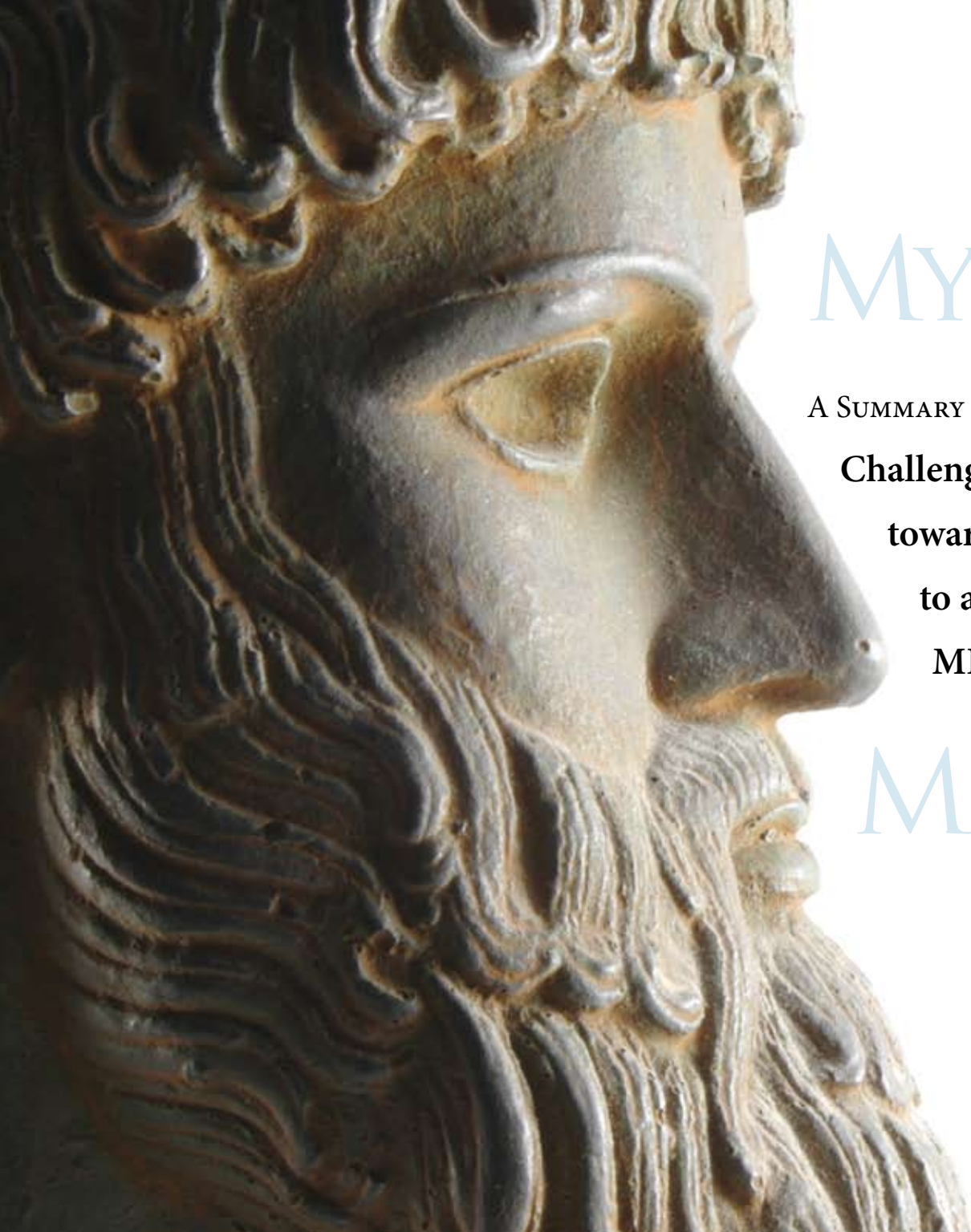




MYTH AND MADNESS: CONQUERING THE TRAGEDY OF MARINE PROTECTION IN CANADA



# MYTH AND

A SUMMARY OF THE CPAWS REPORT:

**Challenges and Opportunities**

**towards Canada's Commitment**

**to a National Network of**

**MPAs by 2012**

# MADNESS



**Myth:** Canada's commitment to a network of Marine Protected Areas by 2012.

With just 0.5 percent of Canada's waters protected and no clear plan for the future, Canada's MPA network remains a tragic myth.



**Madness:** Canada continues to pillage unprotected waters, potentially destroying the resource.

Overfishing. Pollution. Heavy industry. Ecosystem destruction (bottom trawling). Climate Change. Canada hurts its oceans and freshwaters more than it protects them. It's not sustainable.



**Heroes:** In ancient times, the Greeks and Romans created powerful Gods to protect the world's waters.

But the world can't rely on Neptune or Poseidon today. We need mortal heroes—mighty politicians and government officials who can stop the madness, turn a myth into reality and finally create Canada's promised network of MPAs.



**Hope:** The following pages provide a blueprint for the creation of an MPA network—still possible by the 2012 deadline, with the help of some mortal heroes in government.

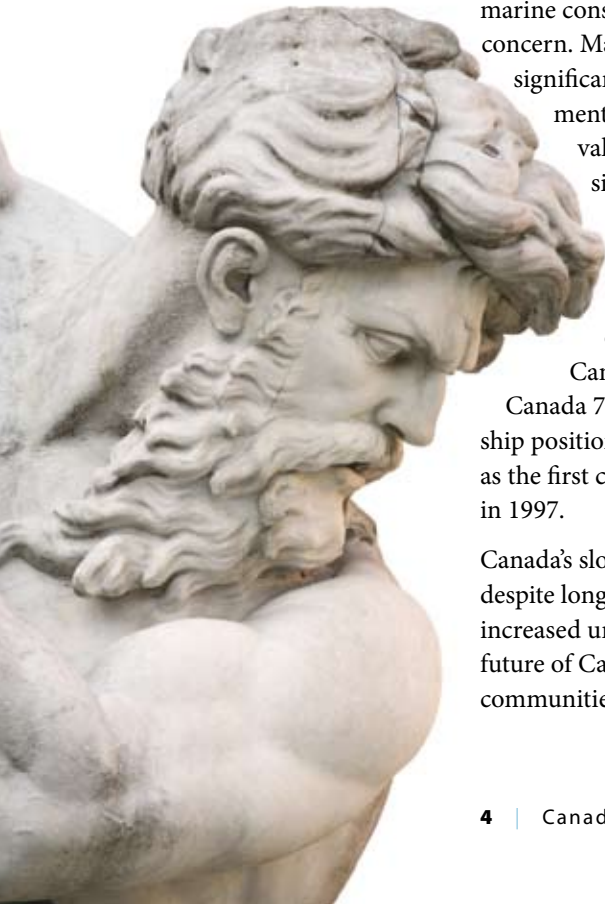
These recommendations by the Canadian Parks and Wilderness Society detail the challenges, opportunities and steps forward to create a national network of marine protected areas.

**Marine Protected Area:** a section of water off-limits to major industry like mining, seismic testing and bottom trawling. With low impact from humans, MPAs support healthy ecosystems where biodiversity can flourish and fish stocks can replenish.



## A National MPA Network for Canada by 2012 – How do we turn myth into reality?

*Neptune, the Roman God of  
the sea, freshwater and horses.  
Could mighty Neptune create a  
network of MPAs?*



### SUMMARY

As the planet's oceans strain from human excesses, marine conservation cements its place as a top global concern. Marine Protected Areas (MPAs) remain a significant part of the solution. Scientists and governments around the world recognize the critical value of Marine Protected Areas (MPAs), signing internationally-binding agreements to complete national networks of MPAs.

