



MARINE NEWS

REPORTING ON
OCEAN ACTIVITIES
FROM ACROSS IUCN

Decisive days for the deep and open ocean

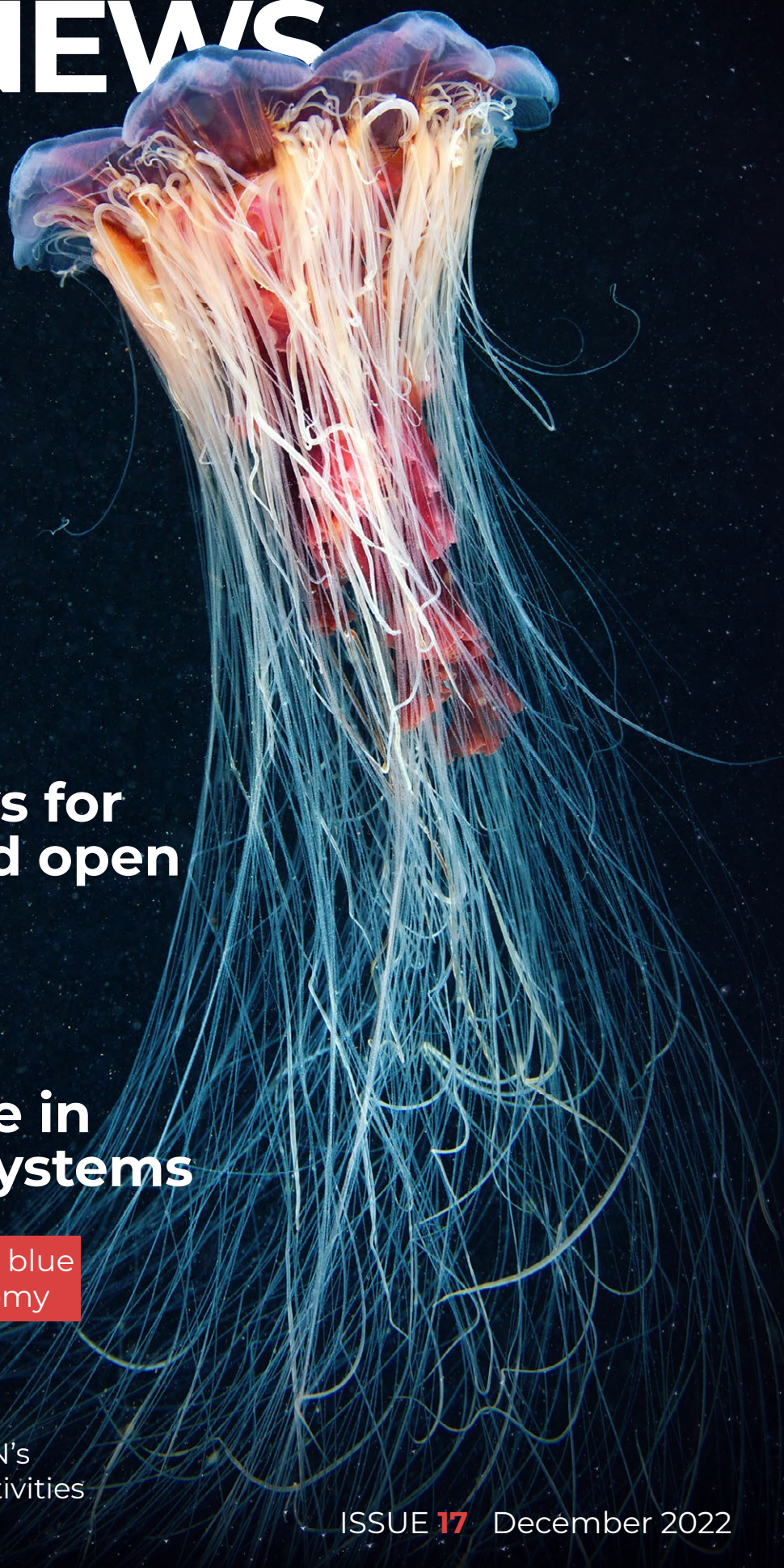
High seas treaty
Deep sea mining

Restoring life in coastal ecosystems

Closing the plastic tap
IUCN grant-making for blue
carbon and blue economy

PLUS news on IUCN's
exciting Ocean news/activities
from around the globe

ISSUE 17 December 2022



IUCN Ocean Team
Rue Mauverney 28
1196 Gland, Switzerland
Tel +41 22 999 0000
marine@iucn.org
www.iucn.org/marine

