










INTERNATIONAL SCHOOL OF
MARINE PROTECTED AREAS

Marine Protected Areas Progress Report Card

	 Canada	 Australia	 USA
 Mathematics The total area of federally designated MPAs and the percentage of overall ocean area that is protected	F	A	C
 Law The countries' laws, policies and regulations that are in place to establish MPAs	C	B	B
 Economics The funding provided for MPAs to enable successful implementation	F	A	A
 Geography The portion of each country's major ocean regions that are protected	F	A	D
OVERALL GRADE	F	A	B/C



note...

Marine protected areas (MPAs) are parts of the ocean that have been set aside by law or other effective means to protect the ecosystems and resources within their boundaries.¹ There is strong scientific consensus that MPAs with strict conservation regulations are a highly effective, but under-utilized tool that can help alleviate the global decline in ecosystem health.²

In the interest of seeing Canada do its part in helping to protect the world's ocean environments, the Living Oceans Society, David Suzuki Foundation and Sierra Club British Columbia have produced this progress report card to assess Canada's performance in meeting its national³ and international⁴ commitments to establish a global network of MPAs by 2012. The performances of classmates Australia and the United States (USA) were assessed to provide a comparison.

In light of the poor grades Canada received, specific steps have been recommended outlining how and where Canada needs improvement in order to get a passing grade by 2012.



No Take Areas

No-take areas are the strictest of MPAs, and do not allow any extractive uses. MPA experts recommend that 20-30% of the world's oceans should be set aside in MPAs that have this strict level of protection.⁸ Nonetheless, no-take areas still make up a small amount of the MPAs in all countries. We can take a lesson, however, from Australia, who recently designated 33% of the Great Barrier Reef as no-take.

Each country has made some progress towards securing 20% protection, however Canada's poor performance suggests that the federal government is simply not applying itself in this class.

Canada
26,084 km²
65 sites

Australia
843,364 km²
46 sites

United States⁷
430,447 km²
160 sites

Total Area of Federally Designated MPAs

⁵ At the World Summit on Sustainable Development (WSSD) in 2002, Canada, Australia and the USA signed onto the WSSD Plan of Implementation paragraph 31(3), Section IV affirming the commitment to implement representative network of MPAs by 2012. In 2006, at the 8th Ordinary Conference of the Parties to the CBD, the Parties committed to protect 10% of the world's eco-regions by 2010, including marine and coastal eco-regions.

⁶ This report card is assessing the federal government's performance on MPAs and therefore is examining federally designated MPAs only. Presented results do not include fisheries closures, gear closures, provincial, state or territorial MPAs. For MPAs that have marine and terrestrial areas, only the marine portion was used in the calculations. Calculations for Canada were made using data from MPA Global (<http://www.mpaglobal.org/home.html>). Calculations for Australia were made using data from MPA Global and data provided by the Department of the Environment, Water, Heritage and the Arts. Calculations for the USA were made using MPA Global and cross-checked with data from the National Oceanic and Atmospheric Administration National MPA Center MPA Inventory (http://mpa.gov/helpful_resources/inventory.html). For more detailed information showing calculations, please go to <http://www.livingoceans.org>.

⁷ Results from the MPA Center Inventory: 455,540 km² (204 sites). Please go to <http://www.livingoceans.org> for details.

⁸ At the World Parks Congress in 2003, Canada, Australia and the USA endorsed a recommendation to establish a global system of marine protected areas by 2012, which includes no take areas that amount to at least 20-30% of each habitat.

⁹ Guenette, S. and Alder, J., 2001. *Lessons from Marine Protected Areas and Integrated Ocean Management Initiatives in Canada*. Coastal Management, 35:51-78. <http://www.fisheries.ubc.ca/members/sguenette/Guenette%20Alder%202007.pdf>

¹⁰ Draft Framework for Developing the National System of Marine Protected Areas, 2006. National Marine Protected Areas Center, NOAA's Office of Ocean and Coastal Resource Management. <http://mpa.gov/pdf/national-system/final-framework-draft.pdf>.

