

The Arctic Ocean as a Marine Protected Area: A Policy Proposal to the Five Arctic Nations

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Abstract

The Arctic and Arctic Ocean compose a region that has seen little human activity due to limitations posed by the extreme climate. As global climate change is projected to alter the ocean landscape and open the region to human activity, many political, economic, and environmental issues arise. This paper proposes the creation of a marine protected area to span the entirety of the Arctic Ocean, restraining access to and use of the ocean according to a new set of international norms. Evidence to support the feasibility of this policy action includes a discussion of the opportunity cost of protecting the Arctic Ocean, as well as examining and stressing the benefits to be expected by the five coastal Arctic nations as well as the rest of the world. The findings conclude that classifying the Arctic Ocean as a Marine Protected Area would be a foundation from which to mitigate Arctic deterioration.

The Arctic, once a barren frozen desert luring explorers and scientists to the end of the earth, has increasingly become a focus area for economic, political, and otherwise human-led development. This new development is impacting a region with weak governance and little foreign policy, and is thus vulnerable to exploitation and grounds for conflict between competing nations. There is no doubt that the Arctic holds natural resources, could provide advantageous shipping routes, and poses new security threats, but these areas of potential will grow unchecked in the global sphere if governance norms are not properly established.

With increased human activity comes increased pollution and exploitation. Other oceans have fallen victim to over fishing, toxic chemical release, and ecosystem imbalances as is caused by the introduction of new species. The same fate holds for the Arctic unless past mistakes can be properly identified and prevented in the future.

To this extent, this paper proposes that the Arctic Ocean be marked a marine protected area (MPA) in which not all access is restricted, but limitations on use and travel do check what happens in the region. The governance of this MPA, the first international MPA, would be coordinated by the Arctic Council through the United Nations, with the endorsement and logistical execution support of the five coastal Arctic nations. Canada, the United States, Norway, Denmark through Greenland, and the Russian Federation must recognize that the best way to mitigate oceanic environmental destruction and to preserve their national interests in the Arctic is to enact protective measures through the establishment of a marine protected area.



The geographic Arctic circle follows latitude 66 degrees north of the Equator. Other definitions of the Arctic are measured by the extent of the tree line, as drawn in black, or the boundary at which July temperatures remain below 10 degrees Centigrade.

¹ This map of the Arctic is from the The Perry-Castañeda Library Map Collection.

From the beginning of recorded human history, the Arctic has remained a static, frozen mystery, which has recently come to grow in importance. The great illusion of Arctic splendor and plenty trapped in a prison of ice has driven human ingenuity to push the limits of Arctic accessibility; beginning with Robert E. Peary as the first person to reach the North Pole in 1909, and most recently marked with Russian dealings with BP to begin Arctic oil drilling, human activity in the region has increased at an incredible rate. What was once an Alaskan afterthought is now a gateway to resources not quite measured. Canadian identity and sovereignty rests on their ability to be assertive as Arctic activity expands. Norway and Denmark also have a thirst for resources, but also wish that their northern native populations are protected. Lastly, for Russia, the Arctic is a deeply embedded pillar of their national identity and view exploration and expansion into the Arctic in the same way America once considered their own "Manifest Destiny."

Adding even more possibility to human Arctic activity is the fact that the ice in the Arctic is receding. The summer ice extent in 2007 was a record low of measurements taken in modern human history. This year as the melting period is beginning in April, the March 2011 ice extent is lower than average, which forebodes even more significant ice melt during the rest of the summer. Some experts have predicted that Arctic ice may melt completely during the summer months in as little as 25 years. The ice is what hindered human activity, and as it melts and disappears, the potential for increased human presence in the Arctic grows.

For most of modern history, the Arctic has been viewed as the last remnant of the ice age, the final untouched region that is uninviting and unchanging. This is changing quickly, and it is important that leading decision-makers do not maintain the perception of the Arctic as pristine and eternally fixed in a state of frozen desert. While the Arctic may be harsh, it is not resilient to abuse. There is abundant life even where it is coldest, and this life will react negatively to pollution and other human disturbances. Most marine protected areas are

created in order to reverse or halt damage that has already occurred. Humanity is faced with the unique opportunity to set protectionary measures before ecosystems are destroyed.

In an ideal world, the Arctic would become a sphere of international cooperation and collaboration, of resource extraction that does not destroy ecosystems, and of scientific research that advances international development. Without improved controls however, the likely fate of the Arctic will be grounds for competition on economic, political, cultural, and military issues, all with the potential to be resolved peacefully, but still carried on with a sense of rivalry.

This competition need not be destructive, however. Environmental or political strife is not an inevitable byproduct of development in such contested territories. If the Arctic countries can identify a common vision for the Arctic and work together to achieve that vision, then the last of the world's untouched marine regions might not be destroyed. It is identifying this common vision that creates difficulty.

Policy focuses of the five coastal Arctic nations are very different, but there are elements that are incredibly similar. There have even been international initiatives led through the Arctic Council that provide a platform for cooperation on such topics as collaborative search and rescue and also disaster response. These initiatives play into the larger goal of complete Arctic cooperation, but fall short of covering issues of resource extraction or Arctic vessel traffic. To address and normalize all Arctic activity under a singular goal, this paper proposes that the entire Arctic Ocean be officially mandated a marine protected area (MPA) so that the common goal of preserving the ecological integrity of the arctic is preserved even while human activity rises in the region.

This proposal is not to deny human access to the ocean, and it is not to prevent drilling or fishing or travel. By labeling the Arctic Ocean in its entirety as a marine protected

area, the localities most affected by Arctic development will have the tools to protect their way of life. Creating the Arctic Ocean as an MPA has the potential of minimizing the types of damages that are widespread in the other oceans of the world. It is clear that there is a pressing need for substantial environmental controls over the world's other oceans.

Establishing the Arctic Ocean as an MPA could be a test case for the more ambitious controls needed elsewhere.

Setting the Stage, Making the Case: a Brief History of the Arctic

Over the course of human history, as modern economic systems have evolved, the Arctic, often described as the North, Circumpolar North, or North Pole, has played various roles. In his chapter titled "History of Globalization in the Circumpolar World," published in the book, *Globalization and the Circumpolar North* (2010), Chris Southcott very intuitively chronicles the ever changing role of the Arctic in economic history and the impact of those roles on Arctic communities. Southcott examines Arctic history through the lens of four layers of economic development, showing that despite the desert image much of the world has regarding the Arctic, there has been a very vibrant history of civilization.

The first of Southcott's layers is the hunting and gathering economy, in which inland and maritime hunting and fishing, and horse, cattle and reindeer breeding dominated economic society.² Premodern subsistence living has often been considered the economic system having the least impact on the environment and the most individual autonomy uncompromised by complex infrastructural dependencies. This setup was least damaging to the environment, but still there was some extent of fur and metal trading that occurred. Such a low volume of activity can be absorbed by the Earth as part of the cycle of life.

² Chris Southcott, "History of Globalization in the Circumpolar North," in *Globalization and the Circumpolar North*, ed. Lassi Heininen and Chris Southcott. (Fairbanks: University of Alaska Press, 2010), 27.