Edited by James Oliver & Loredana Craciun
Layout by Imre Sebestyén (Unit Graphics)
Project map (P56-57): Data-Partner.ch

The editors would like to thank IUCN secretariat colleagues from across the world, IUCN Commission members, The Ocean Race, the Blue Action Fund, the IMPAC5 secretariat, the China Biodiversity Conservation and Green Development Foundation, Ambassador Peter Thomson, SOMN project partners WWF Germany and the Sargasso Sea Commission for their contributions and Imre Sebestyén for his wonderful layout skills.

Front cover: Lion's mane jellyfish *Cyanea capillata* © Alexander Semenov
Back cover: Rock greenling *Hexagrammos lagocephalus* © Alexander Semenov

Photos by Shutterstock unless otherwise credited, except for:
Page 2-3: © IUCN
Page 6-7: People shots - Courtesy of IMPAC5 secretariat
P11: Leaf and salt crystals © Ulf Mehlig / Wikimedia Commons and mangrove roots © Ardiles Rante
P37: Photos courtesy of Sargasso Sea Commission
P50: Photo courtesy of the NOAA Office of Ocean Exploration and Research, 2019 Southeastern U.S. Deep-sea Exploration

The designation of geographical entities in this book, and the presentation of the material, do not imply the expression of any opinion whatsoever on the part of IUCN or other participating organisations concerning the legal status of any country, territory, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. The views expressed in this publication do not necessarily reflect those of IUCN or other participating organisations.

Copyright: © 2022 IUCN, International Union for Conservation of Nature and Natural Resources
Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged. Reproduction of this publication for resale or other commercial purposes is prohibited without prior written permission of the copyright holder.



In this Issue...

- 1 Guest Editorial by H.E. Ambassador Peter Thomson, United Nations Secretary-General's Special Envoy for the Ocean**
- 2 IUCN Congress retrospective**
- 3 Relay for Nature/ The Ocean Race**
- 4 Member focus page**
- 6 Global Coasts**
IMPAC5, Blue Natural Capital, Blue Carbon Accelerator Fund, Ocean Climate Policy, Save our Mangroves Now, IMPANA, Subnational Climate Fund, Blue Action Fund
- 19 Global Threats**
Ocean Climate Multistressors, Marine Plastics (MARPLASTICCS, Plastic Waste-Free Islands, West Africa, Mediterranean), Sunken Vessels, Important Shark and Ray Areas
- 32 Global Commons**
High Seas, Deep sea mining
- 36 Other Initiatives**
Sargasso Sea, BEST, Save our Species
- 42 Regions and Commissions**
Mediterranean, West & Central Africa, East & Southern Africa, Asia, CEESP, CEL
- 51 New Publications**
- 53 Who we are**
- 56 Project map**

2022 has been and continues to be a year of promise for the ocean's wellbeing. Widely termed the "super year" for the ocean, due to the many important conferences where ocean health has been a focus of attention, there has been much progress this year towards the recovery and sustainable use of the ocean.

At the beginning of February, the One Ocean Summit in Brest, called by France's President Macron, kicked off the Ocean Year, pushing progress towards achieving Sustainable Development Goal 14 (SDG14) with such measures as the launch of the High Ambition Coalition for [Biodiversity Beyond National Jurisdiction](#) and a redoubling of the international initiative to achieve 30% protection of the planet's land and ocean by 2030 (30x30). And then at the end of February in Nairobi, the United Nations Environment Assembly adopted a consensual resolution to negotiate a binding [international treaty to stop plastic pollution](#). We now have hope that the plague of plastic pollution we have inflicted upon Nature can be curtailed.