Despite multiple national and international commitments, Canada falls behind many other countries in the world. Only 0.5% of Canada's oceans are protected, which places Canada 70<sup>th</sup> in the world<sup>1</sup>—certainly not the leadership position on oceans that Canada attempted to stake as the first country to pass a comprehensive Oceans Act in 1997.

Canada's slow progress towards a national MPA network, despite longstanding commitments and in the face of increased urgency, is puzzling and dangerous for the future of Canada's marine environments and communities dependent upon them.

Habitats, species, and resource harvesting opportunities are being lost in the face of over-fishing, industrial development, pollution and climate change. As human uses of the oceans intensify, the task of creating an MPA network in Canada will become more difficult. The costs of completing the network will continue to escalate, while opportunities decline. And as ocean ecosystems become steadily more degraded, more severe and extensive conservation measures will be needed.

All of these factors converge to make more rapid progress towards the completion of an MPA network in Canada a vital and pressing need. Accordingly, the Canadian Parks and Wilderness Society (CPAWS) has assessed the challenges which are delaying Canada's progress towards its international commitment to establishing a network of MPAs by 2012, and has identified opportunities for reaching the 2012 goal. Our findings are detailed in the main report *Challenges and Opportunities in Progress towards Canada's Commitment to a National Network of MPAs by 2012*.<sup>2</sup> This booklet presents a summary of our key findings and recommendations.

**CPAWS recommendations for Canada's next steps**

- Establish an Oceans task force to review Canada's overall management of oceans
- Set clear, high level direction for achieving the 2012 target and ensuring the requisite allocation of resources
- Ensure that the federal agencies with MPA responsibilities are working in an effective and coordinated way to achieve the target
- Draw on international best practices for implementing national MPA networks
- Develop a combined national and regional approach that involves provinces, territories, aboriginal organizations, conservation organizations and communities in achieving the national network
- Provide interim protection for areas of known biodiversity value while the network planning process is underway
- Improve relationships with aboriginal governments and organizations
- Hold a national level dialogue on Canada's national MPA network involving ENGOs, research organizations, provinces, territories, First Nations and stakeholders

**Canada's challenges: policies and people delaying a 2012 target**

- Lack of political will and priority on oceans issues by the government of Canada
- Lack of a plan to meet the 2012 commitment
- Ineffective and poorly coordinated federal approach

- Cumbersome and lengthy processes to designate MPAs.
- Jurisdictional disputes between federal and provincial governments
- Complex relationships between federal agencies and aboriginal governments and organizations

**Canada's assets: opportunities for greater progress**

- Canada has the legal tools and federal strategy for MPAs
- Over the last decade, Canada has gained valuable experience through pilot studies that provide a foundation for future efforts.
- Canada has begun broader oceans management planning processes that could facilitate the establishment of MPA networks on each coast.
- Sites established to date provide the building blocks toward a completed national network of MPAs.
- International best practice has identified effective approaches to MPA network development
- Public support for MPAs is strong in Canada and the public expects governments to complete this task.
- Provincial governments across Canada are showing increasing interest in working with the federal government to establish MPA networks on their coasts.

*Marine Protected Areas help protect marine biodiversity, like the 3000 species of nudibranch worldwide.*



*"Serious issues of leadership and governance must urgently be addressed if Canada is to ensure the conservation of biodiversity in ocean ecosystems."*

# MYTH AND MADNESS

## Importance of Oceans and MPAs

The world's oceans cover 70% of the surface of the earth. Oceans support all life on earth by producing half the world's oxygen. An incredible array of lifeforms, great and small, inhabit global waters from surface to bottom to shore. Canada's ocean environments—the Arctic,



*An international effort is underway to protect humpback whales. MPAs help migrating species find sanctuary.*

Atlantic and Pacific Oceans—support unique communities of life, including important populations of seabirds, whales, fish and pinnipeds.

The Commissioner of the Environment and Sustainable Development noted in 2005 that:

*“Canada’s oceans area is an important legacy of natural capital for future generations. Over 20 percent of Canadians live in coastal communities, and our oceans are an important source of food, transportation, recreation, and natural resources for all Canadians. The federal government has a clear responsibility to provide the careful management necessary to protect and develop Canada’s vast ocean spaces and resources.”*<sup>3</sup>

However, no matter where you look, ocean ecosystems are under threat from a variety of human activities, including overfishing, destructive fishing methods, habitat destruction, pollution and climate change.

All recent evidence on the state of the world's oceans shows serious declines, including the most recent study that shows 40% of world's oceans as heavily impacted by humans, with only 6 % remaining pristine.<sup>4</sup>

These impacts have serious consequences for the web of life in the oceans and for the coastal communities dependent upon them. Canada is no stranger to the heartbreaking social and economic costs borne by local people, as witnessed by the collapse of the Atlantic cod on the East Coast.

Better oceans management, including stronger protection of marine ecosystems, is critical in Canada and elsewhere. Scientists around the world point to Marine

### Canada's commitments to MPAs: international and national

#### At the international level:

- World Summit on Sustainable Development in 2002
- World Parks Congress 2003
- Convention on Biological Diversity 2004

#### At the national level:

- Statement of Commitment to Complete Canada's Networks of Protected Areas 1992
- Canada's Ocean Strategy 2002
- Canada's Oceans Action Plan 2004
- Federal Budgets in 2005 and 2007

Protected Areas as part of the solution to conserving marine life and habitat in our oceans.

The scientific literature is increasingly definitive regarding the effectiveness of MPAs in enhancing marine ecosystems and protecting species and habitats. The research also shows that MPAs increase the density, biomass, individual size, and diversity of organisms protected in MPAs, including many species valued for fisheries. These benefits are most clearly realized in marine reserves or MPAs where no fishing is allowed.<sup>5</sup> In addition, MPAs rebuild ecosystem resilience, safeguard against management uncertainty and establish a benchmark for sustainability.<sup>6</sup>

In an era of increasing concern about the impacts of climate change, scientists continue to call for measures to ensure the resilience of marine ecosystems that will help them resist these impacts. Marine protected areas are a key part of this solution.<sup>7</sup>

### What are MPAs?

There are a wide variety of definitions for both MPAs and MPA networks in use around the world. CPAWS defines MPAs as follows:

*MPAs are areas legally designated to provide long term protection of marine ecosystems, processes, habitats and species including marine biodiversity, and which can contribute to the restoration and replenishment of resources for social, economic and cultural enrichment.*

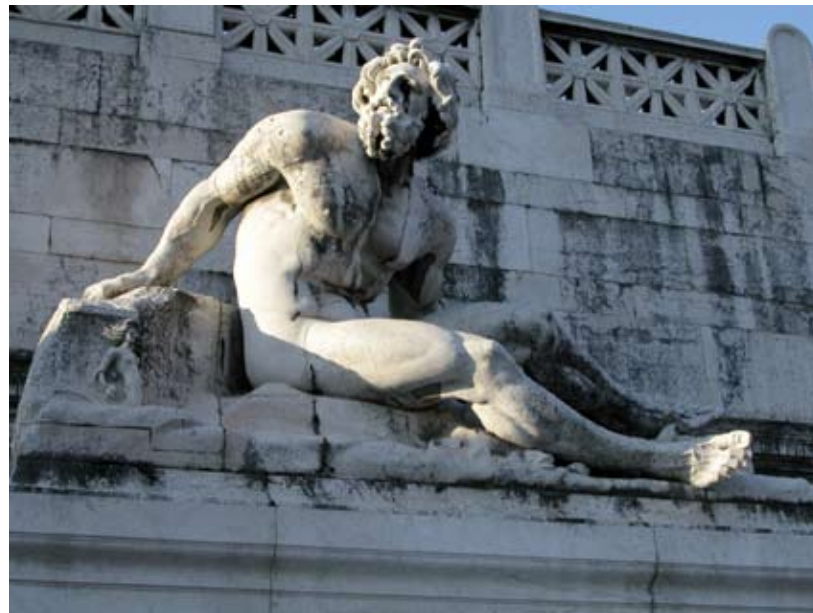
Governments continue to grapple with what activities should NOT be allowed in all MPAs, in order to ensure that the marine habitats and species are adequately protected. CPAWS, along with other conservation

organizations, believe that the following activities are incompatible with achieving the conservation objectives of MPAs.