In the second layer, preindustrial colonialism increased the demand for furs, and polar civilizations came into much more contact with the rest of the world. Europe was the driving force in polar Eurasian economic decision making, presiding over the fur trade, whaling, settlement, and developments in reindeer herding. Arctic populations in what is Russia today were engaged in fur trading with civilizations as far away as Arab states. Siberia continued to be explored and opened to trade, and fur demand sparked an increase in trappers to an extent similar to the American gold rush. Fur constituted nearly ten percent of Russian state income during the seventeenth century, and demand pushed development farther and farther east into uncharted regions of Arctic Siberia.³ Even to this point in history, however, Arctic activity is focused on land resources and coastal fishing.⁴ Whaling was a big industry, but most of today's major oceanic endeavors were not an issue during that era since the ice extended relatively far and the vessel technology needed to travel the sea, such as the icebreaker, were yet to be developed.

With industrialism came extended exploitation of northern regions. The release of market forces to act under classic liberalism's invisible hand to maximize economic benefits for everyone was the dominating principle, but the North's benefit from such economic endeavors was not a priority of the country centers. The Arctic was important, however, for providing the natural resources needed for economic activity. As Southcott describes the national mentality regarding the arctic, "the entire region was divided into northern peripheries of national states, with the aim of increasing wealth in the national centers. ... The future of entire nations was linked to the North's ability to supply the resources required by industrialism."⁵ Transportation infrastructure was built to ensure maximum exploitation of northern resources, but complete extraction was limited by climate, and the dominating

³ Ibid., 32.

⁴ Ibid., 31.

⁵ Ibid., 43.

attitude towards the North was that it was a storehouse for potential wealth. Despite climactic limitations, business continued to be conducted throughout the Arctic. Canadian entrepreneurs built mines in northern Finland, the lumber, mining and hydroelectric industry in Sweden grew tremendously, and pre-Soviet industrialization in Russia completely took off once the Soviet Union industrialization plans were executed.⁶ Gold mining in northern Siberia was matched by the Yukon gold rush in Canada, and other such ventures throughout the North in connection with the rest of the country and the world helped develop the Arctic as an important global region.

The Arctic Today

Over the past fifteen years, the Arctic has reemerged on the strategic policy radars of nearly the entire world. The Arctic's strategic potential as provided by the realities of climactic changes has attracted such attention that has prompted the creation of Arctic organizations and research centers such as the Arctic Council and the Arctic research centers established by individual Arctic states. The realities of the Arctic are changing rapidly. Climactic changes are evident through the melting of the ice cap are opening opportunities for expanded human activity in the North. Additionally, the potential for resource extraction, including oil, minerals, and natural gas, are drawing huge government research investment to determine the scope and location of these resources.

Natural Resources

Most of the Arctic countries have funded official projects to estimate the true amount of oil and natural gas located in the Arctic. The United States Geological Survey (USGS) is the most recent body to produce substantive results. According to the report, onshore resources have been fully explored and the Arctic land contains forty billion barrels of oil and

⁶ Ibid., 52.

over one thousand trillion cubic feet of natural gas, eight billion of which is stored under West Siberia.⁷ What has yet to be discovered is that which is stored under deep sheets of year-round ice.

The USGS partnered with geological experts from Canada, Denmark, Greenland, Norway and Russia, and has determined, without “reference to costs of exploration and development,” that sixty percent of potential Arctic oil is located predominantly in Alaska, and sixty six percent of undiscovered natural gas is located in Russia. By their estimates, there is a ninety five percent chance that the Arctic holds at least one year’s global supply of oil and possibly even three years’ global supply at current consumption rates. Natural gas reserves have been estimated to vary from a seven to twenty seven year global supply. These figures are substantial, but the statistical methodology of deriving these amounts suggests that what is actually found in the Arctic once economic activity is underway may be significantly different. Still, these estimates are the most comprehensive and recent to be produced by a joint-Arctic research team, and are considered the current authority.

Currently, the actual extraction of these resources is far in the future. Deep sea drilling technologies have been developed, but deep ice drilling technology has not, and until then, these resources will lay dormant.

Territorial Issues

The scramble to appropriately estimate the natural resource potential of the Arctic is matched by the Arctic nations’ desire to ensure full resolution of all border disputes before the physical extraction can be started. Overlap of nautical boundaries as mandated by the UN Convention on the Law of the Seas occurs between the US and Canada, and Russia and

⁷ Chris Nelder. “How Much Oil is in the Arctic?” *Business Insider Green Sheet*. June 13, 2009. Accessed February 10, 2011. <http://www.businessinsider.com/how-much-oil-is-in-the-arctic-2009-6>.

Norway.⁸ These territorial disputes have been resolved recently. Norway and Russia ratified a border negotiation in late March 2011, but the US and Canada have yet to resolve their dispute.⁹ Though the US and Canada lag behind their Arctic peers in resolving border issues, both sides continue to promote cooperation in justly determining the truest border.

With surface borders resolved, the discussion turns to the depths of the water. After the territorial water and exclusive economic zones are established, the central portion of the Arctic is left unclaimed and is perhaps unable to be claimed. To ensure proper jurisdiction over those areas and the allowance of eventual resource extraction when and if the entirety of the Arctic ice cap melts, the Arctic nations are conducting research to determine the extent of their nation's continental shelf, from which extra privileges would be granted under the UN Convention on the Law of the Sea(UNCLOS). Scientifically, it is incredibly difficult to take these measurements under deep ice, and no Arctic country has been able to achieve that measurement for submission to the UNCLOS for consideration of extended territorial control.

Environmental Concern

With the increase in interest of Arctic potential resonating from all players, and with some trans-arctic shipping and resource exploits already taking place, there needs to be an international framework for protecting the environment. Other oceanic regions have been depleted of the fish stock, saturated with pollutants, and are ravaged by shipping and tourism vessels to the point of complete ecosystem destruction. The degradation of these already destroyed or continually damaged areas have been inadequately protected and managed by the nations responsible for the damage, and the Arctic Ocean stands as an opportunity to be proactive in protecting marine life. The Arctic Ocean is the last of the pristine and untouched

⁸ The UN Convention on the Laws of the Seas states that nations have full control over the nautical territory extending 12 nautical miles past the low-tide coastline, and full economic control within 200 nautical miles of the coast. http://www.un.org/depts/los/convention_agreements/texts/unclos/UNCLOS-TOC.htm

⁹ "Russian Upper House Ratifies Norway Border Deal." *RIA Novosti*. March 30, 2011. <http://en.rian.ru/russia/20110330/163282362.html>.

regions of the world, and just as countries are proposing legal frameworks to govern borders, drilling, and shipping, so too should environmental protection be a priority.

The Marine Protected Area

The anatomy of each individual marine protected area is unique to that area and is set by national norms and legal guidelines that have no international precedent as established by an existing international MPA. Within the Arctic, there have been numerous initiatives by individual nations to establish MPAs and the Arctic Council until recently was very active in promoting the creation of MPAs. This section will discuss the history of MPAs integrated into the context of the Arctic in order to set the stage for policy precedents.

