

# COMMITTING TO EFFECTIVE MARINE PROTECTED AREAS

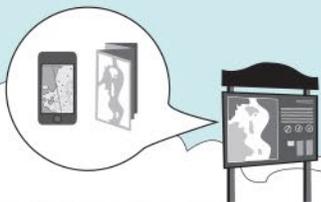


# WELL MANAGED

A well-managed marine protected area (MPA) has a clear plan that is supported and monitored by both the community and government.

# POORLY MANAGED

## MANAGING AN MPA WELL MEANS...



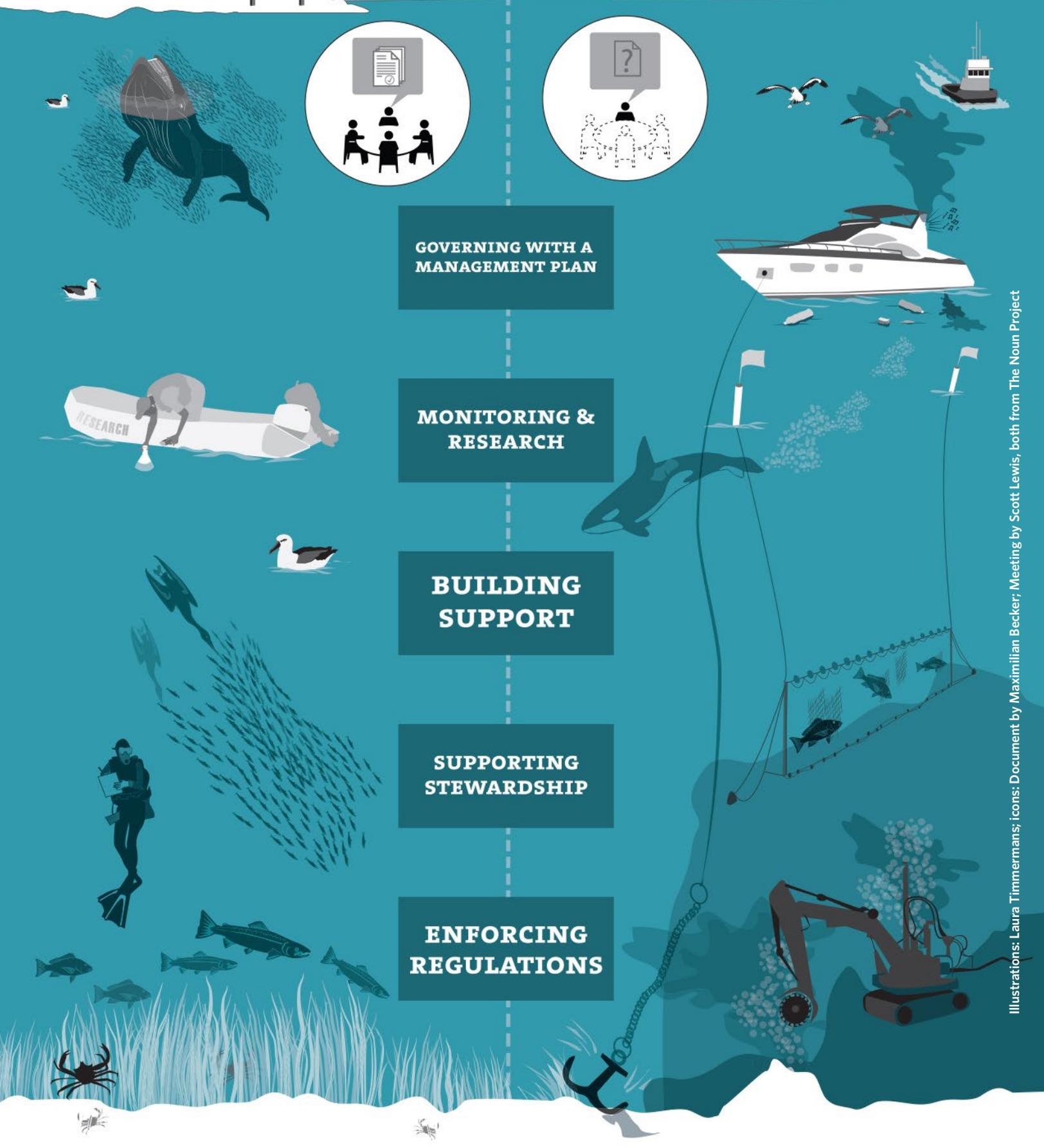
**GOVERNING WITH A MANAGEMENT PLAN**

**MONITORING & RESEARCH**

**BUILDING SUPPORT**

**SUPPORTING STEWARDSHIP**

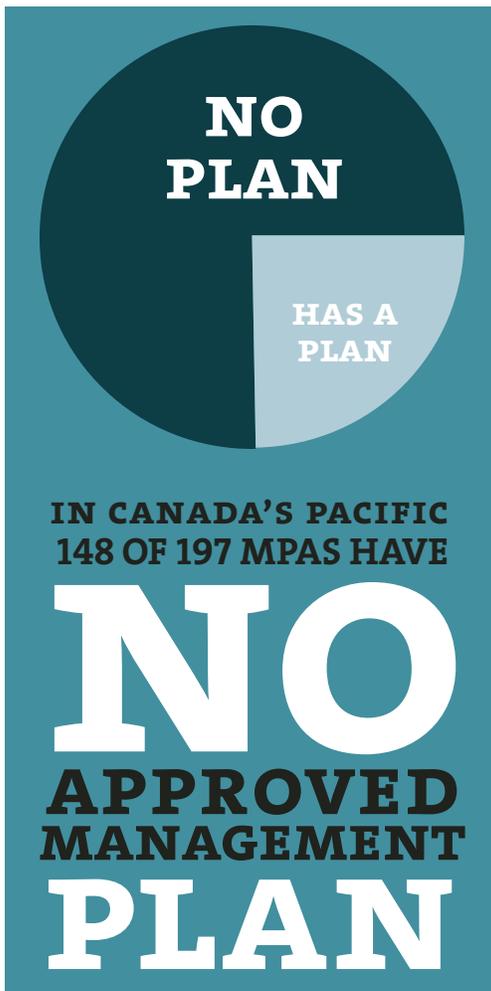
**ENFORCING REGULATIONS**



Illustrations: Laura Timmermans; icons: Document by Maximilian Becker, Meeting by Scott Lewis, both from The Noun Project



# SUMMARY



British Columbians expect their province to be well-managed, especially the marine environment. They want marine protected areas (MPAs) that provide excellent ecological, economic and social benefits. To achieve these goals, MPAs must be well-designed and well-managed.

Identifying and designating sites to build a marine protected area (MPA) network are just the first steps toward realizing the benefits of MPAs. The next steps are to:

- build support among local communities and marine users
- name who will govern the MPA and how governance will be organized
- develop a management plan to monitor and research MPA effectiveness
- support ongoing stewardship and enforce regulations

In today's world, a single government can't do it alone. Governments must partner with each other, and with local communities. Working together can build and enforce effective MPA networks that help boost local economies. With commitment — and creativity — it can be done.

**GOVERNMENTS MUST COMMIT TO  
MAKING MPAS WORK**