Momentum was maintained in June with the World Trade Organization Ministerial Conference's landmark decision to end harmful fisheries subsidies in conformity with SDG14.6. Pressure is now on for two thirds of Parties to deposit their "instruments of acceptance" with WTO to bring the decision into force. The same month witnessed the [UN Ocean Conference in Lisbon](#), co-hosted by the Governments of Portugal and Kenya, where over 6,000 participants, including scores of national leaders and hundreds of youth representatives, brought their solutions and commitments to the table in support of SDG14. In August, attention turned to the Intergovernmental Conference on Marine Biodiversity Beyond Areas of National Jurisdiction (BBNJ) in New York, and whilst delegates were unable to get a treaty text over the line, the necessary [groundwork was laid](#) for a successful conclusion of negotiations when they resume in the first half of 2023.

We closed the year with the two crucial Conference of Parties on climate and on biodiversity. The UNFCCC

COP27 in Egypt no doubt benefitted from the UNFCCC's increased recognition of the role of the ocean in climate change mitigation and adaptation (the "Glasgow Pact"), with the first of the UNFCCC's Ocean and Climate Change Dialogues having been held in Bonn in June. Be it in food, energy, communications, or health, we see growing acceptance that the Sustainable Blue Economy underpins the future of human security on this planet. Thus, there is an urgent requirement for the climate finance needle to move decisively in its direction and we hope to see evidence of this emerge after COP27.

2022's ocean agenda wrapped up in Montreal in December with the Convention on Biological Diversity's COP 15, where over one hundred Parties called for 30x30's inclusion in the Post-2020 Biodiversity Framework. With the adoption of the framework in Montreal, we will be heading towards a massive work programme to effectively govern and finance marine protected areas (MPAs). These will range from highly protected MPAs to Other Effective Conservation Measures, which taken together with FAO's work in the management of fish-stocks, will tackle the spectre of biodiversity loss in the ocean. Personally, I believe there is a need for well-resourced international fund to ensure effective establishment and governance of MPAs, with a universal, distance-neutral toll on international shipping being the obvious source of funding.

As the Ocean Super Year draws to an end, there will be little time to recharge our batteries. To ensure promises are kept, to enable ambition to be realised in action, and to begin to see meaningful reversals in the decline of ocean health, we must forge into 2023 with renewed will. The road from Montreal leads to Vancouver, where we will gather in early February at the IMPAC5 conference (see pages 6 and 7) to strengthen, finance, and greatly multiply the Marine Protected Areas of the planet, and in so doing will collectively build a roadmap for the achievement of 30x30 and the safeguarding of what remains of Nature's bounty.

IUCN Members call for greater ocean ambition!

The IUCN Congress, held in Marseille in September 2021, urged governments to implement nature-based post-pandemic recovery efforts by investing at least 10% of global recovery funds in nature-related projects, and adopted a series of resolutions and commitments to urgently address the interconnected biodiversity and climate crises.

In all, 148 resolutions and recommendations were adopted including many on ocean [themes](#). These included 4 recommendations on the protection of marine mammals, the planning of activities at sea and a landmark IUCN call for a moratorium on seabed mining that was supported by more than 80% of the States and more than 90% of the organisations in the IUCN Members' Assembly.

The IUCN Congress adopted its final declaration, the [Marseille Manifesto](#), focusing on a transformative, effective and ambitious post-2020 framework for biodiversity conservation. This marked the starting point for what many termed a "super year" for the oceans culminating in the UN Biodiversity "COP 15" in December 2022 where the post-2020 framework is up for discussion and agreement.

