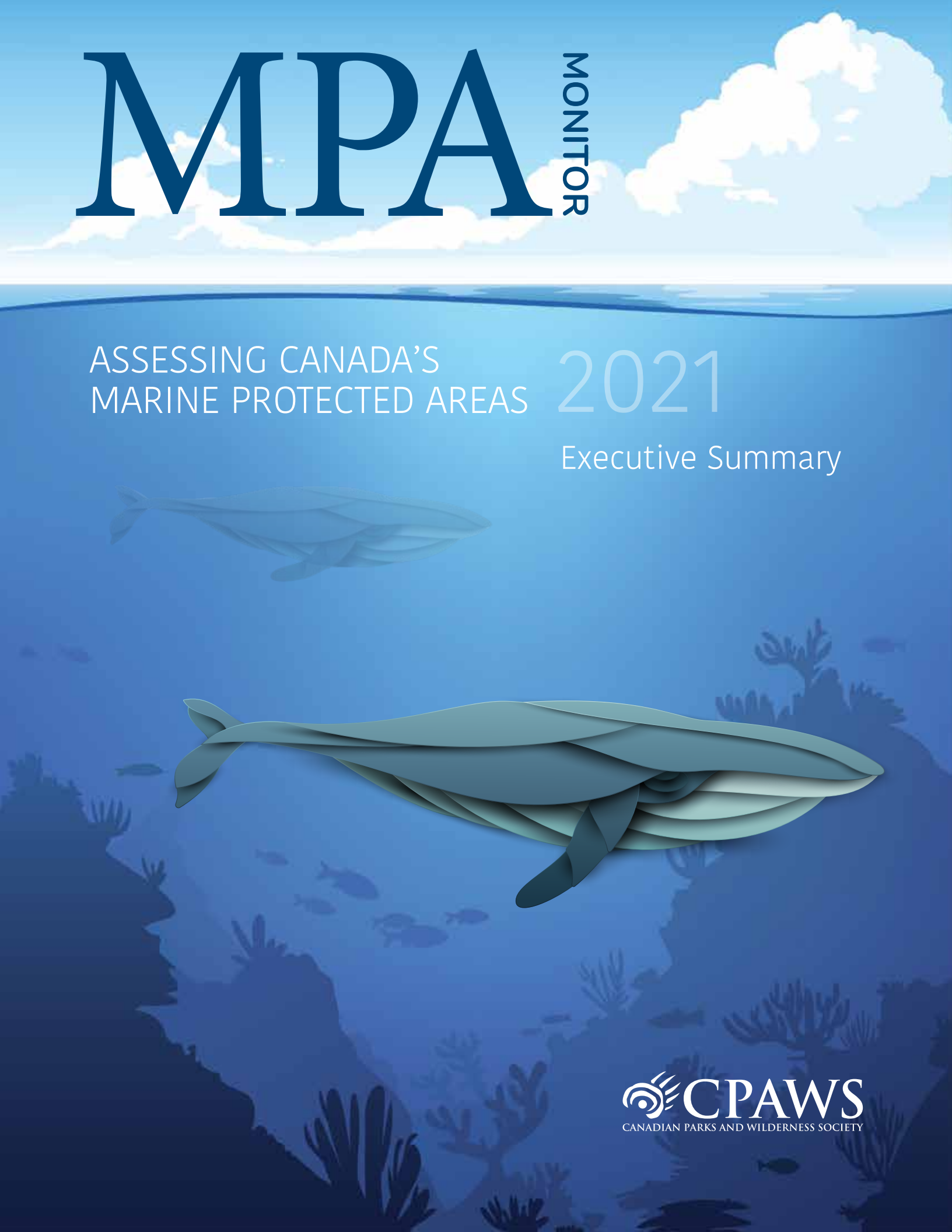
MPA MONITOR

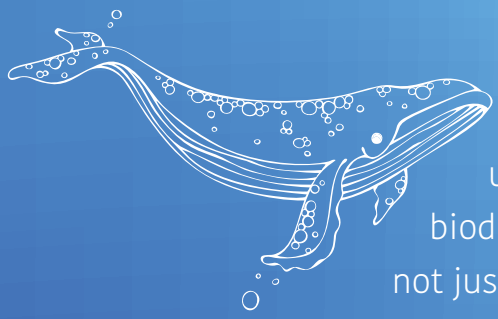
ASSESSING CANADA'S MARINE PROTECTED AREAS 2021