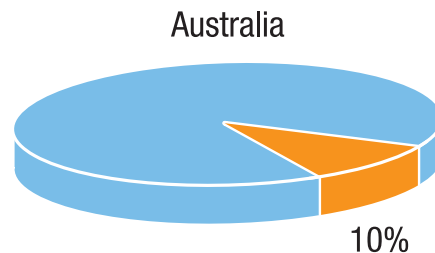
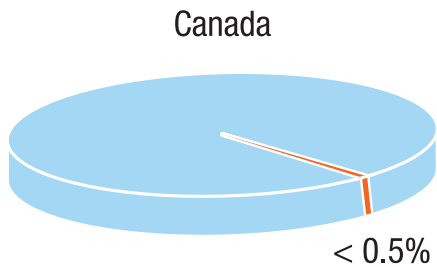
Mathematics



Canada, Australia and the USA have each made commitments to establish networks of marine protected areas (MPAs) by 2012. These commitments range from 10-30% of their federal waters.⁵

The total area of federally designated MPAs and the percentage of overall ocean area that is protected⁶

Canada	F
Australia	A
United States	C



% of each country's overall ocean area protected by the federal government

Making the grade...

Canada gets an F.

The federal government has failed to show initiative and complete its important homework assignments of protecting 10-30% of its ocean area. The approximate 26,000 km² of federal MPAs adds up to less than 0.5% of Canada's oceans. And even this meager 0.5% is not fully protected as no-take areas, offering minimal protection as resource extraction and activities that damage ocean environments continue to occur in many of these areas.⁹ Canada has a long way to go to meet the 2012 target. If the health of the ocean collapses, this course will not be offered again. Canada cannot afford to lose this opportunity and must take corrective steps immediately.

Australia gets an A.

Australia has already reached the low end of the 2012 target and has 4 years to go to achieve more. The results of its focus and commitment can be seen in the great progress that Australia has made in the past decade.

The USA gets a C.

Protecting 5% of the ocean under federal MPAs is a strong start, however, with less than 1% in no-take areas¹⁰ a significant effort is needed to bring the sum up to 10-30%. The USA shows potential and with the right positive support and encouragement can make great strides in the near future.

What's in a Name?

Because there are so many different laws and regulations used to establish MPAs, there are also many different kinds of federal MPA designations. The table below shows all of the different kinds of federal MPAs that exist in the three countries.

Canada Types

National Park
National Migratory Bird Sanctuary
National Wildlife Area
Marine Protected Area
National Park Reserve
National Marine Conservation Area

Australia Types

Commonwealth Marine Park
Commonwealth National Park
Commonwealth Marine Reserve
National Nature Reserve
Historic Shipwreck

USA Types

National Estuarine Research Reserve
National Wildlife Refuge
National Marine Sanctuary
National Seashore
National Park
National Natural Landmark
National Forest (Marine Portion)
National Monument
National Recreation Area
National Historic Park

Canada, the US and Australia each have the laws, policies and regulations in place to establish a variety of MPAs in State/Provincial/Territorial and Federal waters as well as national strategies to establish a network of marine protected areas (MPAs).

Federal laws and policies provide the necessary tools to establish and implement MPAs. However, despite having all the legal and regulatory pieces in place, each country could improve their policies by clarifying their measurable objectives, timelines, and targets.

Law



The countries' laws, policies and regulations that are in place to establish MPAs

Canada	C
Australia	B
United States	B

Making the grade...

Canada gets a C.

While Canada has demonstrated an interest in providing the legal and policy frameworks for establishing a network of MPAs with the creation of the Oceans Act, Oceans Strategy, Oceans Action Plan and Federal MPA Strategy, the lack of measurable objectives, targets, timelines, and mechanisms for measuring success indicates a general lack of depth and fortitude.

Australia gets a B.

While the Strategic Plan of Action for the National Representative System of Marine Protected Areas includes timelines, these have been continuously pushed back. Currently the federal focus is on establishing MPAs through the Regional Marine Plans and the world is watching to see if this means a stronger commitment to measurable progress and timelines.

The USA gets a B.