A high-level session was dedicated to the ocean for the first time at an IUCN Congress. Among many national commitments announced at the Congress, Greek Prime Minister Kyriakos Mitsotakis pledged to reduce



overfishing in declaring that by 2030, 10% of territorial seas will become no-fishing reserves. President Emmanuel Macron announced a planned 25-fold increase in the proportion of French Mediterranean marine areas under "strong protection". The Mediterranean will also benefit from an eight-government action plan to relaunch regional cooperation on the protection of marine biodiversity and fisheries management as well as the creation of a new PSSA (Particularly Sensitive Sea Area) specifically to protect cetaceans and other migratory species. The financing of protected areas will also receive a boost under the Highly Protected Mediterranean Initiative.

Finally, IUCN Congresses also focus attention on the benefits



of conservation. These were notably highlighted through Red List data demonstrating four of the seven most commercially fished tuna species are showing signs of recovery thanks to more sustainable fishing quotas and a more effective fight against illegal fishing enforced by some countries.

UN Special Envoy on the Ocean, Peter Thomson, closed out the Congress declaring "*the protection of the ocean is a matter of intergenerational justice, the preservation of its integrity is essential for the future of humanity.*" We hope that there will be more conservation success to celebrate the next time the IUCN Congress comes around again in 2025!



Relay4Nature

The Ocean is the track for the longest and toughest sporting event in the world. Throughout its 50-year history, the Ocean Race has swept across the face of the planet as sailing's highest challenge. The Race as a body has recognised a healthy Ocean as being crucial to the survival of all of humanity as well as nature, and is giving back to the Ocean that it sprints across.

Relay4Nature was created to help make this happen. The initiative aims to give the ocean a voice on the critical issues affecting our planet. Developed by The Ocean Race, in collaboration with UN Secretary-General's Special Envoy for the Ocean, Peter Thomson, [Relay4Nature](#) champions our amazing ocean and calls on leaders to take urgent action to protect nature:

- Giving the ocean a voice at landmark events where decisions are made about the environment
- Connecting the different, but interconnected issues, by linking the international conferences addressing climate change, biodiversity loss and the decline of the ocean's health. Thus underlining the inseparable connectivity of the planet's environmental problems and solutions
- Gathering messages from ministers, business leaders, royals, sailors and ocean lovers to world leaders, calling for them to radically increase their action to support a healthy and productive ocean

A hand-crafted wooden relay baton was created, and at the IUCN Congress it was filled with hopeful messages from people around the world, giving the Relay4Nature a physical form for people to focus on and recall its message.

The Baton travels around the world on the backs of the yachts of the Ocean Race, advocating for the Ocean with its presence:

- 2021** COP26, IUCN Congress and The Ocean Race Europe
- 2022** One Ocean Summit, Our Ocean Conference, UNEA, UN Ocean Conference, UNFCCC COP27, UN Convention on Biodiversity COP15
- 2023** IMPAC5, Vancouver

The Ocean Race is advocating for Ocean Rights. We have one ocean, problems aren't isolated, and a country-by-country approach to protection is failing our blue planet. The world needs to come together to tackle the issues, so we need one set of rules to protect it. Giving the ocean rights should be at the heart of this. By shifting perception of how we treat the ocean, from a resource to use and exploit, to a vital, complex, system that fuels all life on the planet, we can better protect and restore it.

More information:
www.theoceanrace.com/en/relay4nature
[#Relay4Nature](https://twitter.com/Relay4Nature)



Deep Sea Mining for Renewable Technologies: a Potential Catastrophe for Biodiversity and Climate

The majority of proposed deep sea mining sites are near polymetallic nodules or active and extinct hydrothermal vents at 1,400 to 3,700 metres (4,600 to 12,100 ft) below the ocean's surface. The vents create globular or massive sulphide deposits which contain valuable metals such as silver, gold, copper, manganese, cobalt and zinc.