Executive Summary



CPAWS
CANADIAN PARKS AND WILDERNESS SOCIETY

EXECUTIVE SUMMARY



As the result of more than 100 years of industrial use and over-exploitation, the ocean is facing a biodiversity crisis that will have far-reaching impacts, not just for nature but also for human health and well-being the world over. In Canada, fisheries are edging closer to collapse, iconic species are teetering on the edge of extinction, and vital ecosystems like eelgrass and deep-sea coral and sponge reefs are disappearing. Science tells us that if we are going to reverse these declines, we must act now. Marine protected areas (MPAs) are recognized as one of the most effective tools to protect ocean ecosystems, rebuild biodiversity, and help species adapt to climate change.

In 2019, Canada announced that it had protected almost 14% of its ocean, and since then, has redoubled efforts and committed to protecting 25% by 2025 and 30% by 2030. These ambitious targets are consistent with scientific recommendations that we need to protect ***at least*** 30% of our ocean, and likely significantly more, to reverse biodiversity loss and restore ocean health and abundance by 2050. In doing so, we will reap significant economic benefits, boost fisheries, and fight climate change, but only if MPAs are strongly protected and effectively managed. Notably, the recent recommendations from the High-Level Panel for a Sustainable Ocean Economy, of which Canada is a member, stressed the importance of protecting 30% in fully or highly protected MPAs as a critical component of a productive and prosperous blue economy.

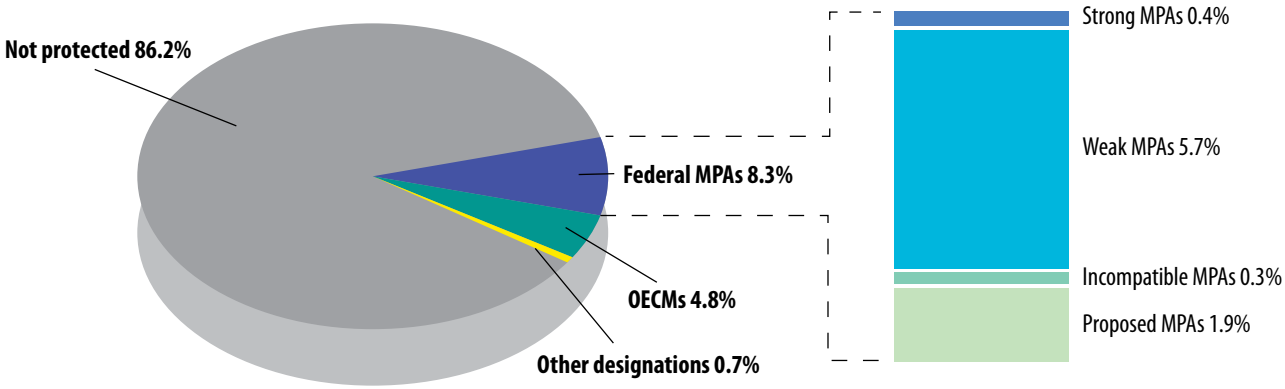
Achieving quantity and quality of MPAs: *The MPA Guide* and Minimum Protection Standards

Despite good intentions, many MPAs fall short of effective protection and national and international reporting of MPAs does not evaluate effectiveness; multiple studies suggest that most global datasets are overestimating protection. As a result, a global team of experts has spent the past several years developing *The MPA Guide*—a standardized assessment tool that evaluates the Stage of Establishment and the Level of Protection based on what activities are allowed within the MPA. In doing so, *The MPA Guide* can identify weaknesses in protection and provide some indication of potential effectiveness. It also allows for MPAs to be compared across jurisdictions. This report is the first assessment of Canadian MPAs, in addition to being one of the first to employ *The MPA Guide*.