# STEPS TO EFFECTIVE MPAs

## Effective MPAs need the following to achieve their intended benefits:

- **Governance** systems that clarify responsibility for enforcing rules and development of management plans.
- **Outreach and education** so communities and user groups understand why MPAs are established, how they can benefit their lives and what they can do to help.
- **Monitor for ecological change** to assess how well MPAs achieve their purpose, and modify if required.
- **Monitor and enforce rules** to ensure the MPA is able to protect the ecological values for which it was created.

## Current B.C. MPAs seriously lacking

Most existing MPAs in B.C. lack management or enforcement, rendering them ineffective. Auditors general at both the provincial and federal level have recently reported a lack of systematic monitoring of federally established MPAs and provincially protected areas.<sup>12,13</sup> As of 2011, 148 of 197 MPAs in Canada's Pacific had no approved management plan.<sup>15</sup>

Although many provincial MPA plans intend to protect habitats or species affected by extractive activities, the province does not have jurisdiction over many of those activities, including fishing.<sup>14</sup> No federal staff have been made responsible for enforcing fishery closures or other regulations in provincial protected areas.

## A need for commitment

Collaborative processes involving federal, provincial and First Nations governments are recommending a network of MPAs. Monitoring and compliance frameworks for this network need clear and committed support and funding from all levels of government.