Deep-ocean sediment (DOS) ecosystems, where polymetallic nodules occur, cover more than half of Earth's surface and remain one of the least explored ecosystems on the planet. Ecosystems in the DOS are responsible for vital ecosystem services including nutrient recycling for the healthy functioning of ocean ecosystems and carbon sequestration for the regulation of Earth's climate over geological time scales. The DOS appears to be much more diverse than oceanic waters and is composed of communities of mostly unknown eukaryotes. The DOS as one of Earth's richest modern ecosystems and fossil archives. The richness of the ecosystems underline the need for concerted international efforts to further understand DOS biodiversity and its ecological role in planetary biogeochemical cycles.

Sea cucumbers, brittle stars, worms, and wispy new species related to jellyfish and coral make their home in deep-sea nodule fields. Mining vehicles will rake-up bottom waters with fine particles as they roam around sucking up nodules, and operators will discharge sediment carried up in pipes back into the ocean. Muddy water could clog delicate mucus filters of animals like the giant anemone *Relicanthus sp.* or obscure light that species like the vampire squid *Vampyroteuthis infernalis* and the barbeled dragon fish *Idiacanthus antrostomus* use to mate and hunt. Deep Sea Mining efforts will increase ambient noise in the normally-quiet pelagic environments. Anthropogenic noise is known to affect deep sea fish species and marine mammals. Many scientists believe that seabed mining is posed to irreparably harm fragile abyssal plain habitats.

The International Seabed Authority (ISA), an autonomous international organization established in the UN Convention on the Law of the Sea (UNCLOS), is tasked with managing deep-sea mining activities. In July 2021 Nauru made use of a rule embedded in UNCLOS that could rush the completion of exploitation regulations to within two years start of mining, including in the Pacific's Clarion-Clipperton Zone (CCZ). The Metals Company (TMC), sponsored by Nauru, have provided assurances that they will work to ensure minimal environmental impact. How will that be checked? How can indigenous knowledge relevant to seabed mining be included? TMC recently announced it had just finished testing its nodule collector vehicle in the North Sea, and that trials would soon start in the CCZ. Who will bear the liability for environmental harm? There is lack of adequate scientific knowledge to establish environmental regulations and standards that can ensure effective protection from harmful effects.

IUCN MEMBER OPINION PIECE

China Biodiversity Conservation and Green Development Foundation

The unleashing of mining in the CCZ could open up mining throughout the CCZ. Mining 500,000 km² (193,000 mi²) of the CCZ would impact an area three times larger — the combined size of Spain, Portugal, France, Belgium and Germany — with noise and sediment plumes. Should we forge ahead with deep-sea mining in the midst of the climate crisis rather than look for alternative materials to build renewable energy technologies? Are we not creating a new problem trying to solve another problem? The next set of ISA meetings will be critical in determining the direction of deep-sea mining.

Article provided by: M. James C. Crabbe, Supernumerary Fellow of Wolfson College, Oxford University, and Emeritus Professor of Biochemistry; Linda Wong, Deputy Secretary-General, China Biodiversity Conservation and Green Development Foundation; and Jinfeng Zhou, Secretary-General, China Biodiversity Conservation and Green Development Foundation.

References:

Amon, D. J. et al. (2022). *Marine Policy*, 138.doi:[10.1016/j.marpol.2022.105006](https://doi.org/10.1016/j.marpol.2022.105006)
Cordier, T. et al., (2022) *Sci. Adv.* 8, eabj9309 (2022) 4 February 2022.
Jones, D.O.B. et al. (2021) *Progress in Oceanography*, 197, 102653.



© Deep Atlantic Stepping Stones Science Team IFE URI NOAA

Welcoming the world to IMPAC5 in Vancouver, Canada in 2023



IMPAC5 is where we will come together and take a stand to protect the global ocean.

From 3–9 February 2023, the [Fifth International Marine Protected Areas Congress \(IMPAC5\)](#) will be jointly hosted by the Host First Nations—xʷməθkʷəy̓əm (Musqueam Indian Band), Skwxwú7mesh (Squamish Nation), and səliłwətał (Tsleil-waututh Nation)—together with the Government of Canada, the Province of British Columbia, the Canadian Parks and Wilderness Society (CPAWS) and IUCN.