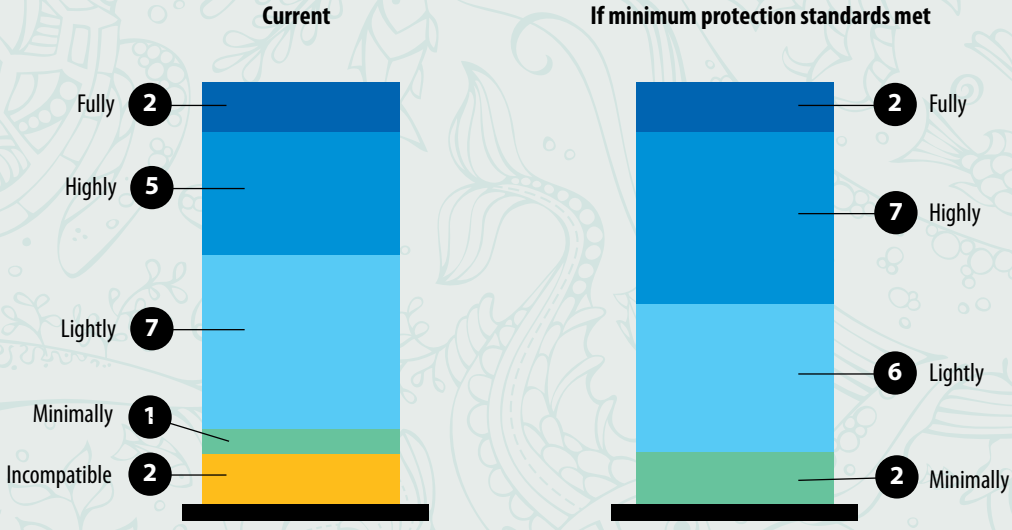
Photo Tala Cohen

In 2019, in response to concerns about the integrity of some Canadian MPAs, the Government of Canada announced minimum protection standards for all new federal MPAs that prohibit the most harmful activities: bottom trawling, oil and gas, mining, and dumping. The government also committed to eventually review existing MPAs against the standards.

Percentage of Canada's Ocean Estate in federal MPAs by protection level, Other Effective Conservation Measures, and Other Protected Areas



Level of Protection by MPA



This analysis is intended to present an initial review of existing federal MPAs against both the minimum protection standards and *The MPA Guide* to evaluate the potential effectiveness of Canada's MPAs and make recommendations to address gaps and strengthen protections.

We assessed 18 MPAs established under the three primary federal legislative tools for MPA establishment, which together cover approximately 8.3 % of Canada's ocean estate. It should be noted that there are other sites being counted towards Canada's marine protection targets which are not included in this analysis. The 18 sites considered here are arguably established and managed under the strongest and most comprehensive legal tools in Canada, and thus should theoretically represent the best protected MPAs.

Analysis identifies weaknesses in existing MPA regulations

Of the 18 sites reviewed, none met all four minimum protection standards in regulations alone, though three MPAs (Banc des Americains, SGaan Kinghlas-Bowie Seamount and Eastport) meet all four minimum standards in practice with activities prohibited through other means or unlikely to occur.

The MPA Guide scores sites by zone and does not include a method to create an overall MPA score. We adapted the Regulation-Based Classification System MPA index to roll up the results into three categories. According to our analysis, **seven MPAs are strongly protected, eight are weakly protected, and two are incompatible with biodiversity conservation**. If the minimum protection standards were implemented nine MPAs would be strongly protected, eight would be weakly protected, and none would be incompatible with biodiversity conservation (though the Hecate Strait and Queen Charlotte Sound Glass Sponge Reef AMZ would still be incompatible due to exemptions for anchoring and infrastructure).