Oceanic ecosystems constitute some of the most fragile on Earth, but human use of the oceans has gone largely unregulated. Marine environment as fishing zones, shipping lanes, and areas of resource extraction has not only disrupted the balance of species and marine populations, but has also contaminated the water with pollutants.

The extent of ocean pollution is not limited to results of oceanic activities. The source of nearly eighty percent of oceanic pollution is land-based.¹⁰ Oil spills such as Exxon-Valdez or Deepwater Horizon are unquestionably devastating to the marine environment, but they only constitute twelve percent of marine oil damage. Waste runoff that feeds into rivers and eventually travel into oceans contribute much more oil than direct spills. The same runoff principle holds for fertilizer from farms and lawns, garbage ranging from plastic bags to packing material, untreated or under-treated sewage, and toxic chemicals. The notion that the oceans are large enough to absorb and dilute such contaminants dominated industrial thought and norms until the 1970s when it became apparent that such unchecked pollution was having noticeable affects on marine life.

¹⁰ WWF. "Problems: Ocean Pollution." *World Wildlife Fund*. Accessed 2 April 2011. http://wwf.panda.org/about_our_earth/blue_planet/problems/pollution/.

Such affects have impacted such factors as food supplies and other animal populations. Toxins from nonpoint sources, better known as runoff, enters waterways and oceans and is dispersed widely. At the very bottom of the food chain, organisms such as plankton absorb the chemicals in high amounts, and then are ingested by larger animals. Larger fish are therefore carrying a much higher concentration of such chemicals. These fish are later consumed by humans. Such pollution is widespread and concentrated in areas where fishing for human consumption takes place. In Baltic waters, herring are measured to contain unhealthy levels of brominated flame retardants at a level five times that of herring in the Atlantic. Harbor porpoises carry high levels of carcinogenic perfluorinated compounds.¹¹

Human ingenuity has provided the tools necessary to extract resources from the oceans and the coast, but the ingenuity of the past did not take ocean health or human health into consideration. Over 90,000 people are affected by marine toxins annually, chemicals in the oceans lead to sixty two percent of all seafood-related sickness, and twenty five to thirty percent of the world's major fish stocks are overfished.¹²

An ideal framework for the MPA proposed includes the following characteristics:

1. The entire territory covered by the Arctic Ocean would be labeled a marine protected area;
2. The MPA would be internationally recognized and endorsed;
3. Administration of the MPA would be on a country basis, with guidance from the Arctic Council and the international legal backing of the United Nations;
4. Activities deemed not harmful to the Arctic would be permitted. This includes but is not limited to:
 - a. Small scale shipping through the least vulnerable marine areas,

¹¹ Ibid.

¹² Ibid.

- b. Resource extraction following best practice security and upholding well rehearsed disaster response potential,
- c. Eco-tourism,
- d. Daily life of indigenous peoples per their customs.

This framework would allow each country to govern its section of the Arctic as an MPA, and would operate not as a top-down restrictive device to hinder economic development, but as a bottom-up power mechanism for localities and regions to protect themselves from the harmful effects of pending Arctic development.

The nations involved would be a select group from the larger collection of Arctic nations, including the US, Russia, Norway, Denmark, and Canada. The support of all of these nations through the Arctic Council would be required for the United Nations to have any ability to enact such a large MPA, the first international MPA, into law.

Arctic Authority: Who Makes Decisions? Who Leads Enforcement?

More recent activity has seen not just increased economic endeavors, but also increased awareness that the Arctic, thanks to climate change, is becoming more important strategically. In 1996, the Arctic nations of Canada, Denmark (by Greenland), Finland, Iceland, Norway, Russia, Sweden, and the United States, met in Ottawa, Canada to discuss their mutual desire to promote Arctic cooperation, including indigenous participation. This meeting led to the creation of the Arctic Council as

“a high level forum to ... provide means for promoting cooperation, ...,

Oversee and coordinate the programs established...on the Arctic

Monitoring and Assessment Program,..., adopt and oversee ... a

sustainable development program,..., [and], encourage education and promote interest in Arctic-related issues.”¹³

The Arctic Council includes members not only from the Arctic states, but also representatives from indigenous groups residing in the Arctic. Non-governmental organizations, non-Arctic states, and inter-governmental organizations have observer status, but no decision-making power.¹⁴ As Arctic ice continues to melt, omitting non-arctic nations may result in some conflict in the future since portions of the Ocean will not be within the territorial zone of any of the states. But this is at least 20 years in the future, and if the Arctic does become an MPA, conflict from this type of issue would be significantly mitigated until appropriate boundaries are created.

The Arctic Council is still evolving as a decision-making body. With no leverage in the sphere of international law making, the Council lacks the essential power needed to implement the policy it creates in the case that a member state or a non-member state refuses to comply. The Arctic Council was established to make recommendations, but as the Arctic discussion is intensifying, its role as a leader in directing dialogue and pushing for laws is becoming more important. The Council has realized its evolving role, and as stated by the current Danish chairman, “[the] Council is the relevant regional body covering the Arctic, its nations, and peoples and in order to respond to the increased interest for arctic matters the chairmanship will seek to highlight Arctic perspectives and concerns in the relevant international processes.”¹⁵ The Arctic Council, in a new geopolitical framework that demands more arctic information and recommendations, realizes that it must take on larger workloads

¹³ The Governments of the Arctic Countries on the Establishment of the Arctic Council, “Declaration on the Establishment of the Arctic Council.” September 19, 1996. Ottawa, Canada. http://arctic-council.org/filearchive/ottawa_decl_1996-3..pdf.

¹⁴ “About Arctic Council.” Last modified October 22, 2007. Accessed March 30, 2011, <http://arctic-council.org/article/about>.

¹⁵ “Programme for the Danish Chairmanship of the Arctic Council 2009 – 2011.” Arctic Council. November 27, 2007. http://arctic-council.org/article/2007/11/danish_programme.

to meet those needs. The Arctic Council has declared itself ready to do so, and to take their work through the proper channels to enact internationally recognized changes.

The Arctic Council as a coordinating body holds meetings twice per year, and chairmanship of the Council rotates among the member states. Within the Arctic Council, six working groups operate to specifically target different Arctic issues. These are the executors of Council policies and programs, and include the following:

- Arctic Contaminants Action Program (ACAP)
- Arctic Monitoring and Assessment Programme (AMAP)
- Conservation of Arctic Flora and Fauna (CAFF)
- Emergency Prevention, Preparedness and Response (EPPR)
- Protection of the Arctic Marine Environment (PAME)
- Sustainable Development Working Group (SDWG)¹⁶

Most closely linked in objective and operations to the proposal of creating an Arctic-wide marine protected area is the working group on Protection of the Arctic Marine Environment. The goals of the group, as outlined in the group's 2009-2011 plan, are to facilitate partnerships for outreach within and outside the Council, to determine the adequacy of applicable commitments and promote their implementation and compliance, and to improve knowledge of the Arctic marine background. This working group is striving to better understand the marine environment and to accurately determine whether and to what extent the member nations are living up to their promises of marine ecosystem protection.¹⁷

The shortfall of PAME is that it is working slowly, with investigative goals similar to those of previous years. At a certain point, PAME must realize that it cannot document every

¹⁶ "About Arctic Council." Last modified October 22, 2007, Accessed March 30, 2011, <http://arctic-council.org/article/about>.