IMPAC5 will bring the global marine conservation community together to chart a course towards achieving ocean conservation targets set at the 15th Convention on Biological Diversity Conference of the Parties (CBD COP15). The Congress will build on the growing momentum for marine protected areas globally and on the expectations set at the four previous IMPACs since 2003.

“As Minister of Fisheries, Oceans and the Canadian Coast Guard, I am thrilled to announce the first three keynote speakers in an exciting lineup planned for the upcoming Fifth International Marine Protected Areas Congress. IMPAC5 will provide opportunities for marine experts from all walks of life to engage in dialogues with international experts, Indigenous

peoples, youth, scientists and others in the international marine protected area movement as we chart a course towards protecting 30 per cent of the global ocean by 2030.” – The Honourable Joyce Murray, Minister of Fisheries, Oceans and the Canadian Coast Guard.

IMPAC5 will be a hybrid event offering in-person and virtual programming. Each day will feature keynote speakers on one of its [five themes](#): building a global marine protected area network; managing marine protected areas and activity; addressing the climate crisis and conserving biodiversity; advancing conservation in the blue economy; and connecting ocean, culture and human well-being. Three [cross-cutting streams](#) will be woven throughout all elements of IMPAC5: Indigenous peoples leadership; the voice of young professionals; and innovation and transformational change.



Keynote Speakers

Keynote speakers have been invited to represent a cross-section of ocean professionals from around the globe. Among the first keynote speakers to be announced are Ruth Mthembu, Daniel Pauly and Hinano Murphy.

Ruth Mthembu uses her passion and understanding of law and communications to make a positive contribution to ocean conservation. As part of the “Youth for MPAs”, a movement of over 400 youth on a mission to save South Africa’s oceans, she co-led ocean advocacy campaigns that aim to drive policy change in South Africa. Her love for communication has now found its place at Mr Price Group Limited, a leading South African retailer, where she focuses on strategic communication to a team of over 20, 000 people. Ruth is also a member of the [IMPAC5 Young Professional Committee](#) where she is focused on developing an intergenerational mentoring program for IMPAC5 participants.

Dr. Daniel Pauly is a world-renowned fisheries scientist and serves on the board of directors of Oceana. He is currently the Principal Investigator of the Sea Around Us initiative, a large research project devoted to identifying and quantifying global fisheries trends. The concepts, methods and software which Daniel Pauly led and co-developed are referenced in over 1,000 scientific and general-interest publications, and are used throughout the world.

Hinano Teavai-Murphy is a widely-recognized expert in Tahitian cultural history. She grew up on Moorea and Tahiti learning oral traditions from her elders. A former school teacher, she served as a technical advisor to the government, developing Tahitian language and culture programmes for schools. She has fulfilled roles as Associate Director of the UC Berkeley Gump Research Station, President of the cultural organization Te Pu Atitia and is serving as the Cultural Director for Tetiaroa Society. Hinano has lectured around the world on traditional Polynesian knowledge and its intersection with science, conservation and environmental philosophy.

Additional information on the [programme](#) and on [registration and field trips](#) can be found at www.IMPAC5.ca.



The BNCFF journey continues...

The Earth is in trouble. But the ocean can help.

"...funders must provide [capital] for project design...feasibility, technical assistance, capacity building and...measurement to bring more projects to the bankability stage."*

The BNCFF continues to do just that!

Launched in 2018, the Blue Natural Capital Financing Facility (BNCFF) is designed to support Nature-based Solution (NbS) financing opportunities in and around marine and coastal environments and to help strengthen specific projects that combine bankability and positive environmental and social impacts. BNCFF has been offering both project sponsors and developers the required technical advice and access to funding so as to get their projects past the financing hurdle.

Since its launch and under its first phase, BNCFF has screened more than 100 proposals and selected the [eight most promising ones](#) that met BNCFF's high standards of combining potential commercial viability with habitat protection and livelihood improvements for vulnerable climate-threatened communities.