*Activities which cause long term or large scale disruption to ecosystem structure and function should be prohibited in all MPAs. These activities include mining, seismic surveys for hydrocarbon reserves, exploratory drilling, oil and gas development, dumping, use of bottom impacting fishing gear, and open-cage finfish aquaculture.<sup>8</sup>*

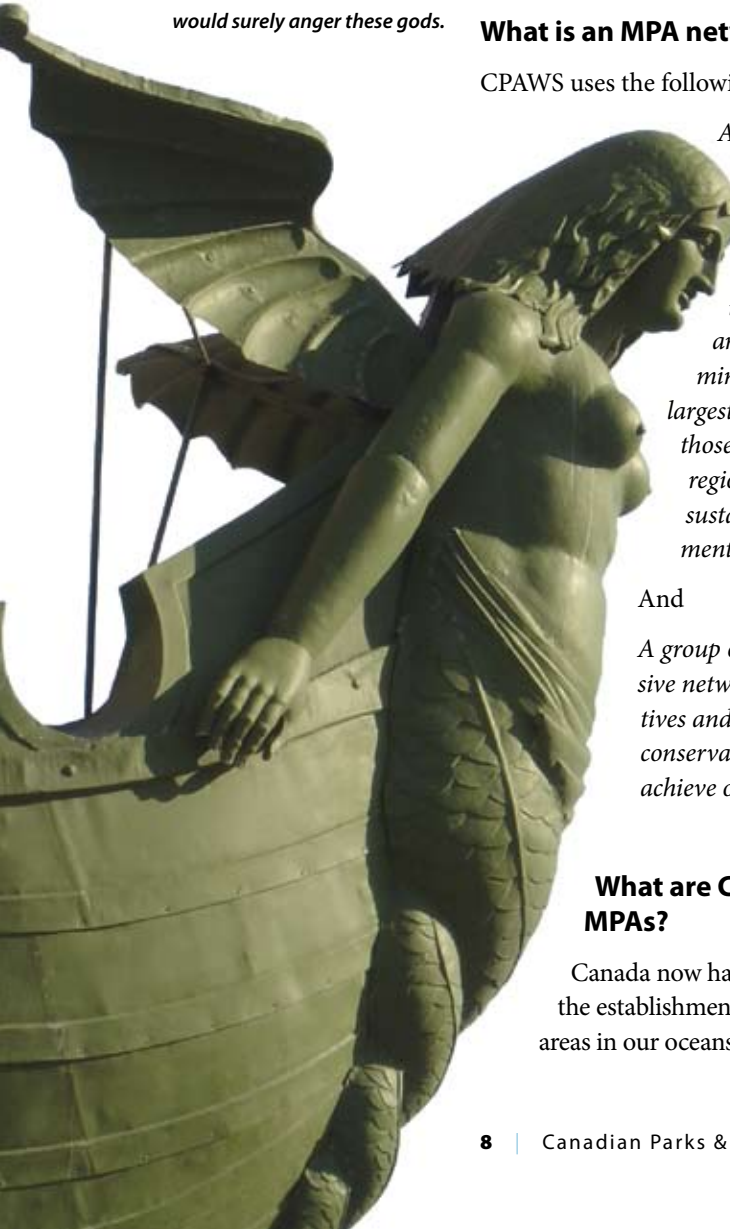
Marine protected areas range from sites that are fully-protected from all threats to multiple-use MPAs which may allow the use and removal of resources, as long as the ultimate conservation goals are not compromised. An effective design for MPAs being used in many places in the world, such as the Great Barrier Reef Marine Park (also the basis of National Marine Conservation Areas

*Canada's commitment to a network of marine protected areas by 2012 dates back to 1992 with the Statement of Commitment to Complete Canada's Networks of Protected Areas. Canada reiterated this commitment in 2002, 2003, 2004, 2005 and 2007.*



*In ancient times, oceans had little impact from humans. Today, alarming reports circle the globe of overfishing and climate change impacts.*

*Long ago, ships could only find safe passage if allowed by the ancient sea gods. Today, the destructive amount of ship traffic would surely anger these gods.*



in Canada), actually marries the two concepts together. **Large-zoned MPAs** integrate fully protected zones into a larger, multiple-use MPA.

## What is an MPA network?

CPAWS uses the following formal definitions:

*A proper national or regional network of MPAs must consist of multiple sites with replicates of all habitat types that are oceanographically connected; individually or in aggregate they are of sufficient size to sustain minimum viable populations of the largest species in a region (including those of seasonal migrants to the region) and their resident species can sustain their populations by recruitment from one MPA to another.<sup>9</sup>*

And

*A group of MPAs that functions as a cohesive network and is designed to meet objectives and achieve comprehensive regional conservation that single MPAs cannot achieve on their own.<sup>10</sup>*

## What are Canada's legal tools for MPAs?

Canada now has a suite of legal tools that enable the establishment of different types of protected areas in our oceans.

Although Marine Protected Areas or MPAs is used worldwide as a blanket term for all of the following, Canada's federal departments use some different terminology.

Fisheries and Oceans Canada: creates "Marine Protected Areas" under the *Canada Oceans Act*

Parks Canada: creates "National Marine Conservation Areas" or "NMCAs" under the *Canada National Marine Conservation Areas Act*

Environment Canada: creates "Marine Wildlife Areas" or "NWAs" under the *Canada Wildlife Act*; creates "Migratory Bird Sanctuaries" under the *Canada Migratory Bird Sanctuaries Act*

In Canada, under the constitution, the federal government has authority for navigation, shipping and fisheries and generally over marine waters and the animals that live in them. Provinces retain authority over marine plants and ownership of the seabed in internal waters. Defining these inland waters is not complete for all coastal areas and disputes remain between the federal and provincial governments. Some provinces have also passed specific legislation for marine protected areas in provincial waters.

## What has Canada achieved on MPAs?

Canada oversees a vast ocean territory of 5.87 million square kilometres—more than half of our land mass and one of the largest ocean areas in the world. So far, about 2.7 million hectares or 2700 square kilometres is currently in some form of federal marine protected area status. While this may appear to be a significant area, it amounts to only 0.5% of Canada's total ocean area. Given

**Table 1: Number and area of federal marine areas protected in Canada<sup>11</sup>**

| Administrator                 | Type of MPA                               | No. of Marine Areas | Approximate MPA size (ha) |
|-------------------------------|---|---------------------|---------------------------|
| Parks Canada                  | National Marine Conservation Area         | 1                   | 11,500                    |
| Parks Canada                  | National Park (Marine Portion)            | 15                  | 716,305                   |
| Joint Parks Canada/<br>Québec | Saguenay – St. Lawrence Marine Park       | 1                   | 113,800                   |
| Environment Canada            | National Wildlife Area (Marine Portion)   | 13                  | 152,317                   |
| Environment Canada            | Migratory Bird Sanctuary (Marine Portion) | 51                  | 1,417,145                 |
| Fisheries and Oceans          | Marine Protected Area                     | 6                   | 255,160                   |
| <b>Totals</b>                 |   | <b>87</b>           | <b>2,666,227</b>          |

*Marine protected areas help safeguard productive underwater ecosystems, like coastal kelp forests.*

that Canada has been working on MPAs for over 20 years, there should be more to show.