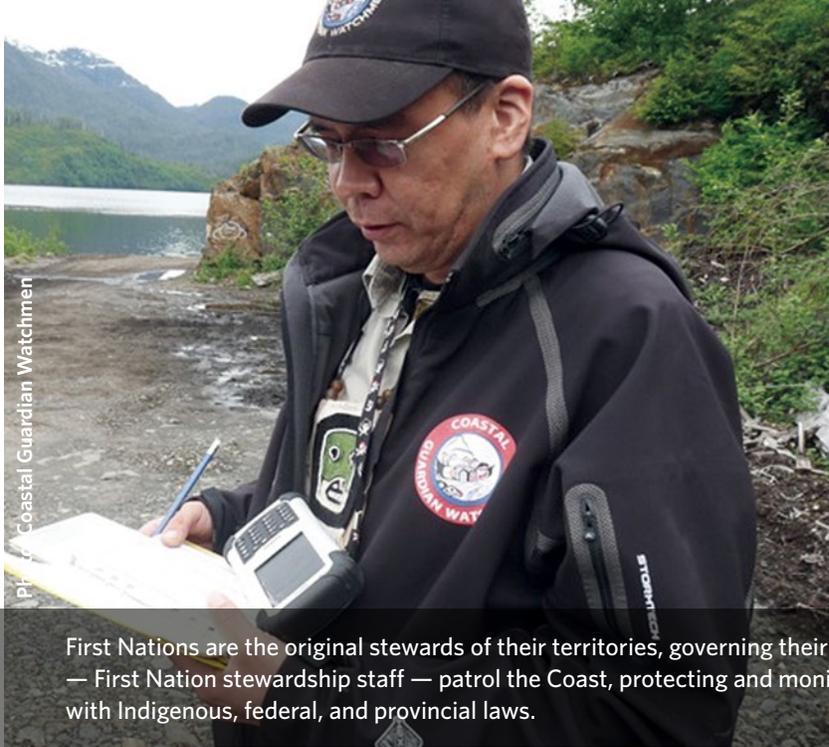
Resources are used more effectively when federal, provincial, First Nations and local governments collaborate, and engage local communities in the components of MPA effectiveness outlined above.

BC MPAs NOT MEETING GOALS:

**90% WERE**  
DESIGNED TO  
PROHIBIT  
RESOURCE EXTRACTION  
**NOT ONE**  
**DOES**<sup>15</sup>

Canada can receive **GLOBAL RECOGNITION** if it creates effective MPAs. The International Union for the Conservation of Nature has established a Green List reward system for well-managed protected areas.<sup>7</sup>

# EFFECTIVE MPAS ARE AN ECONOMIC WIN



First Nations are the original stewards of their territories, governing their lands and waters according to Indigenous laws. Guardian Watchmen — First Nation stewardship staff — patrol the Coast, protecting and monitoring natural and cultural resources and ensuring compliance with Indigenous, federal, and provincial laws.

## Protect MPA investments

Governments are investing time and money to establishing an MPA network. It is only logical to protect that investment by following through to maximize benefits.

## Advance existing stewardship and surveillance programs

B.C. has many successful local stewardship and surveillance programs. For example, First Nations in coastal B.C. operate stewardship and Watchmen teams that are knowledgeable about local areas and respected by their communities. With appropriate training and support, they are well-placed to monitor and enforce marine protection programs.<sup>9,17</sup>

Other community stewardship organizations exist in coastal B.C., and have been involved in initiatives such as species at risk protection. These groups can also be resourced and empowered to participate in MPA monitoring, outreach and education.

## An opportunity for innovation

Monitoring and outreach programs are an opportunity to employ new technologies and methods. In the Canadian Pacific, GPS technology on commercial fishing vessels has improved commercial compliance in fishery closure areas such as Rockfish Conservation Areas.<sup>5</sup> In California, applications for mobile devices inform marine users about MPA regulations and boundaries.<sup>2</sup> Several other remote technologies for monitoring are being used or explored in the Pacific U.S.<sup>1,4,11</sup>

Building monitoring fees into conditions for use and tenure of marine areas can help pay for protection costs. Overhead and logistical costs can be reduced by transferring monitoring from centralized government agencies to trained and resourced local communities and field staff.<sup>6</sup> These programs can then boost regional economies and jobs.