¹⁷ Arctic Council. "Protection of the Arctic Marine Environment (PAME) Work Plan 2009 – 2011," Accessed February 20, 2011. http://arctic-council.org/filearchive/pame_work_plan_2009-2011.pdf.

single protectionary action that is made. The concept of satisficing, a decision-making strategy to adequately meet the criteria and not waste further resources seeking an out-of-reach optimal solution that would only yield small marginal improvements, must be enacted. PAME cannot spend its entire existence investigating. It must direct investigations into action, and the best action to achieve the goal of protecting the Arctic marine environment would be to work to establish the entire Arctic Ocean as a marine protected area.

The plan to enact marine protected area status onto the Arctic Ocean would ideally be proposed and amended within a working group similar to PAME. The Council then, in accordance with the plan developed by the group, would distribute the proposal amongst its members for approval. With the backing of the member states, the Council would take the proposal to the United Nations for integration into international law. Because the Council was created by the eight Arctic states to be the premier authority on all issues of the Arctic, it is reasonable to expect that they are the body to bring the proposal to the global decision making table.

The details of enforcement mechanisms would need to be determined by the Arctic states collectively, as they will largely be policing themselves. On the lowest level, enforcement of policies would take the same channels as enforcement of any restrictions, travel or otherwise, already in place within a nation's territorial waters or exclusive economic zones. This would include coast guard forces where appropriate. Many of the nations already have a strong coastal presence, and enhancing their role to include MPA enforcement would take fewer resources than situations in which there is no military presence at all.

According to the World Wildlife Fund, the vast majority of current marine protected areas lack proper management. According to their statistics, fewer than ten percent achieve

their management goals and objectives.¹⁸ They also lack the funding and staff necessary to adequately enforce even basic MPA laws. Volunteers and local communities are vital to the operations of existing MPAs, and will play an incredibly large role in enforcement.

A large tenet of the MPA proposal is that the protection of the marine environment will also protect the livelihoods of indigenous Arctic peoples. Because indigenous protection is a priority, their participation in enforcement will be vital to the MPA's overall success and sustainability. As local populations are actively involved in MPA enforcement elsewhere, the Arctic MPA would rely on indigenous enforcement.

The detailed structure of enforcement would be the product of international negotiations, but must heavily utilize current Arctic military presences and indigenous peoples at the core of Arctic MPA administration. These two elements are unique to the Arctic region, and policy should take advantage of their potential.

Appeals to the Arctic Nations

In order to gain the proper support for the policy, each of at least the five coastal Arctic nations must be in agreement. In the following sections, appeals to the United States, Norway, Canada, Denmark, and the Russian Federation are made, outlining the costs and benefits of such a policy.

Norway

Incorporating nearly half of mainland Norway, extending through the Barents Sea, around the Svalbard archipelago, and extending far out to the isolated and frozen island of Jan Mayen, Norway's Arctic presence is quite substantial.¹⁹ The warm currents flowing from

¹⁸ WWF. "Problems: Inadequate Protection." Accessed April 30, 2011.
http://www.panda.org/about_our_earth/blue_planet/problems/inadequate_protection/.

¹⁹ Tore Gjelsvik. "Norway." *Arctic* 19, no.1, 1996. 70 – 75. 70

the south into the Barents Sea keeps it ice-free for most of the year. With the absence of ice comes the curiosity to explore. Norwegian Arctic discoveries by Norse Vikings are of the earliest, and most well-known, of all Arctic exploits.

The earliest written records of Viking exploration are of Ottar, an explorer from Northern Norway, who had traveled to the White Sea north of Russia and the North Cape at the northernmost point of continental Norway. His account was recorded by Alfred the Great, king of England at the time, in great detail.²⁰ Meanwhile, the peers of this lone Viking were traveling in the direction of Iceland, reaching Greenland shortly after, and establishing settlements on these Arctic landmasses in order to further explore. Viking exploration of the northeast coast of Canada also took place, and even today there are archeological remnants of Viking activity. As the Middle Ages came to pass, Viking exploits decreased substantially.²¹

Norway's Arctic presence became known once again in the nineteenth century with the scientific journey led by B.M. Keilhau, who spent six weeks with his crew pioneering Arctic geological, botanical, and paleontological research. This expedition sailed in 1827, and until the next scientific journey would occur 50 years later, most Nordic activity in the Arctic would be focused on hunting and fishing.

Whalers, trappers and fishermen played important roles in Arctic discovery. Groups would navigate the waters in search of new, lush hunting grounds or seek out whale pods. Novaya Zemlya, Russian for New Land, was discovered by Elling Carlsen, a Nordic hunter, who was seeking new hunting ground. The documentation of new Arctic land conducted by

²⁰ Tore O. Vorren. "Norway in the Arctic." *Explore North*
http://explorenorth.com/articles/norway_in_the_arctic.html.

²¹ Ibid.

these profit-seeking individuals drove the earliest of Arctic development.²² The lure of Arctic resources, now focused on oil and gas, has always been strong.

Since the time of those explorers, much more has been learned of Norway's Arctic, and polar research has been a top priority for Norway in recent years. Norway hosts a network of institutions at the Norwegian Polar Institute in Tromsø, which is located at 70 degrees north. The institute states the following as the focus of its Arctic work, "The Arctic is one of the world's last wilderness areas and is still relatively untouched. Maintaining it as such is a challenge in an extreme climate, where nature needs a long time to repair damages caused by human intervention, wear and tear and other causes." The sense of mission in this statement resounds in agreement with the proposal to create an ocean-wide MPA in the Arctic. The challenge that the Norwegian Polar institute speaks of can be alleviated by setting protection measures.

The government of Norway's official policy regarding the Arctic also falls in step with this environmental proposal. In their 2007 policy paper regarding Norway's interest in the High North, objectives, specific goals, and methods to be used to achieve those goals are very explicitly outlined. Nearly each point highlighted by the government in their proposal would be met by the creation of a marine protected area. Though there are seven parts, the following are worth highlighting especially.

1. "We will exercise our authority in the High North in a credible, consistent and predictable way."²³

The first priority of Norway is to maintain a military presence in order to protect national security concerns. Such activity is completely legitimate considering the uncertainty

²² Ibid.

²³ "Norwegian Government's Strategy for the High North." *Ministry of Foreign Affairs, Norway*. February 21, 2007. Accessed April 15, 2011. <http://www.regjeringen.no/en/dep/ud/Documents/Reports-programmes-of-action-and-plans/Action-plans-and-programmes/2006/strategy-for-the-high-north.html?id=448697>. 7.

surrounding much that happens in the region. With such a dense occupancy of Arctic regions by enforcement personnel, maintaining the MPA conditions will be adding a set of enforcement objectives to an already present force. The estimated military capacity to enforce the MPA is lessened by the already present military force. There are already soldiers protecting Norwegian Arctic sovereignty, and they can be additionally commanded to enforce environmental laws.

2. “We will be at the forefront of international efforts to develop knowledge in and about the High North.”²⁴

With the protection of scientific research in the mandates of MPAs, such knowledge development will be enhanced so that Norwegian scientists can go beyond the territorial waters of Norway to conduct research. Even research taking place within Norwegian waters will be better protected against competing enterprises.