As the MPAs we assessed vary in size from 2 km^2 to 320,000 km^2 we also calculated spatial coverage by category. Our analysis found **that the 17 MPAs we evaluated contributed 0.4 % of Canada's ocean estate in strongly protected federal MPAs, 5.7 % in weakly protected MPAs, and 0.3 % in MPAs that are incompatible with conservation.** These numbers do not include Tallurutiup Imanga as this site has not yet been officially designated and therefore does not have regulations in place at the time of writing. It should also be remembered that these numbers do not include Other Effective Area Based Conservation Measures or other coastal protected areas that cover an additional 5.5 % of Canada's ocean estate and have yet to be assessed.

Recommendations to strengthen Canada's MPAs

The results of our area-based analysis are driven by a few large, unzoned and weakly protected or incompatible sites, two of which currently lack full legal protection: Tuvaijuittuq Interim MPA and Tallurutiup Imanga proposed National Marine Conservation Area Reserve (NMCAR). As these sites have yet to be finally designated there is ample opportunity to strengthen protection levels. For example, freezing the footprint of activities in Interim MPAs will provide a degree of protection in places with limited use, such as Tuvaijuittuq, and may provide protection from potential new uses, however it will not address existing conservation concerns in more heavily used areas and so further protection measures will be required.

It can take several years to develop a management plan for some MPAs, which is a concern where there are ambiguities or a lack of detail in the regulations that may impede compliance and enforcement. Where management plans have been developed, they vary in the structure, content and level of detail presented. *The MPA Guide* may provide a useful framework to ensure that management plans are comprehensive, consistent, and systematic.

RECOMMENDATIONS

1. **Interim MPAs should be established with caution in areas where existing activities are impacting the ecosystem as freezing the footprint will not fully address existing threats. Additional protection measures will be required.**
2. **An interim management plan that clarifies ambiguities in the regulations and management of the site should be published for all *Oceans Act* MPAs, including Interim MPAs, and marine National Wildlife Areas, upon designation.**
3. **Where an MPA relies on protections provided by other jurisdictions or mechanisms, for example habitat protections or fisheries management measures under the *Fisheries Act*, the anticipated protections or prohibitions should be clearly reiterated in the MPA management plan as management directions.**

4 MPA management plans should be comprehensive documents that include all relevant information for the MPA, including spatial data on ecological values, human use, and management considerations; budget and staffing expenditures; enforcement and monitoring efforts; all relevant authorities and jurisdictions; and approved activities to-date.

5 MPA regulations and management plans should "future proof" sites by identifying and providing guidance on emerging threats, potential new uses and areas of growth.

Photo CPAWS

In running Canada's MPAs through *The MPA Guide*, some common issues and challenges surfaced. We offer specific recommendations to address these major concerns.

Fishing and trawling

Bottom trawling is permitted within five MPAs and another four MPAs allow for future trawling according to the regulations, although it is either not currently happening or is prohibited through other non-permanent means. Trawling is a highly destructive fishing method that is inconsistent with the minimum protection standards and deemed incompatible with conservation based on Resolution 66 adopted this year by the International Union for Conservation of Nature (IUCN). Commercial and recreational fishing activities were a common reason for an MPA or zone to be scored as lightly or minimally protected, rather than fully or highly protected.

6 **Bottom trawling, including scientific trawling, should be prohibited in all MPAs. Any MPAs or zones in which bottom trawling is allowed should not be counted towards Canada's marine conservation targets.**

7 **Where commercial and recreational fishing activities are permitted within MPAs, the MPA should include measures to manage and prevent future increases in fishing activity and reduce impacts. All fishing must be compatible with the conservation objectives of the MPA and managed according to international best practices, including intensive monitoring and effective bycatch mitigation.**

8 **Vertical zoning should be avoided at all costs in accordance with IUCN guidelines. It is challenging to enforce, does not respect benthic-pelagic connections, and increases overall traffic within the MPA.**

Oil and gas activities and mining

Oil and gas activities are exempt from the general prohibitions in three MPAs (The Gully, Scott Islands, Tarium Niryutait), though environmental assessments are needed before activities can proceed. In all instances, there are moratoria in place that currently prohibit any activity, but this leaves a worrying gap in protections should the moratoria be overturned. Three other sites (Hecate Strait Glass Sponge Reef, Gilbert Bay, and Musquash Estuary) specifically state that the regulations do not permanently foreclose on oil and gas opportunities. Two sites (Eastport and Basin Head) make no reference to oil and gas activites.

