictions, boundaries and legal authorities. Consequently, the MPA implementing agencies need to find ways to make progress while these larger issues are being addressed. This might include adopting a phased and flexible approach to creating the system. For example, it might be possible to first prioritize initial MPA designations, or core areas within what may become a larger MPA, in important areas whose jurisdiction is currently undisputed. It should be made clear and agreed that MPAs may span international boundaries and if they do, they should be managed cooperatively. The approach developed must be flexible enough to harmonize legal authorizes, MPA categories, management approaches across countries and jurisdictions to facilitate compatible management of adjacent sites, effective co-management of shared sites, or shifts in jurisdiction over time.

#### Make Best Use of Existing Information and Knowledge to Overcome Real And Perceived Gaps.

Although the Arctic's remoteness has helped to ensure the integrity of its unique marine ecosystems, this same insularity has also left significant gaps in our scientific knowledge about the structure, functions and even human uses of its ecosystem. Faced with imminent threats from climate change and expanded human use, the Arctic simply lacks the time to fill all data gaps using standard and prolonged scientific studies that can take decades to generate results relevant to management. Consequently, a more flexible approach must be used if timely progress is to be made. For example, it must rely heavily on existing information augmenting empirical data with modeled predictions about unexplored areas. It must also identify only the most critical data gaps and fill them expeditiously, even if imperfectly, leaving other secondary issues to be addressed when time and funds permit

These gaps can only be overcome by employing a participatory process that actively employs GIS processes, and specialized hardware, software and facilitation techniques, to elicit missing knowledge from indigenous peoples and regional experts with specific, place-based information. The approach must be based on the premise that, in such a dynamic and unpredictable system, detailed and static scientific knowledge about a specific place, species or process may prove less useful for effective management than a more integrative and intuitive understanding how this system is responding to climate change and what we hope to achieve over the long-term.

Make Developing Funding Sources and Partnerships a High Priority for all Arctic Nations. The circumpolar region is vast, and its unique qualities make any effort or operation extraordinarily expensive relative to other regions of comparable size in the world. Fully developing and effectively managing a system of MPAs will require sustained funding levels exceeding typical agency budgets dedicated to such purposes in every Arctic Nation now and in the future. Consequently, implementing agencies will need to find opportunities to leverage collaborative initiatives that support data and information gathering, management operations, and other necessary Network implementation tasks. Creative thinking will be required to establish long term partnerships with the private sector, especially those seeking greater access to Arctic natural resources or shipping lanes. An "internationally acceptable" funding mechanism such as fiscal sponsors that can accept and distribute funds from a variety of public and private sources across the region's countries will likely have to be established.