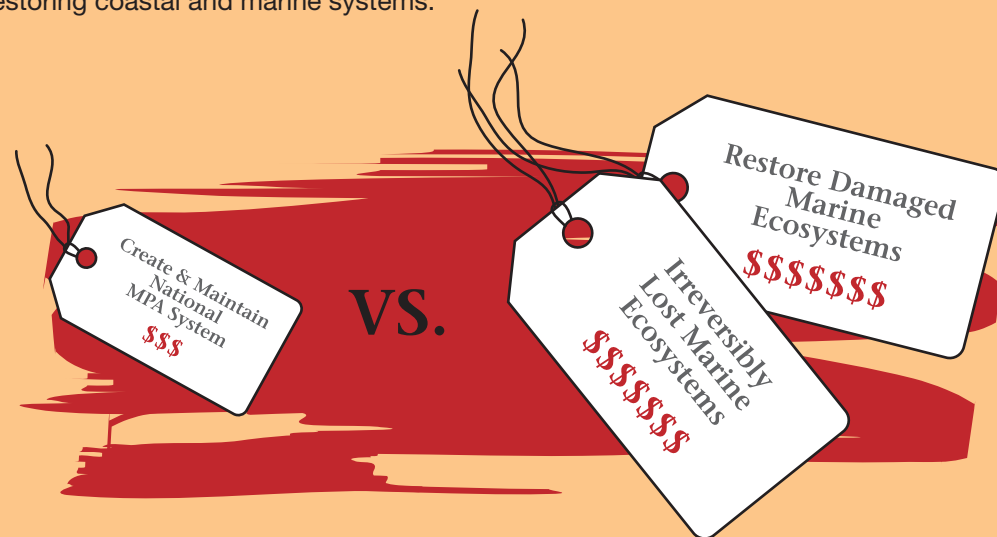
The Draft Framework for Developing the National System of Marine Protected Areas includes timelines (short, mid- and long-term) which is commendable. If the USA could add specific, measurable targets it would likely see its grade increase.

Extra Credit:

How much are Marine Ecosystems Worth?

The US report *Toward a National System of Marine Protected Areas*¹⁴ highlights a critical point related to MPA economics:

“While the costs of the national system [of MPAs] are expected to be significant... it is important to remember the huge costs associated with losing ecosystem services or restoring coastal and marine systems.”



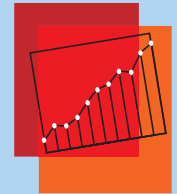
¹¹ The estimate of Canada's federal annual expenditures on MPAs is derived from personal communications with staff from the Department of Fisheries and Oceans, Parks Canada, and Environment Canada. For more information on the breakdown of this dollar amount please visit <http://www.livingoceans.org>.

¹² The estimate of Australia's federal annual expenditures on MPAs is derived from Annual Reports of the Great Barrier Reef Marine Park Authority (http://www.gbrmpa.gov.au/_data/assets/pdf_file/0010/23032/AR2006-2007.pdf) and the Department of Environment, Water, Heritage and the Arts (<http://www.environment.gov.au/parks/publications/annual/06-07/pubs/report-full.pdf>). The figure reported is the federal or Commonwealth Government's budget in relation to MPAs and does not include expenditures by State and Northern Territory Governments on Commonwealth MPAs in their jurisdictions; it is therefore likely to be an underestimate of actual expenditures. For more information on the breakdown of this dollar amount please visit <http://www.livingoceans.org>.

¹³ The estimate of the USA's federal annual expenditures on MPAs is derived from personal communications with staff from the National Oceanic and Atmospheric Administration (U.S. Department of Commerce), the Fish and Wildlife Service (U.S. Department of Interior), and the National Park Service (U.S. Department of Interior). For more information on the breakdown of this dollar amount please visit <http://www.livingoceans.org>.

¹⁴ *Toward a National System of Marine Protected Areas: A Report by the MPA Federal Advisory Committee*, 2008. http://www.mpa.gov/pdf/fac/fac_recmd_06_07.pdf

Economics



Successful implementation of a network of marine protected areas (MPAs) is not possible without adequate funding for scientific research and analysis, process design, consultation, coordination, establishment, enforcement and monitoring. Each country has made a financial commitment to establishing MPAs, but their commitments vary widely.