3. “We intend to be the best steward of the environment and natural resources in the High North.”²⁵

The subtext of this goal within the report reads, “We will promote value creation through sustainable use of resources while maintaining the structure, functioning, and productivity of the ecosystems of the area.” MPA status for the Arctic will be the most solid legal framework for ensuring that this goal is met. The environment would be a priority, but there would be allowances for the value creation that is so important to Norway and the rest of the Arctic states. The MPA would not end exploration or resources extraction, it would set the environment as a priority over all else in terms of policy development and implementation.

²⁴ Ibid., 8.

²⁵ Ibid.

4. “We intend the High North policy to play a role in safeguarding the livelihoods, traditions and cultures of indigenous peoples in the High North.”²⁶

As a marine protected area, the indigenous peoples that Norway wants to protect will have the power as set by international standards to ensure the protection of their livelihoods. They will not be forced by oversight or competition from big industry to accept the destruction of their homes.

Other priorities include establishing a framework for developing petroleum extraction in the Barents Sea, further developing “people-to-people” cooperation in the High North through cultural and education activities, and strengthening cooperation with Russia. All seven of these priorities promote constructive cooperation and development within the Arctic that is on the terms of all parties involved. Norway already has funded research institutions for Arctic marine research, and has already dispatched its coast guard to maintain Norwegian rights. An Arctic MPA is within the full interest of the Norwegian government and people.

Though MPA policy meets many of Norway’s policy priorities, there are factors of Norwegian policy that may be compromised by the proposed MPA. First, the MPA will, to a limited extent, restrict Norwegian sovereignty over their own territorial waters. Norwegian policy discusses the need to extend cod fishing to the High North, “where the necessary natural conditions and expertise are to be found.”²⁷ Large-scale fisheries have been established in other parts of the world, most notably Asia, where fish stocks have been over-harvested, leading to imbalances in the ecosystem and food chain. The type of fish farming proposed by Norway is exactly the type of fish farming that should be controlled in order to avoid the negative affects seen in other parts of the world. The Norwegian policy paper does

²⁶ Ibid.

²⁷ Ibid., 26.

provide promises to regulate the fishing, but with influence only to the extent of territorial and exclusive economic zone waters, such regulations may be easily evaded.

Other disadvantages to Norway of MPA policy are that there would be an element of lost sovereignty in governance of the area as well. The cooperation and concessions that would need to be made in order to govern the world's first and largest international MPA would likely be great, and if Norway and other nations would be unwilling to make such concessions, then the establishment of an Arctic MPA would be without purpose.

Resistance would be expected in terms of misunderstanding as to what purpose the MPA would serve and what restrictions would actually be in place. Acceptance of the minor disadvantages would need to be achieved, and this may pose problems if dealing with a Ministry or other leader who is resistant to any policies that might hinder their autonomous decision making. This type of resistance would be expected across the board, and can be overcome by ensuring that the goals and objectives of the MPA are clear and by gaining popular support.

Denmark

Denmark holds a stake of Arctic activity through its control over Greenland, which is a self-governing entity within the Kingdom of Denmark. Nearly all of Greenland is within the Arctic Circle, and with the entirety of the landmass within Arctic region marked by temperatures colder than 10 degrees Celsius in July, only small areas are at all habitable. Inhabited by the Inuit long before Norse Vikings came and went in the sixteenth century, Greenland came under Danish rule in 1776 and has been part of the Kingdom of Denmark ever since.²⁸ Greenland has become much more autonomous in recent years, with a milestone in 2009. On June 21, 2009, an extension of self-governance just short of independence was

²⁸ "Greenland." *Encyclopædia Britannica. Encyclopædia Britannica Online*. Accessed April 24, 2011. <http://www.britannica.com.proxyau.wrlc.org/EBchecked/topic/245261/Greenland>.

granted to Greenland, and this relationship is one that may be changed in light of continuing Arctic developments.

On that day in June, the Greenlandic Premier Kuupik Kleist spoke in tones alluding to eventual independence, but Danish Prime Minister Lars Lokke Rasmussen spoke of some point in the future, “when we loosen the ties that might be too tight, but keep hold of those that strengthen.”²⁹ Denmark will continue to subsidize Greenland an annual \$660 million, and Greenland will continue to enjoy Danish control of their foreign and defense policy.³⁰ This new level of autonomy is not a substantial step towards independence, but rather of Greenland as an individual nation in terms of a larger perception of greater self-rule. The subsidies and security still provided by Denmark would be large hurdles to leap in a situation of full independence, and because of this, Denmark continues to hold Greenland.

What has been suggested as a power mechanism for Greenland to assert its independence and also have the capital to build the defense capacity currently covered by Denmark is the potential extraction of natural resources. Greenland covers an area comparable in size to Western Europe, and within this massive stretch of ice-covered land there are high estimates of minerals and other natural resources. If Greenland can develop the ability to extract and trade those resources, it will no longer need Danish support and can make serious strides towards independence. This resource extraction, however, would be possible by the continued melting of Arctic ice, which for Greenland translates into the dissolution of culture and traditional livelihoods.

Denmark is the official representation of Greenland in the Arctic, and has done well to put indigenous rights and other policy priorities of Greenland at the forefront of their policy goals. With the current Chairmanship of the Arctic Council, Denmark has pushed focus on

²⁹ Charles Emmerson, *The Future History of the Arctic*. (New York: PublicAffairs, 2010), 264.

³⁰ Ibid.

the human dimension to the forefront of all Arctic initiatives. In his speech at the Arctic Council on April 29, 2009, the Danish Foreign Minister Per Stig Moller spoke to this and said, "...it will be of major importance for the Arctic Council to safeguard the inherent cultural, economic and political rights of the peoples and the Nations in the Arctic....Developments in the Arctic – for good or for bad – directly influence life and living conditions for the Arctic populations.”³¹ Though Denmark dominates Greenland’s international relations, there is no evidence that Denmark is blind to the needs and requirements of Greenlandic officials and people.

The Danish representation, now holding the chairmanship, has more in mind for constructive Council work than only protecting indigenous rights, which is evident in three tangible actions. First, the publication of “The Arctic at a Time of Transition: Proposed Strategy for Activities in the Arctic Region,” which is a policy paper that has circulated through approval within the Danish, not Greenlandic, government. Second, Denmark established an official Defense Commission to analyze Arctic developments with respect to Danish security in terms of energy and mineral supply. Lastly, in the speech mentioned above, the Danish Foreign Minister emphasized that the sovereignty of the five Arctic nations was a priority, among many, and that no new structure of international governance was necessary.³² The growing global realization that the Arctic is becoming a more robust international arena is prompting Denmark to reconfirm its place as an Arctic player by proxy of Greenland.

In terms of marine protected area policy, the appeal to Denmark is at the core an appeal to two separate states. Greenland’s priorities are self-rule and protection of indigenous

³¹ “Foreign Minister’s Speech at the Arctic Council on April 29, 2009.” Ministry of Foreign Affairs of Denmark.
<http://www.um.dk/en/menu/AboutUs/TheMinisterForForeignAffairs/SpeechesAndArticles/UdenrigsministerensTaleiArktiskRaadD29April2009.htm>.