**How does Canada compare with other countries on MPAs?**

Canada’s MPA system ranks among the least advanced, when compared to other countries efforts. Based on a global review, Canada stands at 70<sup>th</sup> place among 228 countries in the establishment of MPAs.<sup>12</sup> In a recent Yale and Columbia Universities environmental performance index, Canada scored 5% out of 100 for its establishment of MPAs, while the average score for other countries in the same income group was 38.6%.<sup>13</sup>



## ASSESSMENT OF MPA PROGRESS IN CANADA



*Global concern mounts for the world's coldwater corals, like this gorgonian coral found in BC waters.*

The primary source of information for our study was interviews with people working on MPAs in every region of Canada, with a focus on trying to understand the challenges to MPA establishment from an “inside government” perspective. As a result, more than half of the interviewees were in federal agencies, with 13% from provincial agencies and the rest from ENGOs. Regardless of the affiliation of interviewees, the diagnoses of challenges and opportunities were remarkably similar.

Currently, the approach in Canada to the establishment of MPAs is on a site-by-site basis, and it generally takes between 6 and 10 years from idea to final designation for each MPA.

The pace of MPA establishment in Canada was described

by interviewees as: “very disappointing”, “not good”, “barely perceptible”, “too slow”, “very much too slow”, “far too slow”, “absolutely, abysmally”, “ridiculously”, “excruciatingly” and “embarrassingly” slow. Canada’s Commissioner of the Environment and Sustainable Development agreed in her report in 2005, where she reported on the “lack of progress on a national system of marine protected areas.”

Given the limited progress to date and the ineffective existing process to establish MPAs, meeting the commitment of a national network of MPAs by 2012 will be a major challenge for Canada. We have examined the principal challenges, identified some key opportunities for future progress, and made specific recommendations that would help Canada achieve the national network of MPAs that has been promised for so many years.

*A Naiad or water “nymph” clutches the winged horse Pegasus. The sea god Poseidon fathered Pegasus.*





*Terrestrial ecosystems, like Pacific Rim National Park Reserve, have great champions in government. Marine ecosystems, though hidden from human view, need to spark the same enthusiasm.*

## CHALLENGES

Key **challenges** that are standing in the way of meeting the 2012 target are described below.

### **1 – Lack of political will and priority on oceans issues by the government of Canada**

Development of a national MPA network for Canada will be difficult as long as oceans issues are not a priority for the government of Canada. Without political champions for the oceans in Canada, oceans may continue to

languish on the list of government priorities. The lack of priority is reflected in insufficient allocation of staff and funding across the agencies with oceans and MPA responsibilities. The resource limitations also affect the pace of progress on the national MPA network.

One of the key findings of the Commissioner for the Environment and Sustainable Development in her 2005 assessment of the implementation of Canada's Oceans Act was that the government of Canada had not made oceans issues a national priority. In her view, this



contributed to DFO's inability to meet the promise of the Oceans Act.<sup>14</sup> Interviewees for this study considered this situation to remain largely unchanged. This is in part reflected in the relatively small budget allocations that have been made since 2005. After the Oceans Act was passed, it was 8 years before new funding was allocated for its implementation. In 2005, \$28.4 million over two years was allocated broadly across for oceans issues. In 2007, the budget allocated \$61.5 million over five years, of which about \$20 million is for MPAs in Canada.<sup>15</sup> Given the scale of the issues in the marine environment, and the size of Canada's ocean space, these allocations are quite meager. By way of comparison, financial and staff resources for MPA programs amount to roughly 1% of the amount spent on terrestrial protected areas programs.<sup>16</sup>

## 2 – Lack of a plan to meet the 2012 commitment

Canada does not have a plan for completion of a national MPA network. Such a plan needs to include specific timelines and milestones to measure progress along the way and to provide incentives subsidiary to that provided by the end target date. Canada's Oceans Agenda has only broad level targets and the federal MPA Strategy has no timelines or clear outcomes. The approach to date in Canada is to work in a very linear sequence—pick a few sites at a time, work on them individually for many years, and eventually complete them, often after more than seven years of work. There continues to be a lack of urgency, clarity, definitions or vision of what is required in an MPA network or what the 2012 target really means, including “how much is enough?” and “what counts” towards the network.

The lack of a national level systematic planning approach for a network of MPAs leads to a variety of risks flowing

from an ad hoc or opportunistic approach.<sup>17</sup> The National Roundtable on the Environment and Economy stated that: “The lack of a national coordinated plan for MPAs has led to uncertainty among resource users that in some cases has translated into fear and diminished support for conservation initiatives.”<sup>18</sup>

Critical tools have been lacking in Canada, where commitment tends to be expressed as sweeping, large scale declarations followed by tentative forays into possibilities, rather than diligent implementation of publicly declared actions and adherence to deadlines.

*“A common shared vision of what do we want to achieve needs to be bought into by government, industry, by the ocean community. Without this we stagger along the path of least resistance. Trying to tiptoe through this is so typically Canadian.”*

### 3 – Ineffective and poorly coordinated federal approach

Our research found that other responsibilities of each agency took priority over MPAs—for Fisheries and Oceans Canada it is fisheries management, and for both Environment Canada and Parks Canada Agency it is their respective terrestrial programs. Some question whether the federal government is currently structured in a way to effectively deal with oceans issues broadly and marine protected areas specifically.

The Commissioner of the Environment and Sustainable Development identified DFO’s dual mandate as an impediment to leadership on oceans issues in her 2005 report:

*“Is the Department, through its Oceans Directorate, properly structured to play this leadership role? Can a department that has historically dedicated most of its resources*

*to managing one of the key ocean-sector industries—the fishery—transform itself to represent and integrate a broader oceans interest? These are difficult questions that must be answered.”*<sup>19</sup>

Worse than not leading, some feel DFO even gets in the way of the MPA initiatives of the other two agencies as it prioritizes service to its clients in the fishing industry.

If Fisheries and Oceans Canada’s “juggernaut” is fisheries, Parks Canada Agency’s is the terrestrial national parks program. This is despite the fact that a marine orientation is not completely new to Parks Canada since it manages marine areas around some terrestrial parks, and now has responsibility for the *National Marine Conservation Areas Act* that gives the agency a clear mandate for establishing MPAs. Parks Canada has an advantage over the other federal agencies in having an NMCA system plan, which lends it a uniquely proactive attitude towards the establishment of protected areas. However, to date, these advantages have not resulted in the kind of progress needed on NMCAs.

Under the *Canada Oceans Act* Fisheries and Oceans Canada has the mandate to lead and coordinate the development of a national system of MPAs. However, most observers agree that the department is not fulfilling this role for a variety of reasons that include insufficient expertise in conservation, internal structural and staffing issues, and lack of vision and political will. Interagency challenges seriously compromise progress, and effective coordination of government programs is lacking. Symptoms include inconsistent communication and collaboration, and “silo” behaviour expressed in unilateral approaches.

*No federal department has embraced the marine conservation mandate with enthusiasm or made completing a national MPA network a priority.*

#### **Opposite page:**

*Neptune’s fountain in Madrid. Neptune used his trident to make new bodies of water and start earthquakes. He had powers to create and destroy.*



*Once slaughtered to near extinction, sea otters disappeared from Canadian waters for several decades. Due to a successful reintroduction, some 3200 sea otters now thrive off the west coast.*

#### 4 – Cumbersome and lengthy processes to designate MPAs

Getting an MPA network implemented depends on getting its component MPAs designated. In Australia, two years is considered a long period from identification of an MPA candidate site to the legal establishment of the MPA. Federal government officials in Canada stated that the most optimistic timing from announcement to establishment of MPAs is 6-7 years, and 10 years was not unexpected. And there are sites, like Gwaii Haanas on the Pacific Coast and Igalirtuuq in the Arctic, that have still not been completed after 20 years.