As Luxembourg renewed its financial commitment to BNCFF, a second phase has been launched. Thematic calls for proposals are being issued, with one focusing on Green-grey infrastructures whose applications are being assessed, and one on Marine Protected Areas (MPAs). Further calls are being defined in consultation with the donors.



In the **Investing for Ocean Impact** podcast, we've spoken to leading conservation and blue finance experts to understand why investments in our ocean are crucial and what the current market looks like. We've asked investors of all sizes what makes an appealing blue investment and how do we move towards mainstreaming them. We've explored how global policy makers see this new blue finance world and how they can help facilitate progress. And finally, we've dived into real life, working examples of Nature-based Solution projects on the path towards becoming sustainable businesses that create a positive impact for the ocean. From seaweed farms to marine protected areas, find out how these are projects that investors can indeed get behind.

The time to invest in our ocean is now.

LEARNING and SHARING



The BNCFF series of eight Blue Prints provides examples on how to integrate Blue Natural Capital restoration and conservation into sustainable business models.

This Impact Report card series showcases how BNCFF support has helped projects on the journey towards becoming bankable businesses with investor appeal.

KNOWLEDGE HUB



With the financial support from the Government of Luxembourg, the Government of Sweden and UBS's Optimus Foundation, BNCFF also produced a set of knowledge products, which have been well received in the community and are being used as references and technical guidance for their continuous work:

The Knowledge Centre features the following publications:

- [Blue Bonds: Financing the Resilience of Coastal Ecosystems](#)
- [Blue Infrastructure Finance](#)
- [BNC+ Framework](#)
- [BNC Positive Impacts Management System](#)
- [Multilateral Development Bank Engagement](#)
- [Investments in Coastal NbS: Opportunities for National and Local Governments](#)

* WWF-UK / Terranomics (2022)

The Blue Carbon Accelerator Fund: getting projects ready for investment and direct implementation

BCAF is designed to find, grow, support, and fund projects in developing countries involving Blue Carbon restoration and conservation. Blue Carbon is the carbon stored in coastal and marine ecosystems – taken from the atmosphere and ocean, then stored naturally.

Why blue carbon ecosystems?

Coastal blue carbon ecosystems are environments that support mangroves, tidal marshes and seagrasses. They play a crucial role as carbon sinks, sequestering and storing large amounts of carbon in their soils, roots and plants. They also provide significant benefits to protecting biodiversity and supporting livelihoods:

Carbon benefits

The climate regulation role of blue carbon ecosystems makes their restoration and protection so important in the fight against climate change. Sadly, these ecosystems are often destroyed to make way for developments, an activity that releases vast amounts of carbon into the atmosphere, further fuelling climate change.

Ecosystem benefits

Coastal ecosystems are some of the most productive on Earth. They are home to important biodiversity and provide many ecosystem services, such as essential breeding grounds for commercial fish, habitat for threatened marine species such as turtles and dugongs, and feeding and staging grounds for migratory birds. They also stabilise shorelines and purify water flowing into ocean and reef systems.

Community benefits

Coastal blue carbon ecosystems play a vital role in food security and sustaining coastal livelihoods, including by supporting fishing and tourism businesses. They also provide a natural barrier that can reduce the impact of storm surges, infrastructure damage and can protect lives. The involvement of communities in the set-up, management and execution of carbon restoration projects is crucial to ensure longevity of protection while boosting local job creation.

Two roads to success

There are two avenues BCAF drives to stimulate the uptake of blue carbon:

- 1. Readiness support.** Building and supporting developers who have so far struggled to bring their projects to a state ready for full implementation funding, so increasing the global supply of credible, shovel-ready blue carbon restoration projects; and
- 2. Implementation support.** Funding and supporting blue carbon ecosystem restoration or conservation projects that will demonstrate and measure climate, biodiversity and livelihood benefits – furthering the business case for private sector investment in blue carbon ecosystems.

