



Vital Arctic Graphics

People and global heritage on our last wild shores



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Preface by Klaus Toepfer

Executive Director, United Nations Environment Programme (UNEP)



The fate of the Arctic environment is no longer solely an Arctic issue. The Arctic and the global environment have never before been so interdependent. Growing demands for oil, gas, minerals and timber in other parts of the world are increasing exploration pressures in the Arctic, and pollutants from all over the planet are accumulating in Arctic food chains and indigenous peoples. At the same time these peoples face the effects of climate change, changes that may produce severe impacts on the rest of the world through increases in sea level from receding sea ice and glaciers, along with changes in sea currents dependent upon the Arctic cycles. These impacts include changing weather patterns and agricultural production for numerous nations around the globe. The very existence of some island nations may be at risk from floods. Climate change also threatens our ability to meet the Millennium goals on the eradication of poverty, the safe and sufficient supply of drinking water, and on limiting the spread of disease.

UNEP particularly welcomes the coming into force of the Kyoto protocol on February 16th, which will, we hope, provide a turning point in our efforts to effectively combat climate change.

This report also shows us that the Arctic holds a unique global heritage: the last continuous undeveloped and unexploited coastal and marine areas. These areas are the lifeblood of Arctic peoples and animals, and they cannot resist the cumulative impacts of all potential pressures. While conservation efforts on land have been significant in some areas, less than one percent of the coastal zones and marine areas have been protected. The coming decade may be our last chance to preserve this global heritage, of which no equivalent remains anywhere on this planet and which is so crucial to Arctic peoples and life. By protecting these areas, we help increase their resilience against inevitable climate change and help support indigenous peoples' right to make their own decisions on the future of the region.

Arctic governments have a special responsibility to protect the Arctic coastal and marine areas, not only because of their intrinsic value to Arctic ecosystems and Arctic indigenous peoples' livelihoods, but also because they form the only such major intact areas remaining on this planet.

A word from Sheila Watt-Cloutier

Chair, Inuit Circumpolar Conference (ICC)



To many environmental organizations the Arctic is "wilderness" to be preserved. To industry it is a "frontier" and a source of energy and minerals to be exploited. But to the 155,000 Inuit living in Canada, Alaska, Greenland and Chukotka in Russia the Arctic is "home" with all that this implies. The same is true for Sami, Athabascans, Gwich'in, Aleuts, and Arctic Indigenous peoples in northern Russia.

Through the Inuit Circumpolar Conference (ICC), Inuit have worked on the international stage for nearly 30 years. The last 15 years has been particularly exciting, for the circumpolar world is taking on many of the features of a geopolitical region. All Arctic Indigenous peoples are committed

to protecting our region's natural environment and enhancing our age-old cultures. In 2003, UNEP's governing council passed a resolution to promote sustainable development in the Arctic. This is important for the Arctic is the world's "barometer" when it comes to global climate change. ICC welcomes the interest and engagement of UNEP in the Arctic and looks forward to close co-operation with UNEP in coming years.

ICC welcomes this report as an acknowledgement of the rights and interests of Arctic Indigenous peoples and the need to protect and manage the natural resources upon which they so closely depend.



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Summary

The Arctic is home to many indigenous peoples, including reindeer herders, hunters, fishermen and nomads. They all share one common feature: their dependency on a healthy environment to support their livelihoods and chosen ways of life. These ways of life include intimate relationships with land and sea. Caribou, reindeer, fish and sea mammals play a vital role not only for Arctic peoples, but also for the planet's northernmost ecosystems.

Coastal areas are particularly important to Arctic peoples and ecosystems. Caribou and reindeer often travel to the coastal regions for their calving grounds and summer ranges. Many species, such as polar bears and shore birds, breed on land but spend most of their lives and find most of their food at sea or in the drift ice. Accordingly, indigenous peoples have inhabited these resource-rich locations for centuries and even millennia. Today, more than 80% of all Arctic settlements are located along coasts. These coastal areas are also of global significance. Migratory birds from nearly all parts of the planet travel to the Arctic wetlands and coasts to breed. While more than 71% of coasts worldwide are now impacted by development and their coastal-marine areas exposed to industrialized fisheries, the equivalent figure in the Arctic is still less than 7%. By 2050, more than 90% of the world's non-Arctic coasts may be affected by development and exploitation. Hence, the Arctic appears to hold the last of the world's remaining large, undeveloped coastal ecosystems, a unique global ecological heritage.

However, in spite of their unique global and Arctic significance, only about one percent of such continuous areas are protected. In fact, marine protected areas are severely under-represented in the Arctic. While some coasts are protected, the protection does not extend to the marine areas upon which the coastal people and wildlife depend. At the same time, these areas are facing serious threats. Development related to the infrastructure of roads, pipelines, power-lines and hydro-power dams has increased dramatically in the past decades in northern Scandinavia, Russia, northwestern Canada and Alaska. Furthermore, global climate change is resulting in the recession of sea ice

and hence increased access to resource exploration and to intensive coastal fisheries. The melting sea and land ice will inevitably cause sea level rise and could also affect currents, with major global implications. Arctic wildlife and plants are facing the cumulative impacts of these pressures and additional pressures from invasive species and pollutants.

Potential impacts on indigenous peoples include increased competition for traditional rights, introduction of pollution and toxins into primary food sources, and introduction of alcohol, drugs and diseases through the social changes that come with industrialization. In addition, they are threatened by increased risks from climate change, such as changes in weather patterns and sea ice. The latter constitutes a considerable risk factor for hunters in the pack ice. A further major threat is the potential loss of game species and the subsequent loss of chosen lifestyles associated with the use of natural resources, in particular, along the coast. Positive opportunities for indigenous peoples in the modern world include improved economic opportunities and employment, and improved access to social services, communication and education.