Officials agree that the lengthy time frame for MPA designation is a serious problem. They attribute it to the complexities of the process and the resources available. The various elements of the process include: data gathering, mapping, defining boundaries, internal government reviews, public consultation, and regulatory and parliamentary approval processes. Each step along the way can result in delays.

Quantifying the values of MPAs, considering socio-economic impacts, weighing economic tradeoffs and/or realizing sustainable development priorities, are time-consuming processes in the establishment process. The Canadian protected area status report stated that competing interests in oceans use are the most severe constraint on MPA networks.<sup>20</sup> The degree of potential impact on access to fisheries and energy resources is a key determinant of how much time and effort is required to achieve MPA establishment.

The most frequently identified cause of slow progress on MPA designation is the time and resources required by the respective agencies to consult the public, communities and stakeholders. Many observers suggested that

agencies focused on appeasing local stakeholders thereby sacrificing the interests of a broader range of stakeholders and the agencies' broader social responsibilities. As a former DFO employee asserted: "The Department wouldn't go ahead with an MPA designation until all of the stakeholders were fully supportive, which in many areas simply isn't realistic."

Rather than demonstrating leadership to ensure a healthy marine environment for the future, DFO is viewed as giving power to stakeholders to drive and sometimes halt the process. The standard of full consensus or virtually unanimous support for an MPA proposal is too high—it is a target that is not realistic or achievable. Even the most collaborative approaches should not be expected to achieve full agreement.

There are serious costs of the slow pace of MPA establishment in Canada. The probability of the following issues all increase over time: loss of momentum, dropping off of interest, changes of personnel and participants leading to discontinuity in trust and relationships, breakdown of agreement/consensus, frustration, loss of commitment, fatigue, missed opportunities, increasing costs, discouragement among supporters, fear caused by uncertainty, increase in opposition and spread of misinformation. ***Most importantly, under-utilization of this essential conservation tool means that the integrity of the marine environment continues to be compromised by myriad threats.***

#### 5 – Jurisdictional disputes between federal and provincial governments

Canada's coastal regions are very different from each other and dovetailing the provincial agendas and priorities with government of Canada priorities is challenging.

In order to establish federal MPAs, the three federal agencies must cooperate with provinces to apply an appropriate array of protective measures in an individual MPA, and, ideally, in a network of MPAs. In addition, provinces can and have applied various provincial measures to protect areas in the oceans.

In the marine environment, federal-provincial interactions take on a level of complexity that is not usually seen on the terrestrial side. The high levels of cooperation required to resolve jurisdictional issues, align regulations and coordinate system planning depend on positive federal-provincial/territory relations—apparently an elusive situation in Canada.

Virtually all observers agree that the time and effort necessary to foster agreements between the provincial and federal governments is a central reason it has taken a long time to achieve MPAs in Canada.

*“Every time we get close, the Province or Federal Government or First Nations puts the kibosh on it—it’s a lack of political leadership to say ‘we’re doing this’. It depends on the day of the week as to which government is saying, ‘I can’t do this right now.’”*

### **6 - Complex relationships between federal agencies and aboriginal governments and organizations**

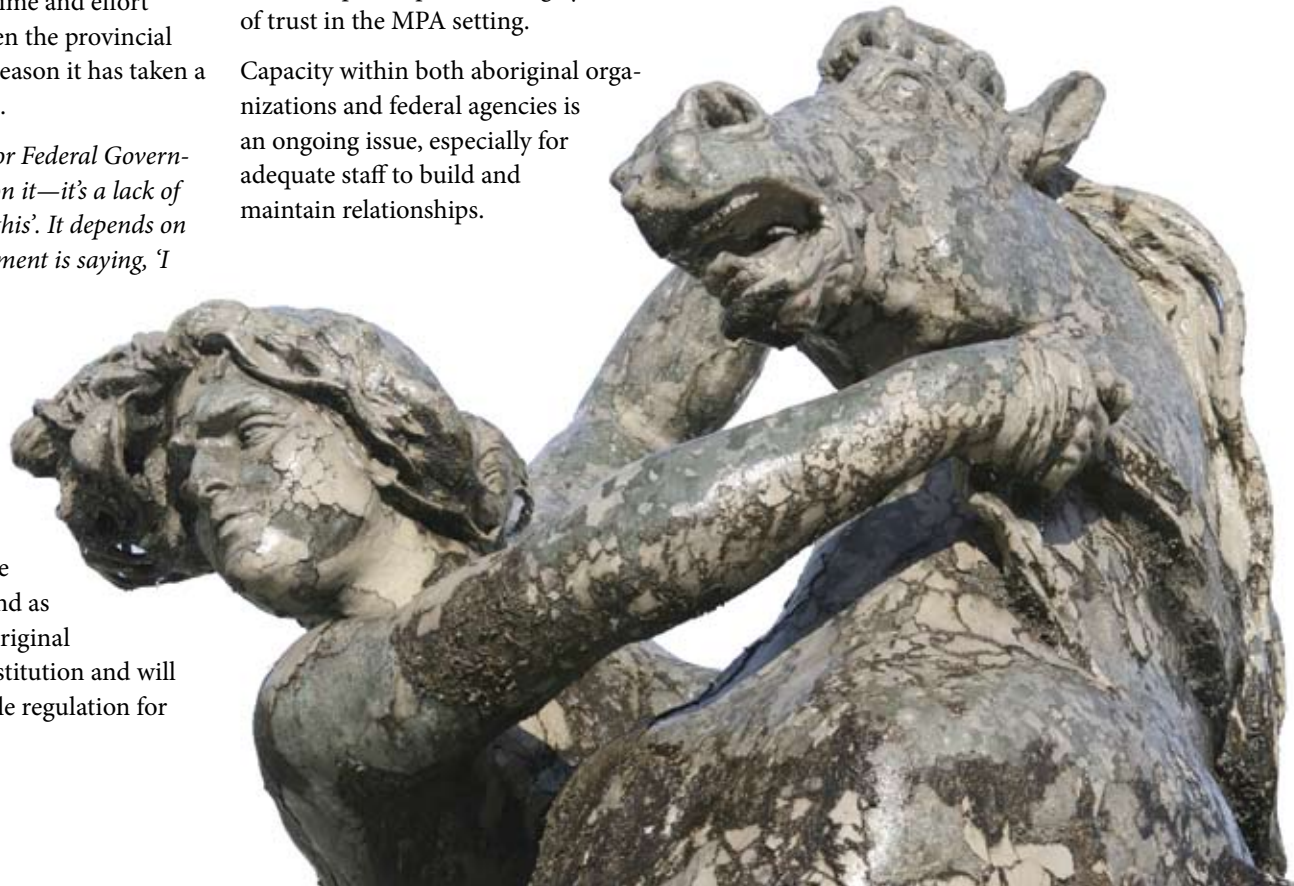
Aboriginal people in Canada, especially those in coastal areas, have strong connections with the ocean as stewards of ocean resources since time immemorial for future generations, and as individual users of the resources. Aboriginal rights to fish are protected by the constitution and will continue in MPAs, subject to justifiable regulation for

conservation purposes. Aboriginal assertions of title and jurisdiction over marine areas reinforce the need for consultation, accommodation and cooperation in selecting, designating and managing MPAs. In areas with treaties and/or land claim settlements, any MPA agenda has to dovetail with and be implemented by or connected with the implementation of the agreements.

Working with aboriginal governments and organizations in MPA planning is complex and essential. Some government agencies have more developed policies and more extensive experience in engaging aboriginal governments and organizations. For example, Parks Canada has experience through their work on national parks. The nature of past experience largely determines the level of trust in the MPA setting.