Deep-sea mining is not yet happening in Canada and no other mining activities are occurring within MPAs as far as we were able to discern. However, this is likely a growing area of interest. Most MPAs did not make any explicit reference to mining.

9 **Oil and gas activities and all forms of mining should be explicitly and permanently prohibited in MPAs. Any MPAs with oil and gas activities, mineral, or aggregate mining in any part of the MPA should not be counted towards the marine conservation targets due to the significant and far-reaching impacts on marine ecosystems.**

10 **The federal government should proactively work with Offshore Petroleum Boards and industry to relinquish licenses voluntarily.**

Photo Kim Conway

Dredging and dumping

Three MPAs either expressly allow or fail to prohibit dumping within their respective boundaries. Most older *Oceans Act* MPAs include an explicit prohibition against dumping, however that language has not been included in five recently established MPAs. Most importantly, there is no clear definition of what constitutes dumping in an MPA, and whether prohibitions include non-marine sources. Three MPAs provide exemptions for navigational dredging and another two allow for the maintenance and construction of marine infrastructure which may require some dredging.

11 **Canada needs a clear and comprehensive definition of dumping that is consistently recognized in MPA regulations. Future *Oceans Act* MPAs should reinstate the prohibition against "... depositing, discharging or dumping any substance, or causing any substance to be deposited, discharged or dumped..." for clarity.**

12 **All potential sources of pollution — both marine and upland — should be identified and long-term management objectives should be established to work with relevant authorities to proactively address these risks. These include effluent from upland mines, forestry operations and other industrial uses, sewage, agricultural run-off, as well as light and noise pollution.**

13 **MPA management plans should identify and map areas requiring dredging, along with any ecological features that may be impacted, and establish mitigation requirements.**

Photo Ruth Troughton

Anchoring and navigation

There are a range of impacts from vessel traffic that need to be considered in MPA planning, including collisions with marine mammals, noise pollution, and scouring from wake and propellors, however only anchoring and dumping were explicitly assessed in *The MPA Guide*. Six MPAs included prohibitions against anchoring in one or more zones.

14 **The impacts of anchoring and vessel use should be carefully considered in MPA planning and management plan development. Shipping and vessel use must be consistent with the conservation objectives of the MPA and subject to detailed review during MPA planning.**

15 **Anchoring should be prohibited in sensitive ecosystems within MPAs. Voluntary restrictions on anchoring and voluntary avoidance areas for all navigation should be used to provide quick, temporary protection where needed. For coastal MPAs, mooring facilities should be provided to avoid anchoring in sensitive areas.**

Infrastructure

Infrastructure projects that are exempt from some MPA prohibitions include constructing and maintaining wharves, laying undersea cables, and potential oil and gas infrastructure. Two MPAs allow infrastructure that may be incompatible with the conservation objectives of the MPA and five MPAs allowed for moderate infrastructure. The creation of coastal MPAs provides an opportunity to invest in upgrading infrastructure that will benefit communities and reduce the footprint of human activities on marine ecosystems.

16 **MPA management plans should clearly identify the location, nature, and condition of existing and potential infrastructure, as well as sensitive habitats and species, and necessary mitigation measures. Long-term management objectives should be developed to improve coastal infrastructure, in partnership with other relevant jurisdictions.**

Aquaculture

Very few MPAs made any explicit reference to aquaculture operations in either the regulations or management plans. Given the breadth and complexity of activities associated with aquaculture, it requires much more detailed and comprehensive consideration in MPAs.