While the coming into force of the Kyoto protocol is an important step forward, climate change is already impacting the Arctic environment. There are, however, opportunities to help increase the resilience of Arctic ecosystems and people. This can be done by reducing the number and extent of other pressures through development of a stronger network of protected areas and, particularly, through protection of coastal and marine areas against industrialized, often southern-based exploitation. This, in turn, may facilitate sustainable development while protecting the crucial traditional food sources and healthy ecosystems so important to Arctic indigenous peoples. Co-management and close collaboration with indigenous peoples is essential in order to allow them to choose their own way of life and influence the future of the resources that they rely upon. The current lack of protected coastal-marine areas in the Arctic, their global and Arctic significance, and the emerging and hard-to-reverse threats specific to these areas, call for particular concern and attention.

Introduction

The purpose of this report is to compile a number of “vital” Arctic graphics that describe the Arctic, the livelihoods of Arctic indigenous peoples and the future well-being of this region. It summarizes some key threats that endanger the fu-

ture sustainability of the Arctic. The coastal regions are particularly important to the ecology and to the peoples of the Arctic and their current protection status is therefore given particular focus.



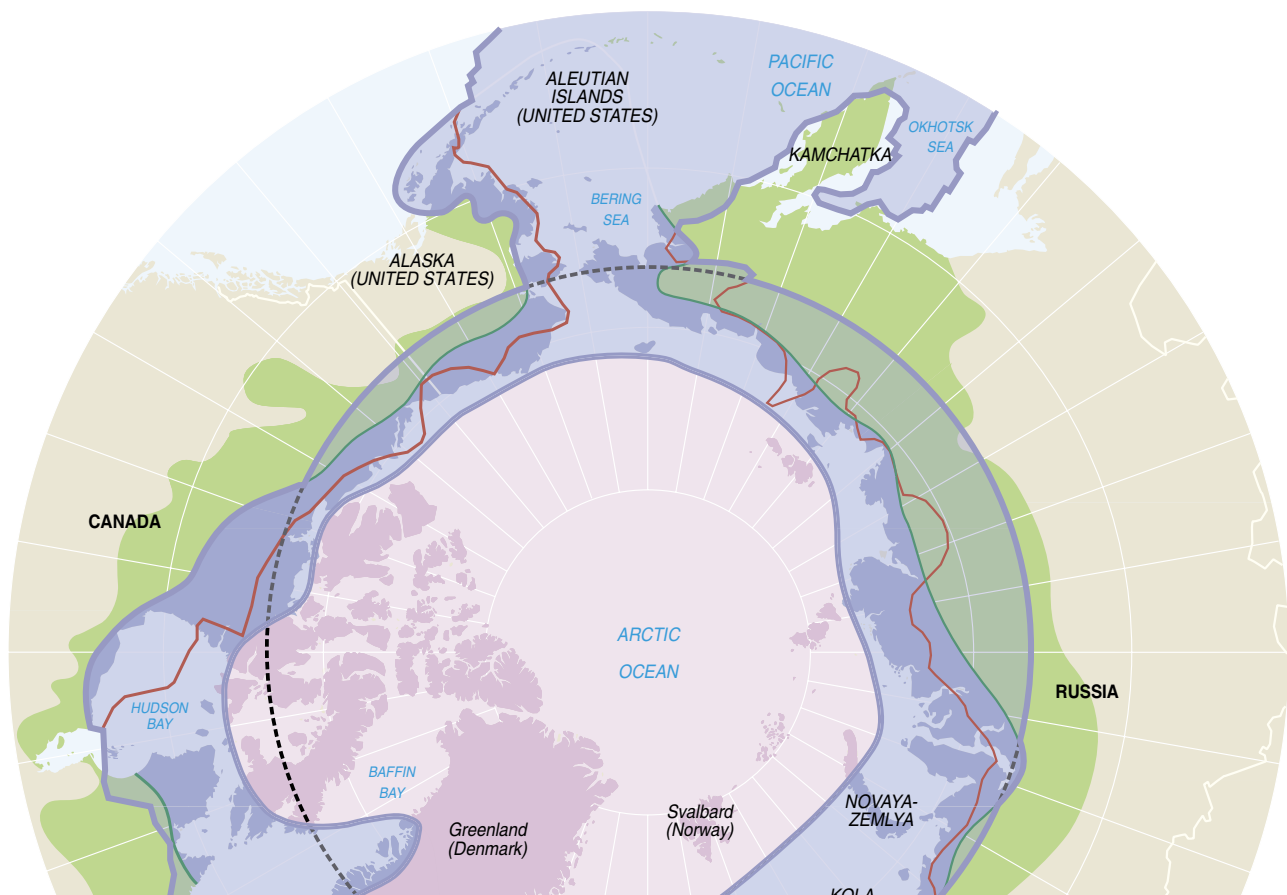
The Living Arctic – the last unexploited marine and land areas on Earth?

The world's largest remaining intact ecosystems

Definitions of the geographic boundaries of the Arctic vary, including such definitions as the area with a July isotherm below

10° C, vegetation distribution (tundra) or political boundaries, such as the definition by CAFF (CAFF, 2001). Nowhere else on Earth do we find such vast areas of relatively undisturbed marine and coastal eco-systems outside of the Polar regions.

Figure 1. Boundaries of the Arctic. Several definitions of the Arctic as a region exist and are all used extensively.



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