Enforcement of MPAs, fishery closures and fishery management in Georges Bank on North America's east coast has led to **INCREASED ABUNDANCE** of commercially important fish stocks and recovery of sea-bottom habitats.<sup>3</sup>

Traditional marine protection measures in Ahus Island, Papua New Guinea—including limiting the harvest to two days a year and five per cent of the biomass—have led to **100 PER CENT COMPLIANCE** and increases in fish biomass.<sup>10</sup>

# COMMUNITY INVOLVEMENT MAKES MPAs EFFECTIVE



Photo: Marie Fournier

Wardens from non-profit organizations such as Cetus Research and Conservation Society educate boaters and help protect killer whales.

## Canadians want to see results of marine protection

Marine users know when protected areas are appropriately enforced. Compliance increases with increased outreach and monitoring. Communities and stakeholder groups will support marine protection measures that demonstrate benefits.

## Local communities drive the most effective MPAs

Research demonstrates that enforcement is a requirement for effective MPAs. International experience shows that protected areas are more easily enforced when local communities are involved in MPA design and enforcement, and feel they will benefit from the MPA.<sup>8,10,16</sup> Local knowledge, social

deterrents, community vigilance, respect for local needs and simplified logistics to employ those living nearby all add to the value of working with communities.

## Involving local communities increases compliance with MPA rules.

Outreach and education enables resource users and communities to understand the reasons for, and nature of, protection mechanisms. Investment in engaging local communities reduces confusion, creates better relations and minimizes problems down the road.<sup>8</sup>

## Lessons Learned

B.C. fishers are asking for monitoring in Rockfish Conservation Areas (RCAs), a type of fishery closure. There are no systematic programs for baseline data collection or monitoring in RCAs. Lack of outreach has resulted in recreational fishers in particular being unaware of fishing prohibitions in RCAs. Lack of research and education makes it unclear whether rockfish populations are recovering in RCAs, or if some need modification to be more effective. This teaches us that monitoring and outreach programs should be a requirement of MPA network creation.<sup>5</sup>



Photo: Asha Wareham

Partnerships between government regulatory authorities and locally respected stewardship groups can have great results.

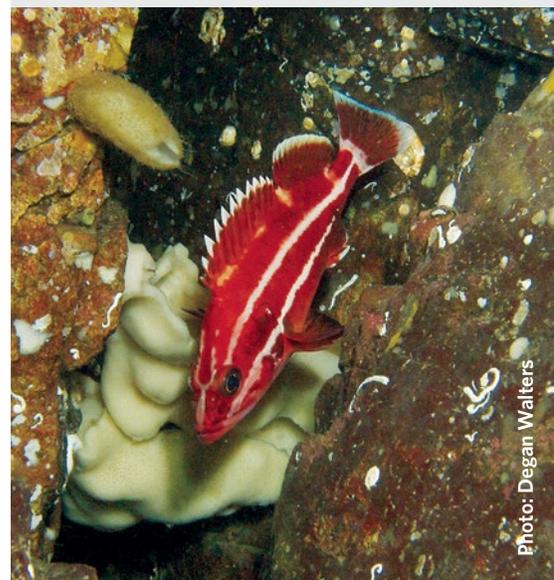


Photo: Degan Walkers

# ACTIONS

## Governments must commit to making MPAs work

1. Design MPAs in consultation with communities, create simple boundaries and regulations, and use a variety of outreach and education tools to make them accessible to marine users.
2. Write a management plan for each MPA with adequate budgets and staff to coordinate enforcement of the plans.
3. Develop intergovernmental agreements and partnerships with local organizations to educate, monitor and enforce.
4. Undertake scientific baseline studies upon MPA establishment, followed by regular monitoring to assess MPA effectiveness.



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Citation: Rao, A.S. and K.M. Bodtker. 2014. *Committing to effective marine protected areas*. David Suzuki Foundation, Living Oceans Society and WWF, Vancouver.

ISBN: 978-1-897375-63-1

An underwater photograph showing a school of fish swimming through a dense field of seaweed. The water is clear and blue-green, and the seaweed blades are long and thin, creating a complex, textured background. The fish are dark-colored, possibly rockfish or similar species, and are seen from various angles, some swimming towards the camera and others away from it.

# British Columbians want MPAs that work.

Photo, this page: David Hall; Cover: Janna Nichols