³² Nikolaj Petersen. “The Arctic as a New Arena for Danish Foreign Policy: the Ilulissat Initiative and its Implications.” *Danish Foreign Policy Yearbook 2009*. 35-77, 36.

rights, more specifically, rights of Greenland's 56,000 residents.³³ Denmark ensures that these priorities make it to the forefront of their official rhetoric, but based on actions in the past, Denmark shares security and resource interests with much of the rest of the Arctic community. Despite this there is great potential for Denmark with pressure from Greenland to adopt such protective measures as afforded by a marine protected area.

Denmark already administers 1.3% of all of Europe's marine and littoral, meaning near the shore, protected areas.³⁴ Denmark understands the operations of a marine protected area, and because of the country's focus on protecting the culture and way of life of the indigenous people living in Greenland, endorsing the Ocean-wide MPA is a feasible reaction. Resistance will likely take form in Danish and Greenlandic leaders preferring alternatives to a broadly cast MPA. Such alternatives have been proposed, but on much smaller scales. Arctic Council rhetoric has focused on preserving biodiversity and raising awareness of polar bear habitat destruction, but not in a proactive way that would propose certain action take place. The informative nature of the Arctic Council would be best shifted to that of an advocate for legalized change.

Canada

The Canadian Arctic has made its way into the Western, myth-driven annals of history though the tales of explorers seeking the Northwest Passage. From Edward Parry's expedition in 1819, through a large group of failed attempts, and finally to Roald Amundsen in 1903, the northern shipping route held vast potential for trade and settlement, if only the ice was not such a problem.³⁵ For Canadians, however, their Arctic regions, referred to colloquially as The North, is home to Canada's vast indigenous Inuit population. The Inuit

³³ NANOQ . "About Greenland." Last updated March 13 2010. Accessed March 20 2011. <http://uk.nanoq.gl/Emner/About.aspx>.

³⁴ "Biodiversity and Protected Areas—Denmark." *EarthTrends Country Profiles*.

³⁵ "Northwest Passage." *Canadian Encyclopedia*. Historica-Dominion: 2011. <http://www.encyclopediecanadienne.ca/index.cfm?PgNm=TCE&Params=A1ARTA0005816>.

culture, synchronized with the severity of life in such extreme weather, is a pillar of Canadian identity, and as the Arctic gains international importance, Canada is realizing that their Northern citizens are not as isolated as they once were.

Granted most of its northern parts in 1670 by the Hudson's Bay Company and endorsed by Charles II, Canada has laid a long claim on northern North America.³⁶ The history of challenges to Canadian claims has been just as long. Because the geography in the region is so dotted with islands, explorers from America, Britain, Norway, and elsewhere have discovered, set foot on, and claimed many small islands in the past.

In order to assert its claims in the region, Canada would periodically sponsor voyages to travel the Arctic and promote Canadian presence and Canadian claim. The first of these trips began in the 1880s. These expeditions would plant flags, map terrain, and proliferate Canadian dominance in areas where such a claim could be historically contested. In 1903, Canada set post at Herschel Island, located off the Yukon Territory's northern coast, in order to monitor and control American whalers operating in the Western Arctic.³⁷ This mentality of feeling vulnerable to arbitrary external claims has remained with Canada to this day. One of the main tenets of Canadian Arctic policy is reinforcing sovereignty, and is the first concept promoted in even the subtitle of their official policy release.

Official Canadian Arctic policy focuses on the following points, which, as explained below each point, fit well with the goals of the proposed Arctic marine protected area.

³⁶ "Arctic Sovereignty." *Canadian Encyclopedia*. Historica-Dominion: 2011.
<http://www.encyclopediecanadienne.ca/index.cfm?PgNm=TCE&Params=A1ARTA0000298>.

³⁷ Ibid.

1. Exercising Sovereignty by resolving boundary issues regarding claim on Canadian islands and navigation of territorial waters.³⁸

Canadian claim and governance over their islands within the MPA would be of foremost importance so that the MPA can be successfully administrated. Problems with external actors would be alleviated because upon the creation of an MPA, the governance of different sectors of the MPA would need to be clearly established. The territorial clarification as mandated by the MPA creation would allow Canada to achieve this goal.

2. Promoting economic and social development by creating appropriate international conditions for sustainable development, seek trade and investment opportunities that benefit Northerners and all Canadians, and encourage greater understanding of the human dimension of the Arctic.³⁹

One of the primary objectives of the MPA is to ensure that Arctic activity is sustainable, both environmentally and economically. With protection measures and allowances for non-exploitative investments placed on the natural landscape, the Canadian population of Northerners will not be at such high risk of exploitation by outsiders.

3. Protecting the environment by promoting an ecosystem-based management approach with its Arctic neighbors and others, to actively contribute to efforts to address mitigation adaptation to Arctic climate change, by pursuing and strengthening international standards of environmental protection, and by contributing to science and the legacy of the International Polar Year.⁴⁰

³⁸ “Statement on Canada’s Arctic Foreign Policy: Exercising Sovereignty and Promoting Canada’s Northern Strategy Abroad.” *The Government of Canada*. August 2010.
http://www.geopoliticsnorth.org/index.php?option=com_content&view=article&id=138:statement-on-canadas-arctic-policy&catid=1:latest-news, 6-7.

³⁹ Ibid., 10-11.

⁴⁰ Ibid., 20-21.

The proposed MPA would be the foremost comprehensive ecosystem-based management approach to administration of the Arctic. The MPA would be a forum in which Canada would be able to cooperatively with the rest of the Arctic nations, establish international environmental norms and legal requirements.

4. Empowering the peoples of the North by improving and devolving governance by engaging northern citizens in Canadian Arctic foreign policy, including indigenous permanent participation in Canadian governing organizations, and empowering the Canadian youth through outreach and involvement programs.⁴¹

Such empowerment would be vital to the effective administration of the Ocean-wide MPA. One of the biggest challenges that hinders the positive impact of many centrally-controlled organizations is the fact that the central government is unable to address the needs of those who are on the ground and experiencing the effects of the MPA first hand. The local communities and regional governments would need to be empowered and engaged in order for the large-scale MPA to achieve its objectives.

In the past, MPAs have been suggested and established on a small scale throughout the Arctic, and Canada has been the most vocal supporter within the Arctic Council. Canada's own oceans policy is ahead of its time, stemming from the Canadian Oceans Act of 1996.⁴² This Act explicitly stated that MPAs were important to enhancing integrated ocean management. Currently in Canada there is the Beaufort Sea Large Ocean Management Area (LOMA), and within it is Canada's first Arctic MPA. The Tarium Niryutit Marine

⁴¹ Ibid., 22-23.

⁴² Timo Koivurova. "Governance of protected areas in the arctic." *Utrecht Law Review* 5, no. 1. June 2009.