17 **Open-net pen finfish aquaculture should be prohibited from all MPAs. Other potential aquaculture activities—including developing technologies—should be carefully considered. Regulations and management guidelines should address dumping, entanglement risk, invasive species and species displacement, and the cumulative impacts of infrastructure and vessel traffic.**

Recreation and non-extractive activities

Most MPAs are intended to support non-extractive uses including scientific studies, recreation and tourism, and environmental education. Permits and authorizations are required for some activities, including research, but few MPAs provide details on approved activities. Three MPAs limit recreational vessel access to certain zones within the MPA.

18 **Where possible, research activities in MPAs should be limited to non-extractive and non-invasive methods. Activities and projects that have received approval should be publicly listed on the MPA webpage and summarized in the MPA management plan.**

Photo Jeff Isaak

Reaching 30% by 2030: using *The MPA Guide* as a framework

Canada has made ambitious commitments to significantly increase both the quantity and quality of MPAs. In doing so, we are charting a course to a healthy, resilient ocean that supports thriving and sustainable fisheries, and flourishing coastal communities. To realize this vision, we will need to double the area currently protected, while also addressing outstanding management issues, within the next eight years.

As a short-term solution for existing MPAs, management plans should be used to address any gaps in the regulations and provide explicit management directions for all potential activities and threats. However, regulatory amendments are required to provide assured, long-term protection. In many cases there are either existing management measures in place or activities in question do not currently occur, therefore strengthening regulations in line with minimum protection standards or *The MPA Guide* would have little short-term economic impact but potentially considerable long-term benefits.

19 ***The MPA Guide*** **can provide a useful framework for the consideration of current and potential future activities and expected benefits. For existing MPAs,** ***The MPA Guide*** **could be used to inform revisions to the management plan and for future MPAs it provides a useful framework for MPA planning and regulations.**

There are several factors that are not reflected in the Stage of Establishment or Level of Protection scoring system but are recognized as Enabling Conditions in *The MPA Guide* as they are as critical to MPA function. These Enabling Conditions include size and design, governance and equitability, strength of the conservation objectives, and available resources and capacity. Our analysis does not consider these enabling conditions as they were not finalized at the time of writing.

As Canada strives to protect 30 % of its ocean estate by 2030, it is important that quality is not sacrificed for quantity. There are several proposed MPAs and networks in the process of being designated that will be counted towards the 25 % and 30 % targets. Many of these sites are in busy coastal locations that are jurisdictionally complex and have been heavily exploited. Given the breadth and complexity of these issues there is a need to work more effectively across agencies and governments.

20 More robust processes or structures need to be put in place to support better coordination across departments and agencies to ensure that all activities are appropriately managed.

Overall, implementing minimum protection standards will provide Canada's MPAs with a base level of protection, and help ensure effectiveness. *The MPA Guide* will provide a robust framework to identify potential gaps in protection. With the longest coastline in the world spanning the Pacific, Atlantic and Arctic, Canada has a unique opportunity to set a global standard for marine protection and shore up its legacy as an ocean leader.

Photo CPAWS

About CPAWS

CPAWS is Canada's only charity dedicated to the protection of public land, freshwater and ocean with a strong national and regional presence across the country. We are Canada's leader in conservation with more than 50 years of success based on our expertise, public education and advocacy, relationships and local knowledge. We are a credible, trusted, knowledge-based, nationally coordinated, collaborative organization, focused on conserving nature to respond to the dual crises of accelerated biodiversity loss and climate change.

Our mission

CPAWS advocates for the effective, long-term protection of ecologically- and culturally-significant land, freshwater and ocean areas in Canada. Working in a way that respects the sovereignty and leadership of Indigenous nations, we achieve our mission through knowledge-based advocacy, and public education and engagement, underpinned by collaboration and partnership.

Our vision

At least half of land, freshwater and ocean in Canada is permanently protected to sustain nature and people for current and future generations.

Written by Alex Barron and Natalie Groulx

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Spatial analysis, mapping and data visualizations by Rithikha Rajamohan
Translation by Gil Fontenele

For further information, contact:

CPAWS
CANADIAN PARKS AND WILDERNESS SOCIETY

CPAWS National Office
600–100 Gloucester Street, Ottawa, ON K2P 0A4
Unceded Algonquin territory
www.cpaws.org

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