Despite efforts to ensure a complete assessment in this category, these results are not comprehensive. Funding for MPAs is not itemized within each country's budgets, therefore getting exact amounts for the multitude of different federal MPA types was extremely difficult. Also, government departments in some countries were unable or unwilling to share information about their financial investments in MPAs. Dollar amounts presented here are based on the best available data we were able to obtain. It is hoped that all governments will learn how to properly track and share MPA spending in the near future to make future analysis more transparent.

Millions of dollars spent (in \$10m increments).



Estimated amounts of federal spending for the most recent fiscal year for which data are available, expressed in Canadian dollars.

The funding provided for MPAs to enable successful implementation

Canada	F
Australia	A
United States	A

Making the grade...

 **Canada gets an F.**

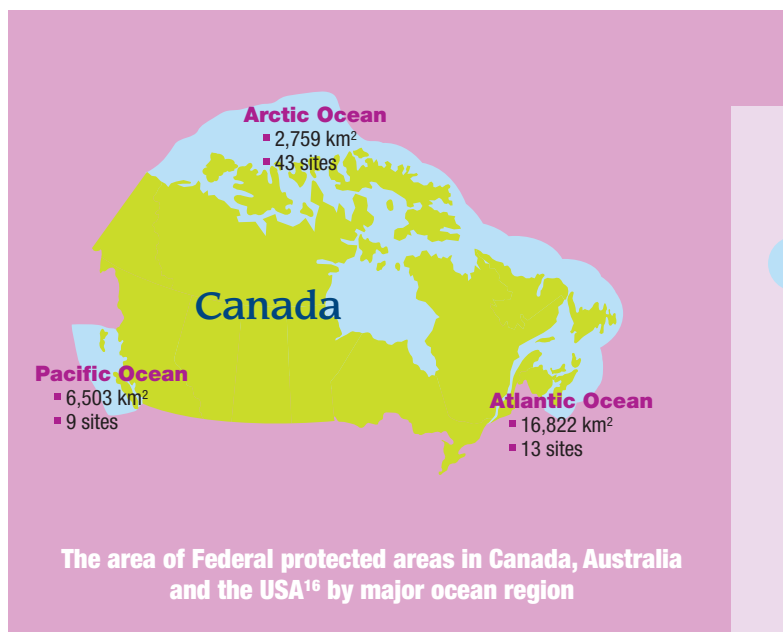
The budget information obtained from the federal government demonstrates very low levels of resources allocated to MPAs in comparison to the other countries. Due to the extreme importance of our oceans to the national and global environment and economy, it is fair to expect more from Canada. It is hoped that Canada will soon move from words to action by providing the necessary investment in MPAs.

 **Australia gets an A.**

Thirty-three million dollars may appear low to manage such a large network of MPAs. However, the budgets for Commonwealth MPAs are difficult to separate from the regional marine planning budgets now that marine planning is the primary mechanism for all MPA establishments in Australia. If Australia continues to advance its National Representative Network of MPAs at the current rate, with the current funding, clearly it deserves an A despite the dollar value appearing relatively low.

 **The USA gets an A.**

Two hundred seventy four million dollars in funding is an extraordinary investment. The USA is definitely excelling in this subject and it is hoped that its behavior will set an example for the rest of the class.



Doing Your Homework

Australia gets a gold star for coming to class prepared. It developed IMCRA (Integrated Marine and Coastal Regionalisation of Australia) and, consequently, has been able to ensure that 75% of its eco-regions have at least one MPA.

¹⁵ Calculations made using data from MPA Global (<http://www.mpaglobal.org/home.html>).

¹⁶ Results from the MPA Center Inventory: Atlantic Ocean: 11,107 km² (86 sites); Alaska: 31,924 km² (7 sites); West Coast: 31,995 km² (51 sites); Gulf of Mexico: 13,354 km² (50 sites); Hawaii: 367,160 km² (10 sites).