Protected Area spans 1,800 square kilometers (694 square miles), and covers the coast of three separate Arctic regions.⁴³

This MPA was established in order to preserve populations of beluga whales, anadromous fish, and birds, to provide a framework for long-term sustainable management of the area, to protect the harvesting traditions of the Inuvialuit people living in the area, and to prevent activities that could harm the environment and its inhabitants in any way.⁴⁴ Activity is still allowed to take place in these regions, even whaling, but only so long as the activity does not over fish, lead to pollution or otherwise harm the area.

Canada has also been the strongest supporter of developing a network of MPAs in the Arctic through the Arctic Council. Through the Arctic Council working group PAME (Protection of the Arctic Marine Environment), Canada has emphasized its own successes in creating Arctic MPAs, and has dominated, as in the 2004 Arctic Marine Strategic Plan, the discussion in advocating a large network of MPAs.⁴⁵

Because of Canada's heavy involvement in leading the current MPA discussion within the Arctic Council and in other discourse, this nation is the least expected to oppose this proposal. Some resistance might be met regarding the doubt that effective administrative mechanisms can be developed organically, and that the rest of the Arctic nations would be unwilling to accept an Arctic MPA as even a proposal. There are no current stipulations in Canada's published Arctic policies that suggest the potential of high levels of conflict with this proposal. The closest alternative to an Ocean-wide MPA is a large network of individual MPAs, and Canada is already engaged and is leading this discussion.

Russian Federation

⁴³ "Tarium Nirvutait Marine Protected Area." *The Beaufort Sea Partnership, Government of Canada*. http://www.beaufortseapartnership.ca/tnmp_area.html.

⁴⁴ Ibid.

⁴⁵ "Arctic Marine Strategic Plan." *PAME: Arctic Council*. <http://www.pame.is/arctic-marine-strategic-plan>.

Just as the young United States once marveled at its western expanse stretching to the Pacific and claimed by the nation by the sacrosanct manifest destiny of American civilization, so has the Russian cultural identity experience an era of fascination with its own frontier to the north. The Soviet Arctic produced incredible stories of Russian Arctic discovery and conquest, and these images were transformed through popular culture's fascination into what has been referred to as the Polar Myth of the Russian identity.⁴⁶ Combined with the seemingly endless vastness of Siberia, the North is an integral part of Russia.

Deeply embedded in Russian history, the Arctic has always been a stage for Russian activity. Though much of the early Russian Arctic discovery was done by Danish and English explorers, Russians had lived and traveled to the region since the beginnings of Kievan Rus. Most notable of early Russian Arctic exploits is Peter the Great's commission of Vitus Bering, a Dane serving the Russian Empire, to the east in order to determine if Russia was connected to North America in the early eighteenth century.⁴⁷ He found that it was not, and this greatly publicized journey sparked a wave of Arctic interest throughout Russia. The discovery of Arctic gold, the potential for shipping lanes along Russia's northern coast, and the expansion of the fur trade drew nearly one million Russians to Siberia to live and work.⁴⁸

Development of the Russian Arctic continued in the following centuries, but participation in such adventures as the race to reach the North and South Poles was not of interest. The Russian perspective of the Arctic was much more practical. It was a part of Russian identity myth, but it was also a region that was largely integrated into the rest of the nation's operation. It was not some distant place that few could reach. Russian Arctic concerns were that of improving Arctic living and travel between Arctic regions. The

⁴⁶ John McCannon, *Red Arctic: Polar Exploration and the Myth of the North in the Soviet Union, 1932 – 1939* (Oxford: Oxford University Press, 1998).

⁴⁷ Ibid., 15.

⁴⁸ Ibid., 15.

pragmatic approach to the Arctic as no different from the rest of Russia has shown through in current Russian policy in the way that Russian assertions over their Arctic rights hold a tone of preferential authority.

Past publications and official rhetoric regarding Russian Arctic policy largely reflected an aggressive and assertive tone, highlighting Russian security interests before all other priorities. In recent years, Russian Arctic policy has taken a much softer and cooperative tenor, and the legacy of inaction in regards to previous Arctic policy adds more significance to the 2009 comprehensive plan. Inaction that followed Russia's 2001 Arctic policy statement, which was heavy with security rhetoric and regional assertiveness, was examined by a Russian State Council working group and came under large amounts of scrutiny from the highest levels of Russian Federation government.⁴⁹ Despite this scrutiny, there is still some skepticism that Russia will be able to turn its 2009 policy statement into coherent policy action items.

The tenets of the policy as it stands, however, must be analyzed in terms of compatibility with the proposed marine protected area. Scholar-activists such as Konstantin Zgurovsky and Vassily Spiridonov of WWF-Russia have declared that Russia will likely not support one large MPA on the grounds that they are not willing to forfeit access to shipping lanes or natural resources.⁵⁰ The caveat of the proposed MPA would allow for such activity to continual, albeit with more restrictions to ensure that ships do not harm the environment or the lifestyle of those who live in the region. Despite such pessimism, consideration of the objectives of Russian Arctic policy is as follows:

⁴⁹ Katarzyna Zysk. "Russia's Arctic Strategy: Ambitions and Constraints." *Joint Force Quarterly* 57, Second Quarter 2010. 104.

⁵⁰ "Before the Ice Melts: Experts Discuss Proactive Protection of the Arctic Ocean in Anticipation of Climate Change." *MPA NEWS: International News and Analysis on Marine Protected Areas* 9. No. 2. August 2007.

1. Expansion of the resource base of the Arctic zone of the Russian Federation capable to meet the substantial requirement of Russia in hydrocarbon resources, water biological resources and other kinds of strategic raw materials.⁵¹

This policy would be able to be fulfilled by Russia even with the proposed MPA in existence. Resource extraction would not be forbidden, only limited on the grounds of environmental safety.

2. Defense and protection of Russia's Arctic border by an operative air regime.

As with Norway's priority of defense interests and coast guard presence, such an objective will not be hindered, and exist as an effective framework from which to build enforcement of the environmental requirements of the proposed marine protected area.

3. Preservation and maintenance of environmental protection of the Arctic, elimination of the ecological consequences of economic activities.

An Arctic MPA would allow for this to take place with not just Russian backing of environmental protection, but the support of the entire Arctic community.

4. Formation of a communication infrastructure for Arctic activity.
5. Maintaining fundamental and applied scientific research on the creation of a geographic information management framework throughout the Arctic.
6. Enforcement of mutually beneficial bilateral and multilateral cooperation between the Russian Federation and the Arctic states on the basis of international treaties and agreements.

⁵¹ Russian Federation. "Osnovy gosudarstvennoj politiki Rossijskoj Federacii v Arktike na period do 2020 goda i dal'nejshuju perspektivu." Approved by President Dmitry Medvedev. September 18, 2008. <http://www.scrf.gov.ru/documents/98.html>.

Both communication and research would be fostered under an Arctic-wide MPA, and all of this would be fostered under the multilaterally beneficial environmental marine protected area.

All of these objectives can be viewed through the lens of the proposed MPA, and the real conflict is not apparent. What would hinder Russian support, as many other policy initiatives have been hindered in the past, is Russia's staunch preservation of sovereignty and control over its landmass and nautical claims. This perspective is not grounded in tangible causes for real concern, and is simply the dominating view point of Russian policymakers. As environmental problems are compounded upon each other throughout the Russian Arctic, outside pressure will be needed in order to prevent the complete destruction of the Russian North in the way that the Aral sea was completely depleted of water during Soviet times, the way that industry in the Ural mountains continues to produce air pollution and severe acid rain, and the way that hot water dumping is destroying the once secluded and pristine Lake Baikal.