Capacity within both aboriginal organizations and federal agencies is an ongoing issue, especially for adequate staff to build and maintain relationships.

*The nymph of the oceans rides a horse on the Fountain of the Naiads in Rome.*





## OPPORTUNITIES

We see many opportunities on which to build and make more progress on a national network of MPAs for Canada.

### **1 – Canada has the legal tools and federal strategy for MPAs**

Canada has four legislative tools and three federal agencies with the responsibility for implementing MPAs. These are Marine Protected Areas under the *Canada Oceans Act*, National Marine Conservation Areas under the *Canada National Marine Conservation Areas Act*, Marine Wildlife Areas under the *Canada Wildlife Act*, and Migratory Bird Sanctuaries under the *Migratory Birds Convention Act*.

In addition to these individual programs, in 2005, the three federal agencies jointly released the Federal Marine Protected Areas Strategy that includes broad objectives for a MPA network for Canada. While this strategy is seen as a good start to “getting the federal house in order”<sup>21</sup>, more coordination is needed to meet the 2012 commitment.

### **2 – Canada has gained valuable experience through pilot sites that provide a foundation for future efforts**

Over the past decade or so, the federal agencies have gained experience on the establishment of MPAs, with new legislation and programs. Policies, action plans and frameworks have been developed, as has experience working with protected areas in the marine environment. This experience varies across agencies and regions of the country. A deliberate, adaptive management approach is leading to increased effectiveness and capacity, although the agencies are still solidifying the lessons learned from experience to date.

**Where do the federal agencies anticipate being in 2012? (Landry et al. 2007)**

| Federal Agency              | Current Status  | By 2012   |
|-----------------------------|---|---|
| Fisheries and Oceans Canada | <ul style="list-style-type: none"> <li>• 6 MPAs</li> <li>• 4-5 proposed MPAs in progress</li> <li>• 6 new sites to be identified</li> </ul>                       | <ul style="list-style-type: none"> <li>• 16-17 MPAs</li> </ul>  |
| Environment Canada          | <ul style="list-style-type: none"> <li>• No Marine Wildlife Areas</li> <li>• 64 “marine” National Wildlife Areas and Migratory Bird Sanctuaries</li> </ul>        | <ul style="list-style-type: none"> <li>• 1 MWA</li> <li>• 64 NWAs/MBSs + 4 new “marine” NWAs</li> </ul> |
| Parks Canada                | <ul style="list-style-type: none"> <li>• 2 National Marine Conservation Areas</li> <li>• 4 proposed NMCAs in progress</li> <li>• 1-3 proposals pending</li> </ul> | <ul style="list-style-type: none"> <li>• 6-9 NMCAs</li> </ul>   |

**Opposite page:**

*Puffins, like other seabirds, depend on healthy marine ecosystems for survival. BC’s most important seabird colony on the Scott Islands desperately needs an MWA.*

**3 – Sites established to date provide the building blocks toward a national network of MPAs**

Canada has now designated sites within each of the three federal main MPA programs. As shown in the table above based on currently designated sites, together with those in process and new announcements, a total of 95 sites could be designated by 2012. While this forecast by the three federal agencies will likely only achieve between 17% and 33% of the required network by 2012,<sup>22</sup> these sites do represent key building blocks in the overall national MPA network.

**4 – Canada has begun broader oceans management planning processes that could facilitate the establishment of MPA networks on each coast**

Integrated oceans management planning currently underway in five large ocean management areas (LOMAS) in Canada offers opportunities for planning MPA networks on a regional scale. While there is some concern that these processes are also making slow progress and could delay the process for MPA network estab-

lishment, they do provide opportunities for planning networks within a broader ecosystem-based management approach that brings together the requisite stakeholders and interests and applies a scientifically rigorous framework. Interim protection of high value ocean areas could be a key mechanism for ensuring that conservation values are not lost while the planning process is underway. Issues still need to be resolved regarding how integrated management planning processes will interface with the MPA planning for all federal agencies.

**5 – International best practice has identified effective approaches to MPA network development**

Globally, there is increased recognition of the need to work on networks of marine protected areas. Canada can draw on experience and knowledge from around the world to develop a process for achieving a national MPA network. In countries like Australia and New Zealand, national processes to advance such networks are in place, and the IUCN (the World Conservation Union) has recently published a best practices report on implementing networks of MPAs.

*Financial and staff resources for MPA programs amount to roughly 1% of the amount spent on terrestrial protected areas programs.*

# MYTH AND MADNESS

*Neptune rides a shell chariot atop the Trevi fountain in Rome. His myth endures, but will his healthy waters survive?*



## **6 – Public support for MPAs is strong in Canada and the public expects governments to complete this task.**

The Canadian public strongly supports the establishment of marine protected areas.

Polling conducted in 2002 on the East Coast and in 2001 on the West Coast demonstrated this strong public support. In Atlantic Canada, 73% of respondents supported the need for fully protected or “no-take” MPAs. They also believed that the Canadian government had already protected 20-30% of Canadian waters.<sup>23</sup> In BC, 75% of those polled supported the establishment of MPAs. The poll also showed that the existing system of marine protected areas fell far short of British Columbia’s expectations. When asked how much of British Columbia’s ocean is fully protected from all non-renewable resource development activities, respondents believed an average of 16% to be fully protected.<sup>24</sup>

## **7 – Increasing provincial interest in MPAs on their coasts**

Across the country, provinces are showing increasing interest in establishing MPAs on their coasts and in working with the federal agencies toward the establishment of a national MPA network. British Columbia has signed a memorandum with the government of Canada on oceans issues that includes a sub-agreement on MPAs that is awaiting final signoff. Newfoundland and Labrador is also working on a new oceans policy framework and Quebec has recently engaged stakeholders in discussion on MPAs.

Some provinces have also designated protected areas in the oceans that contribute to a national MPA network. In British Columbia, 150 protected area sites have a marine component, many of which have important conservation values.



*Canadians support marine protection. It's time for governments to respond to the urgent need.*

## RECOMMENDATIONS

Our key recommendations for Canada to achieve a national network of MPAs are:

### **1 – Establish an Oceans Task Force to review Canada's overall management of oceans**

Given that Canada's overall management of oceans issues has not reached its potential under the Oceans Act, and that the state of Canada's oceans environment continues to decline, a high level Oceans Task Force may be necessary in order to engage in a national dialogue on oceans issues and to identify alternative organizational approaches in Canada. Possible models include the US National Oceans Commission and the Pew Oceans Commission, as well as Canadian bodies like the Panel on Ecological Integrity in Canada's National Parks.

### **2 – Set clear, high level direction for achieving the 2012 target and ensure the requisite allocation of resources**

In order to increase progress toward the 2012 goal for a national network of MPAs, strong leadership from the highest levels in Canada's government is urgently needed. This leadership must begin by setting clear, high level direction for achieving the 2012 target by requiring the development of a plan to achieve the network. This plan must include strategic timelines, with milestones and mechanisms for addressing the process issues that currently plague the designation of MPAs. A critical component is to publicly commit to these timelines and targets, in order that agencies and Ministers can be held publicly accountable for progress.

### **3 – Ensure that the federal agencies with MPA responsibilities are working in an effective and coordinated way to achieve the target**

There are also ways to speed up the designation process for individual MPAs at the micro-process level through effective project management. Project management expertise should be applied to develop and implement a



*This elaborate warbonnet evolved with clever camouflage to hide from predators. But bottom dwellers find their worlds easily destroyed by trawling.*

*Naiads or “nymphs” were associated with wells, springs, streams, brooks and fountains. Canada needs to protect its freshwater as well as its oceans.*

well thought-out project plan. Timelines and milestones need to be set strategically and then tasks undertaken in a timely way. Publicized deadlines should be diligently pursued, predicated on the public commitment to move ahead. Multiple ends should be pursued on parallel tracks—e.g. negotiating with government agencies while reaching out to communities and meeting with stakeholders. The different players whose support is required need to be “tended” rather than ignored for months on end while other objectives are the focus of activity. Careful tracking allows issues to be dealt with as they arise so that possible obstacles do not become overly influential.