Geography

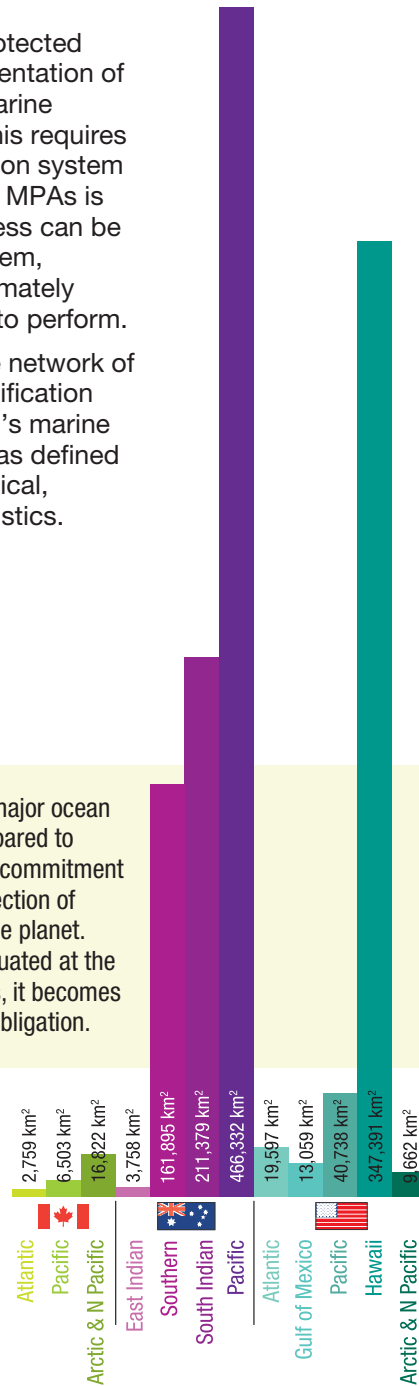


An effective network of marine protected areas (MPAs) must include representation of the different habitat types in all marine regions within their jurisdiction. This requires a national eco-regional classification system to measure if a national system of MPAs is representative. While some progress can be made without a classification system, operating without this tool will ultimately affect the ability for each country to perform.

Part of setting up a representative network of MPAs involves developing a classification system that will identify the nation's marine eco-regions. Eco-regions are areas defined by distinct combinations of biological, ecological and physical characteristics.

Federally designated MPAs in Canada's major ocean regions are barely detectable when compared to Australia and the USA. The international commitment to establish MPAs by 2012 requires protection of 10-30% of each eco-marine region on the planet. Even when the existence of MPAs is evaluated at the very coarse scale of major ocean regions, it becomes clear that Canada is failing to meet this obligation.

The area of Federal protected areas in Canada, Australia and the USA by major ocean region¹⁵



The portion of each country's major oceans regions that are protected

Canada	F
Australia	A
United States	D

Making the grade...

Canada gets an F.

Canada does not have a national eco-regional classification system in place for all types of federal MPAs, making it impossible to assess the degree to which each habitat type is protected. Furthermore, its poor (F grade) performance in Mathematics indicates that Canada is a long way from graduating with a representative network of MPAs.

Australia gets an A.

Australia has significant portions of all of its major ocean regions protected by a suite of MPAs and a comprehensive eco-regional classification system in place to ensure that important biological and ecological features are protected.

The USA gets a D.

The USA does not have a national eco-regional classification system in place and is prevented from failing only because of its average (C grade) performance in Mathematics. As the USA continues to establish more MPAs and its Mathematics grade increases, the pressure is on for it to create the eco-regional classification system and measure how representative its network is. It would be tragic if the USA made so much progress but ultimately failed because it put MPAs in the wrong places.



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note...

Australia made great strides when it established the South East Commonwealth Marine Network as part of the South East Region's Marine Plan. Through the consultation and planning for overall use of the region, 13 marine reserves covering 226,460 km² were established.¹⁷ This increased the total area of MPAs in Australia by 34% and allowed it to meet its 10% target.