There are already sixteen Arctic MPAs in existence, covering over eight hundred thousand square miles.⁵² The legal framework for administrating these MPAs is still somewhat weak, but could become incredibly robust in the future. Meanwhile, Russia may opt out of supporting an international Ocean-wide MPA because it already has a budding network of MPAs in places where economic interests are much less, but it is the high-traffic areas that need to be addressed. Six thousand vessels have sailed throughout Russia's Arctic, unchecked. The continued growth of Arctic activity with no overarching legal framework in place will lead to irreversible environmental damage. To an extent, Russia would forfeit some aspects of its sovereignty over what is currently Russian territorial water, but this would be in

⁵² M.M. Kalentchenko. "Russian Legal Framework for Marine Protected Areas in the Arctic." *Association of Polar Early Career Scientists*. Presented at IPY Oslo Science Conference, Oslo, Norway 8-12 June 2010 <http://www.apecs.is/virtual-poster-session/social-sciences/1971-mikhailkalentchenko2010a>.

exchange for agreement by other Arctic nations not to challenge Russian rights as awarded by the MPA law. Additionally, other nations with no Arctic territory would be forbidden by the MPA law from even entering the Arctic, leaving full privilege of Russian resources to Russia.

The United States

The United States, with Arctic access through Alaska, claims a regional history punctuated by William E. Parry's expedition to the North Pole in the nineteenth century. Unlike Russia, the Arctic Polar Myth is viewed by few in American civilization with such high regard, but like the rest of the Arctic nations, America's dedication to protecting the rights of the indigenous people in Alaska is a top priority.

More recent US activity in the Arctic begins with the Arctic Research and Policy Act of 1984, which most importantly, established the United States' definition of the Arctic as territory north of the Arctic Circle as well as the Beaufort, Bering, and Chukchi Seas, and the Aleutian archipelago.⁵³ The Act also set an agenda of nationally supported research led by the National Science Foundation (NSF), throughout the Arctic. For fiscal year 2011, NSF requested \$111.36 million to fund such research, and since January 2009's Arctic Policy as set by President George W. Bush, Arctic management is developing very thoroughly in the American Arctic.⁵⁴

President Bush's policy directive stresses the importance of international governance, continental shelf and boundary issues, promotion of international scientific cooperation, maritime transportation, economics and energy, and environmental protection. The focus points of the policy and their agreement or disagreement with the proposed MPA is below.

⁵³ Arctic Research and Policy Act of 1984." Title I of P.L. 98-373. July 31, 1984.

⁵⁴ Ronald, O'Rourke. "Changes in the Arctic: Background and Issues for Congress." *Congressional Research Service*. January 21, 2011.

1. Meet national security and homeland security needs relevant to the Arctic region.⁵⁵

More controlled access to the Arctic environment and fewer allowances of activities risky to the environment would decrease the high level of security required to govern the Arctic. Additionally, the willingness of the United States to dedicate forces to the North could be shifted in focus to enforce the MPA while ensuring general security.

2. Protect the Arctic environment and conserve its biological resources.
3. Ensure that natural resource management and economic development in the region are environmentally stable.

Both of these policy points share in the goal of the proposed MPA. The protection of the environment as a policy priority is not something that is omitted from any of the countries' official publications, and this is telling to the internationally recognized need for significant measures in environmental protection.

4. Strengthen institutions for cooperation among the eight Arctic nations (the United States, Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, and Sweden).
5. Involve the Arctic's indigenous communities in decisions that affect them; and
6. Enhance scientific monitoring and research into local, regional, and global environmental issues.

These policy initiatives resonate through each country's official policy, and are no different for the United States. Despite these echoes, there is much that is unique to the US policy. The Arctic Council is directly referenced as the premier authority on Arctic issues. US-specific

⁵⁵ "National Security Presidential Directive and Homeland Security Presidential Directive." NSPD-66, HSPD-25. January 9, 2009. President George W. Bush. <http://www.fas.org/irp/offdocs/nspd/nspd-66.htm>.

territorial issues are addressed and US willingness to peacefully and quickly resolve those issues is promoted. Besides these country-specific details, the overall policy is in line with the rest, and it would not be outlandish to place high probability on US acceptance of the proposed Ocean-wide MPA.

Conclusion

There is no specific policy point in any of the included nations that could be used as a basis for completely disregarding the proposal of an Arctic Ocean marine Protected Area. Despite this fact, there is still difficulty in convincing Arctic nations to hand over proportions of their sovereignty for the sake of ensuring preventative environmental measures. All put environmental policy at the forefront of their national policy.

What will surely be a source of issue with the proposed MPA is the assumption that MPA means no access, no drilling, and no travel. It is vital to emphasize that the MPA proposed will allow for all of that to take place, and that the protected status of the Arctic will need to underlie all Arctic endeavors. Current policies already have conditions for this, but by applying the MPA to the whole ocean will require what is now only promised compliance.

One alternative to this would include a network of MPAs, coordinated from the top-down and used to completely cut off certain areas from human use in order to protect them. This network will require a complex governing structure and would add difficulty to navigation, as a small and isolated MPA would act as a pothole in large scale navigation. Additionally, preserving pockets but exploiting the rest of the Arctic vastness would do nothing to “cancel out” the harmful effects. Pollution spreads and damage is permanent.

An additional alternative is to enact environmental restrictions on shipping, to introduce regulations on drilling, and limiting fishing, but these are the same legal structures

that have governed the rest of the oceans for decades, and the degradation due to noncompliance is vast.

Current military regime presence in the Arctic already lessens the cost of enforcement of the proposed MPA, and indigenous volunteers provide much needed local enforcement capabilities. The Arctic MPA would rely on local enforcement as opposed to national or international enforcement because localities can best identify their specific needs and take appropriate actions to address those needs. In terms of Arctic MPA enforcement, it is in their cultural and economic interest to take part in MPA enforcement, and will be the most important players in maintaining Arctic protection.

The five coastal Arctic nations should realize that their policies already promote a marine protected area, and that if they officially enact one, they will have much more control over external actors trying to enter the Arctic resource race, and will be able to preserve their environments and indigenous cultures. This proposal is beneficial to all, and the costs in regulation translate into more positive and sustainable Arctic development for the future. By marking the Arctic Ocean an MPA, the symbolism will drive the importance of environmental protection to the top of decision-maker priority lists. The proposed MPA is not the type of MPA to restrict all access, all fishing, and all drilling, but it will serve the purpose of giving localities and nations to claim their rights to an ecologically stable environment in a place that is becoming more and more important. A protected Arctic will not undo the destruction of other oceanic areas, but it will lay the groundwork for more extensive protectionary measures. The Arctic is the last untouched area of the Earth; humankind must realize past mistakes and take action to prevent damage when there is such great opportunity to be proactive. Humanity's impact on the environment has proven to be great, and it is our responsibility to stop acting as though our conduct held no consequences. We are witnessing those consequences now, and should work to change our ways.

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