Establishing MPAs in a Changing Climate

The impacts of climate change, notably increasing sea temperatures, marine heatwaves, ocean acidification, and sea level rise are threatening ocean ecosystems, driving biodiversity loss and posing risks to the livelihoods and well-being of coastal communities.

Marine Protected Areas (MPAs), as Nature-based Solutions (NbS) are critical tools for addressing the challenges of the twin crises of climate change and biodiversity loss. MPAs, including other effective area-based conservation measures (OCEMs) and areas conserved by indigenous peoples, help to protect biodiversity and enable ecosystems to adapt to changing conditions. Climate change adaptation and mitigation can therefore be supported through integrating climate considerations into MPA design and management.

IUCN's Protected Areas and Climate Change Specialist Group and the International Partnership on Marine Protected Areas Biodiversity and Climate Change have developed a technical report on establishing MPAs in the face of a changing climate. As countries work to implement the Global Biodiversity Framework, including Target 3 that calls for at least 30% of the planet's land, waters and seas to be conserved by 2030, this guidance aims to ensure that newly established and expanded networks of protected and conserved areas incorporate climate-informed principles from their earliest stages. In addition, this guidance provides resources and case studies to support the incorporation of climate change management into MPA establishment, including approaches that consider a variety of stakeholder perspectives.

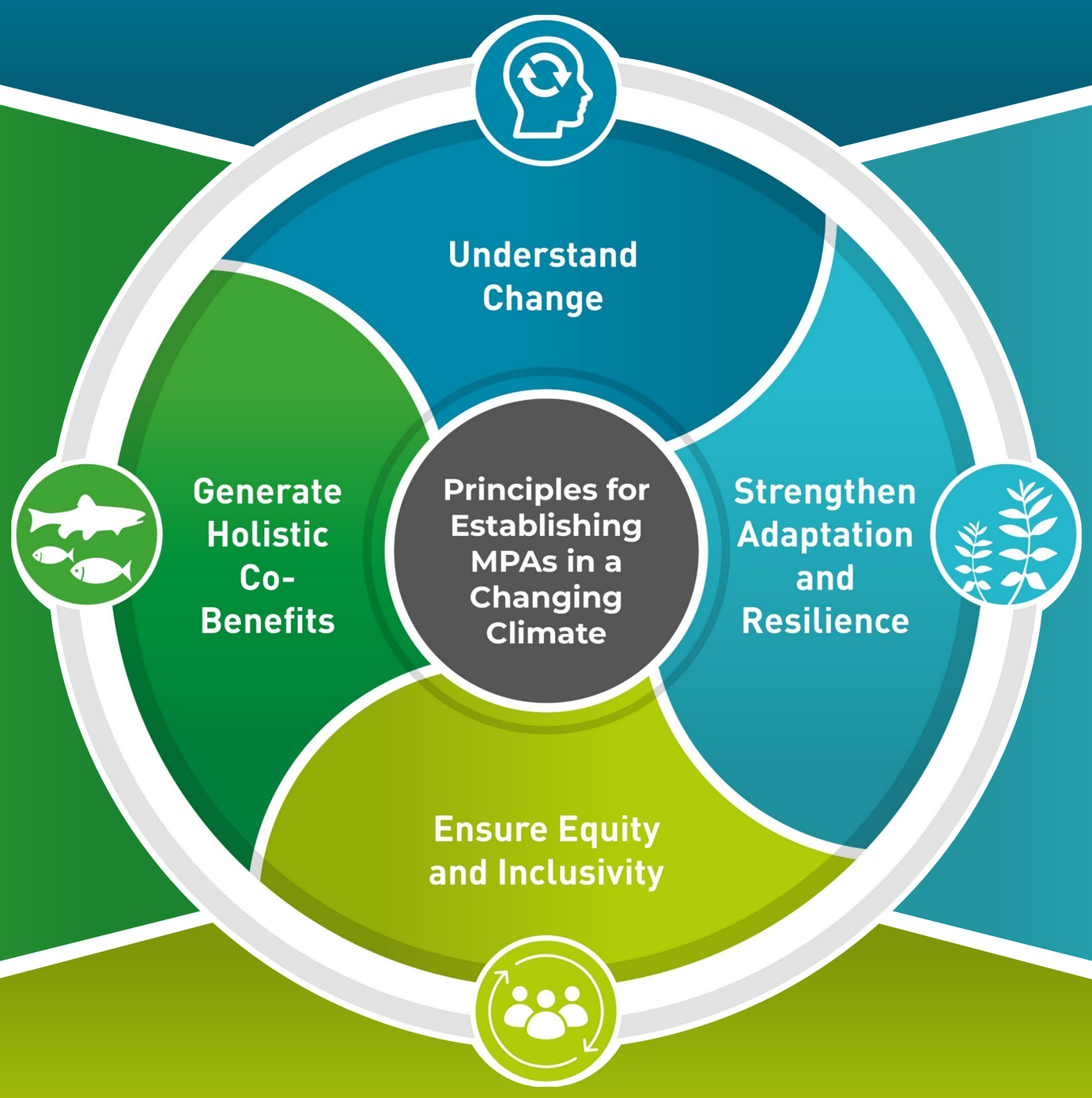
This best practice guidance is shaped by a set of core principles designed to support the development of climate-informed MPAs. These principles were established by a dedicated working group comprising members from the International Partnership's technical team and the IUCN's WCPA specialist group. The working group was formed to address the critical gap in integrating climate change considerations into the planning and expansion of MPAs. The guidance will be published as part of the IUCN's technical report series. The QR code provided links directly to the publication page.

Understand and monitor past, current, and future environmental, ecological, and social change to inform marine protected area planning and adaptive management.

Embedding climate-adaptive strategies into MPA planning, design and implementation supports enhanced effective and responsive conservation of the marine environment in the longer term. Flexible evidence-based strategies should be integrated from the beginning to support MPAs adaptability to changing conditions.

Safeguard and strengthen climate mitigation, adaptation, and resilience co-benefits, whilst acknowledging the full spectrum of ecosystem services for people.

Effective MPA planning needs to involve community-based methods to set goals that consider climate mitigation, adaptation, and resilience alongside biodiversity, social, and economic objectives.



Proactively provide effective area-based conservation in a changing climate to support adaptive and resilient ecosystems.

Climate change considerations should be integrated into MPA goals and objectives to support adaptation and resilience. MPA boundaries should be designed with climate-smart principles that acknowledge ecological connectivity, climate refugia, and future conditions.

Ensure equitable and inclusive design and management in support of the adaptation, resilience, and wellbeing of human communities, cultural practices, and values.

Meaningful involvement of Indigenous Peoples and local communities during the design and establishment phases of MPAs can enhance conservation outcomes, it ensures equitable processes and help to address past inequities and also fosters collaboration.

With 2030 approaching, it is important that the qualitative aspects of MPA planning are addressed in tandem with quantifiable targets. Effective conservation requires addressing climate change during MPA design and establishment phases to ensure long-term biodiversity outcomes. Managers should apply principles and tools for climate integration, fostering collaboration across disciplines. Creating an enabling environment for climate-adaptive management and engaging local communities are essential for building support and achieving global targets. Combining diverse area-based management tools within a marine spatial planning framework can also enhance conservation and sustainable use goals.

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