Combining MPA network planning with regionally-based marine-use planning is the most efficient way to achieve a network of MPAs that takes into account the needs of government, multiple user groups and coastal communities. By establishing a network of MPAs through marine planning processes, Canada can improve efficiency and decrease conflicts between stakeholders who are currently overwhelmed by the multitude of processes and consultations that currently occur.

Establishing MPAs through a comprehensive planning process will enable Canada to meet its objectives in a more timely manner and will build long term security for ocean industries and for marine ecosystems.

¹⁷ Commonwealth marine reserves in the South East marine region: <http://www.environment.gov.au/coasts/mpa/southeast/index.html>

Teachers' Comments



How to turn an **F** into an **A**

Overall teacher comments:

Canada has received failing grades in three of four subjects, a sad performance compared to the success of other countries. In short, while Canada has the legislation and policies in place, it has failed to deliver a comprehensive network of MPAs that would meet its national and international commitments. With the deadline of 2012 fast approaching, Canada needs to show a greater commitment to completing homework assignments. There is concern that Canada spends too much time talking in class and not enough time creating tangible 'on-the-water' results. A change of attitude is required to increase its grades and graduate.

To improve its grades, the Government of Canada must:

- Immediately resource and launch comprehensive marine planning processes designed to establish networks of MPAs as well as ecosystem-based management in the Large Ocean Management Areas (LOMAs) identified in Canada's Oceans Strategy. These are the Pacific North Coast Integrated Management Area (PNCIMA), Eastern Scotian Shelf (ESSIM), Beaufort Sea, Placentia Bay, and Gulf of St. Lawrence (GOSLIM).
- Set clear and measurable timelines and targets for MPA establishment and adhere to them.
- Provide adequate human and financial resources to the departments and programs responsible for establishing a network of MPAs.
- Create a national classification system to identify each eco-region that needs protection, track the extent of eco-regions that are currently protected and evaluate priority areas for protection within these regions.
- Develop the necessary governance agreements with First Nations, Inuit, Provincial, and territorial governments in order to move forward with marine planning and MPA designation.
- Improve access to information and transparency of existing information regarding the status and extent of Canada's MPAs.

Canada is a very capable student with lots of potential. This country could do exceptionally well if it puts some effort into all four class subjects, learns from its classmates, and follows the recommendations laid out in this report card.

What You Can Do

If you are concerned about Canada's failing grade in marine protection, tell the Government of Canada you want to see them improve. Write to:

- The Honourable Stephen Harper
Prime Minister of Canada
- The Honourable Loyola Hearn
Minister of Fisheries and Oceans Canada
- The Honourable John Baird
Minister of Environment Canada
- Your local Member of Parliament (MP)

Tell them that they can do more to protect Canada's oceans by adequately funding the establishment of a network of MPAs through integrated ocean management planning.

Learn more about how to take action by visiting

- www.livingoceans.org
- www.davidsuzuki.org
- www.sierraclubbc.org

Stark, J., & Ladell, K.W. (2008). The International School of Marine Protected Areas Progress Report Card: Canada, Australia and the United States. A Report by Living Oceans Society, the Sierra Club British Columbia, and the David Suzuki Foundation.



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¹ World Conservation Union (IUCN), 1994. *Guidelines for Protected Area Management Categories*. IUCN, Gland, Switzerland and Cambridge, UK. <http://www.iucn.org/themes/wcpa/theme/categories/categories.htm>

² National Center for Ecological Analysis and Synthesis (NCEAS), 2001. *Scientific Consensus Statement on Marine Reserves and Marine Protected Areas*. 17 February, 2001; Annual Meeting of the American Association for the Advancement of the Sciences (AAAS). http://www.compassonline.org/pdf_files/NCEAS_Marine_Reserves_Consensus_Statement.pdf

³ Canada's Oceans Act, 1997. Part II, Oceans Management Strategy, Section 35 (2). <http://laws.justice.gc.ca/en/ShowFullDoc/cs/0-2.4//en>

⁴ United Nations Convention on Biological Diversity (CBD), 1993. <http://www.cbd.int/>