#### **4 – Draw on international best practice for implementing national MPA networks**

Systematic conservation planning is not easy but it is mainstream, well-supported by guidance and experience in various countries and states, and is feasible in Canada.

The IUCN (the World Conservation Union) has recently published a report that summarizes international best practice for establishing MPA networks, which Canada can draw on.

Canada can also learn from countries like New Zealand, with its Marine

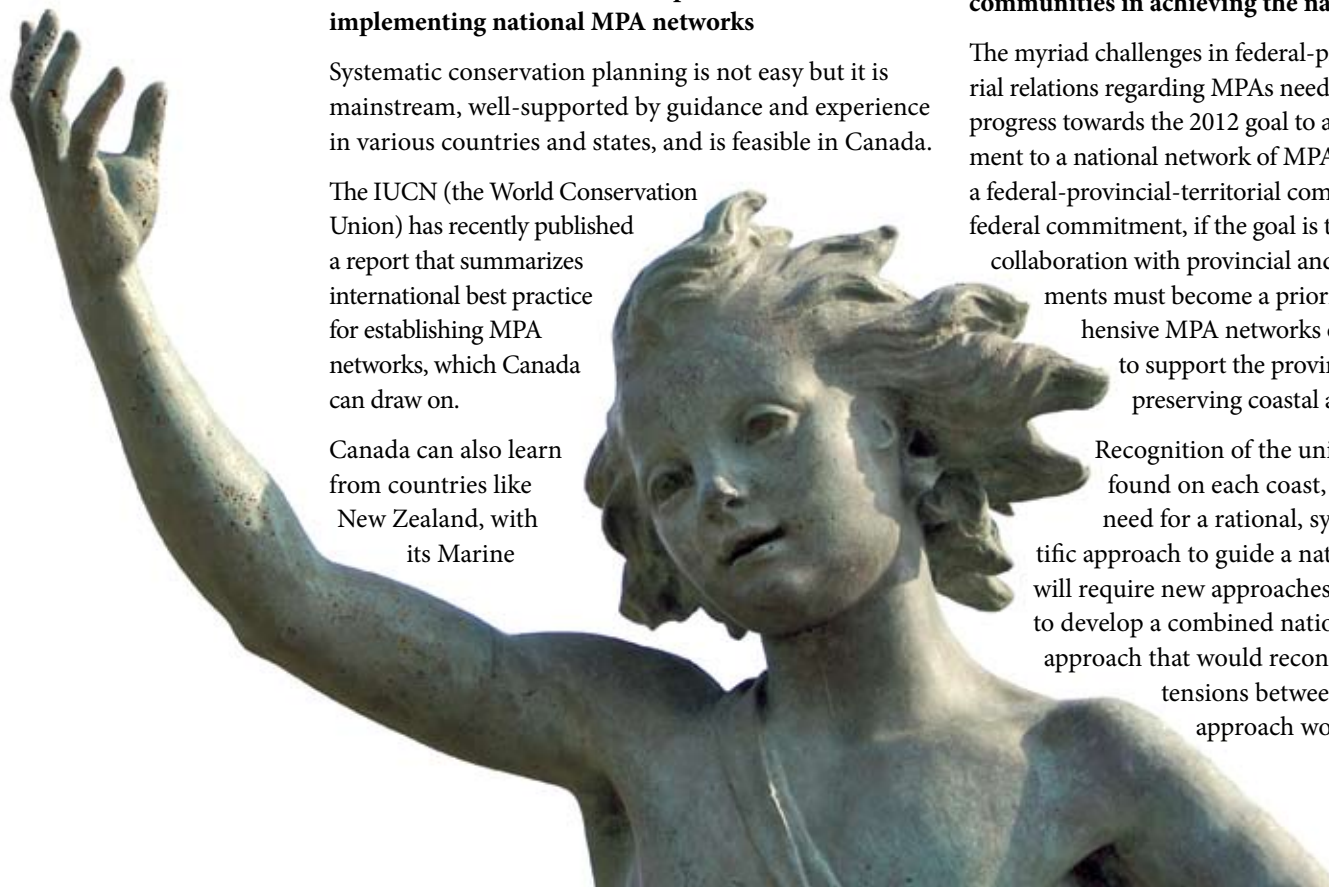
Protected Areas Policy and Implementation Plan,<sup>25</sup> and Australia, which has a National Representative System of Marine Protected Areas.<sup>26</sup> The New Zealand policy and plan “provides an integrated process, including regional consultation, for establishing a network of marine protected areas around New Zealand.”

Finally, here in Canada, CPAWS and other environmental organizations have also developed expertise on MPA networks and can contribute to the development of a systematic planning approach for Canada’s MPA network.

#### **5 – Develop a combined national and regional approach that involves provinces, territories, aboriginal organizations, conservation organizations and communities in achieving the national network**

The myriad challenges in federal-provincial/territorial relations regarding MPAs need to be addressed for progress towards the 2012 goal to accelerate. The commitment to a national network of MPAs must be viewed as a federal-provincial-territorial commitment, not just a federal commitment, if the goal is to be achieved. Federal collaboration with provincial and territorial governments must become a priority to advance comprehensive MPA networks on the three coasts, and to support the provincial/territory role in preserving coastal and estuary habitats.

Recognition of the unique circumstances found on each coast, together with the need for a rational, systematic and scientific approach to guide a national MPA network will require new approaches. One possibility is to develop a combined national and regional approach that would reconcile the current tensions between the two. This approach would allow the national



targets to be tailored to circumstances in each region and also allow for regional approaches to become building blocks for the national strategy, rather than being seen as a loss of control by the federal government. Agreements like the BC-Canada MOU on implementation of the Oceans Strategy<sup>27</sup> could provide the forum for defining this middle ground,<sup>28</sup> and alternative approaches could be developed on the Atlantic and Arctic coasts with the appropriate provincial and territorial governments.

#### **6 – Commit to integrated oceans management and provide interim protection for areas of known biodiversity value while the network planning process is underway**

Integrated oceans management planning needs to be advanced more quickly and more broadly in Canada's oceans as it provides an opportunity to plan MPA networks on a regional scale. While these planning processes are under way, interim protection is an important mechanism for the protection of marine biodiversity. There are a number of mechanisms for achieving interim protection for areas of interest, for example, emergency MPAs under the *Oceans Act*, and fisheries closures under the *Fisheries Act*. Rules and restrictions were implemented in cases such as Gilbert Bay and Musquash MPAs prior to full protection. Interim protection is especially important in Canada given the lengthy process from candidate area identification to final protection. In addition to providing protection of key conservation values while the consultation and information gathering process is underway, interim protection can also provide the incentive for stakeholders to participate in the process. Such measures are being successfully used in the terrestrial environment, for example through land withdrawals for future national parks, and during land use planning in British Columbia when 18% of the

province was under interim management guidelines.

#### **7 – Improve relationships with aboriginal governments and organizations**

A number of mechanisms and approaches are available to help improve relationships between federal agencies and aboriginal governments and organizations. These range from improving cultural literacy for communicating with aboriginal governments and organizations, recognizing the distinctions between the different governments and organizations and ensuring the appropriate organizations and individuals are consulted in the process. Recognizing and accommodating aboriginal rights and interests in the areas of MPA proposals is critical.

#### **8 – Hold a national level dialogue on Canada's national MPA network involving ENGOs, research organizations, provinces, territories, aboriginal governments and organizations and stakeholders**

Achieving the goal of a national network of MPAs for Canada will require the commitment and engagement of the full range of actors in oceans conservation issues in Canada. To date, the work to develop policy, guidelines and approaches to MPAs in Canada has been done behind the closed doors of the federal government. This has alienated many of the key players who not only can contribute valuable knowledge and experience, but who can also hold up the process so that Canada will not meet this urgent goal. It is time that the federal government engages a range of Canadians in the process of developing the plan to achieve a national network of MPAs by holding a national level dialogue that will enrich and accelerate the process, and possibly vault Canada to the forefront among the countries of the world committed to meeting the 2012 target.



*Canada's Arctic is melting at an alarming pace. Changing oceans hurt creatures great and small, from charismatic polar bears to tiny plankton.*

## Endnotes

- 1 Louisa Wood, personal communication 11 September 2007
- 2 Gardner, Julie, Sandra Bicego, Sabine Jessen, and Megan Baker. 2008. *Challenges and Opportunities in Progress towards Canada's Commitment to a National Network of MPAs by 2012*. Vancouver, BC: Canadian Parks and Wilderness Society
- 3 Commissioner of the Environment and Sustainable Development. 2005. *Report of the Commissioner of the Environment and Sustainable Development*. Ottawa: Office of the Auditor General of Canada.
- 4 Halpern, B et al. 15 Feb 2008. A Global Map of Human Impact on Marine Ecosystems. *Science*. Vol. 319. no. 5865, pp. 948 – 952
- 5 Norse, E. and L. Crowder (eds). 2005. *Marine Conservation Biology: the science of maintaining the sea's biodiversity*. Island Press, Washington, D.C.  
Halpern, B. 2003. The impact of marine reserves: Do reserves work and does reserve size matter? *Ecological Applications* 13: S117 – S137  
Gell, F.R. and C. M. Roberts. 2003. Benefits beyond boundaries: the fishery effects of marine reserves. *Trends in Ecology and Evolution* 18 (9):448-55.  
Hoffman, J. 2003. Designing Reserves to Sustain Temperate Marine Ecosystems in the Face of Global Climate Change in L.J. Hansen, J.L. Biringer and J.R. Hoffman (eds) *Buying Time: A User's Manual for Building Resistance and Resilience to Climate Change in Natural Systems*. WWF  
Palumbi, S. 2002. *Marine Reserves: A Tool for Ecosystem Management and Conservation*. Pew Oceans Commission. Arlington, Virginia
- 6 Smith, Jennifer L., Kaaren Lewis and Joshua Laughren. 2006. *A Policy and Planning Framework for Marine Protected Area Networks in Canada's Oceans*. Halifax, WWF-Canada.
- 7 L.J. Hansen, J.L. Biringer and J.R. Hoffman (eds) *Buying Time: A User's Manual for Building Resistance and Resilience to Climate Change in Natural Systems*. WWF
- 8 Smith, Jennifer L., Kaaren Lewis and Joshua Laughren. 2006. *A Policy and Planning Framework for Marine Protected Area Networks in Canada's Oceans*. Halifax, WWF-Canada.
- 9 Roff, John C. 2005. Conservation of marine biodiversity: too much diversity, too little co-operation in *Aquatic Conservation: Marine and Freshwater Ecosystems*, Volume 15, Issue 1
- 10 Roberts CM, Hawkins JP (2000) *Fully protected marine reserves: a guide*. WWF Endangered Seas Campaign, Washington DC and Environment Dept, University of York, UK.
- 11 Gardner, Julie, Sandra Bicego, Sabine Jessen, and Megan Baker. 2008. *Challenges and Opportunities in Progress towards Canada's Commitment to a National Network of MPAs by 2012*. Vancouver, BC: Canadian Parks and Wilderness Society
- 12 Louisa Wood, personal communication 11 September 2007
- 13 Environmental Performance Index <http://epi.yale.edu/Canada> (accessed March 2008)
- 14 Commissioner of the Environment and Sustainable Development. 2005. *Report of the Commissioner of the Environment and Sustainable Development*. Ottawa: Office of the Auditor General of Canada.
- 15 Department of Finance Canada website <http://www.fin.gc.ca/budget05/bp/bpc5e.htm#environment> (accessed March 2008)
- <http://www.budget.gc.ca/2007/bp/bpc3e.html#conserving> (accessed March 2008)
- Fisheries and Oceans Canada website [http://www.dfo-mpo.gc.ca/media/newsrel/2007/hq-ac51\\_e.htm](http://www.dfo-mpo.gc.ca/media/newsrel/2007/hq-ac51_e.htm) (accessed March 2008)
- 16 Government of Canada. 2006. *Canadian Protected Areas Status Report 2000-2005*
- 17 Dearden, Philip 2002. Marine Parks. pp 354-377 in Philip Dearden and Rick Rollins (eds) *Parks and Protected Areas in Canada – Planning and Management*.
- 18 National Roundtable on the Environment and Economy. 2003. *State of the Debate – Securing Canada's Natural Capital: A Vision for Nature Conservation in the 21st Century*. Renouf Publishing Co. Ltd. <http://www.nrtee-trnee.ca/eng/publications/securing-canadas-natural-capital/index-securing-canadas-naturalcapital-eng.htm> (accessed March 2008)
- 19 Commissioner of the Environment and Sustainable Development. 2005. *Report of the Commissioner of the Environment and Sustainable Development*. Ottawa: Office of the Auditor General of Canada.
- 20 Government of Canada. 2006. *Canadian Protected Areas Status Report 2000-2005*
- 21 Commissioner of the Environment and Sustainable Development. 2005. *Report of the Commissioner of the Environment and Sustainable Development*. Ottawa: Office of the Auditor General of Canada.
- 22 Roff, John and Philip Dearden (Workshop Organisers). 2007. SAMPAA VI Ecosystem Based Management: Beyond Boundaries, Marine Workshop: Establishing a Network of Marine Protected Areas by 2012 – the Path Forward, Acadia University, Wolfville, Nova Scotia
- 23 Canadian Parks and Wilderness Society, NS Chapter. 16 February 2002. Press Release: Northwest Atlantic Ocean Needs More Protection: Poll show the public strongly favors more fully protected marine areas in New England and Atlantic Canada just as a new scientific study shows how urgently they are needed.
- 24 Canadian Parks and Wilderness Society, British Columbia Chapter. 19 November 2001. Press Release: British Columbians want more protection in the ocean, says new poll.
- 25 New Zealand Department of Conservation and Ministry of Fisheries. 2005. *Marine Protected Areas Policy and Implementation Plan*, <http://www.biodiversity.govt.nz/pdfs/seas/MPA-Policy-and-Implementation-Plan.pdf> (accessed March 2008)
- 26 Australian Department of the Environment, Water, Heritage and the Arts <http://www.environment.gov.au/coasts/mpa/index.html> (accessed March 2008)
- 27 Fisheries and Oceans Canada. 2004. *Memorandum of Understanding respecting the implementation of Canada's Oceans Strategy on the Pacific Coast of Canada*. Oceans and Fish Habitat, Fisheries and Oceans Canada. [http://www.dfo-mpo.gc.ca/oceans-habitat/oceans/ri-rs/bc-cb/index\\_e.asp](http://www.dfo-mpo.gc.ca/oceans-habitat/oceans/ri-rs/bc-cb/index_e.asp) [accessed March 2008]
- 28 Jones, P.J.S. 2001. Marine protected area strategies: issues, divergences and the search for middle ground. *Reviews in Fish Biology and Fisheries* 11: 197–216  
Agardy, Tundi. 2005. Global marine conservation policy versus site-level implementation: the mismatch of scale and its implications. pp. 241-296 in *Marine Ecology Progress Series* vol. 300.

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