Supported Readiness or Implementation projects will also have access to technical guidance, collaborative networks and exposure to opportunities for future financing.

Making it work for everyone

As part of the implementation process, BCAF also harbours a private sector investment component and will “match-make” projects to investors, finding the best way forward for all involved. It will apply measurement approaches that allow valuation of the climate, biodiversity and livelihood benefits of these ecosystems.

Projects winners so far

BCAF has only just begun, but has already found winners in its first Readiness Support call for proposals.



Mangroves in Benin improving local living standards

Aiming to create, protect, restore and manage at least 2,088 ha of mangrove forest across three sites in Benin, West Africa. Having already completed a pilot phase, the project is now looking to accelerate and upscale activities with an aim to start selling carbon credits.



Strengthening the resilience of Peru's largest mangrove forest

Quantifying the potential of the National Sanctuary Manglares de Tumbes as a source of carbon credits to provide local communities with a new income stream and fund ongoing management of the site.



Safeguarding biodiversity and livelihoods in Madagascar

The objective is to create, protect, restore and manage at least 2,088 ha of mangrove forest across three sites on the north-western coast of Madagascar. Having already completed a pilot phase, the project is now looking to accelerate and upscale activities with an aim to start selling carbon credits.



Restoring mangroves for disaster protection in the Philippines

Despite providing disaster risk reduction, coastal protection against floods, storms, tsunamis and sea level rise, mangrove forests are under threat. Partners Zoological Society of London and Coast4C are working to protect and restore large areas of mangrove forest using their proven assisted natural regeneration approach.

The first **Implementation Support** call for proposals has just closed, so watch [BlueNaturalCapital.org](https://bluenaturalcapital.org) for announcements of winners, and the status of supported projects as they grow to maturity.

BCAF was established by Australia and IUCN as a dedicated funding scheme. It continues a vision to help increase coastal blue carbon ecosystems conservation and

restoration to aid climate change mitigation and adaptation, biodiversity, and livelihoods of coastal communities.

BCAF also collaborates with partners such as the International Partnership for Blue Carbon and is actively searching for further private enterprise and finance partners.

Using policy as a tool to accelerate the conservation and restoration of coastal blue carbon ecosystems

A major partnership is accelerating the conservation and restoration of blue carbon ecosystems globally by unifying siloed, disconnected conversations and policy

Recognising that most environmental issues are best addressed through international cooperation, today there exists a myriad of international policy processes meant to address the pressing challenges of climate change, biodiversity loss and sustainable development. The world of international policy – one of conference centres and country name plates; far away from mangrove forests – plays a key role in increasing global action to conserve and protect coastal blue carbon ecosystems. Within these international policy processes, such as the United Nations conventions on climate change and biodiversity, countries come together to set ambitious goals, take on-the-ground action at the national level, and share what they have achieved to date.

However, while numerous international policy processes exist to tackle pressing environmental issues, many of these processes were established decades ago, in isolation from each other, often making it difficult for countries to collaborate across their closely-related themes of climate change, biodiversity and sustainable development.

To help address this challenge, Conservation International and IUCN, along with many partners, are working to accelerate the conservation and restoration of blue carbon ecosystems globally by increasing synergies across these often siloed, disconnected conversations. The United Nations Framework Convention on Climate Change (UNFCCC), the 2030 Agenda and related Sustainable Development Goals (SDGs), the Ramsar Convention on Wetlands and the Convention on Biological Diversity (CBD) are the key policy processes relevant to conserving and restoring blue carbon ecosystems, and shifting from traditionally siloed approaches to integrated approaches across these policy processes holds the potential to enhance ambition, accelerate implementation and deliver high-quality outcomes for coastal blue carbon ecosystems.

To achieve these high-quality outcomes for blue carbon ecosystems, governments should align actions across international policy processes to 1) enhance ambition, 2) accelerate implementation and 3) measure results.

Aligning goals for blue carbon ecosystems can increase global ambition, leading to more – and better outcomes on the ground

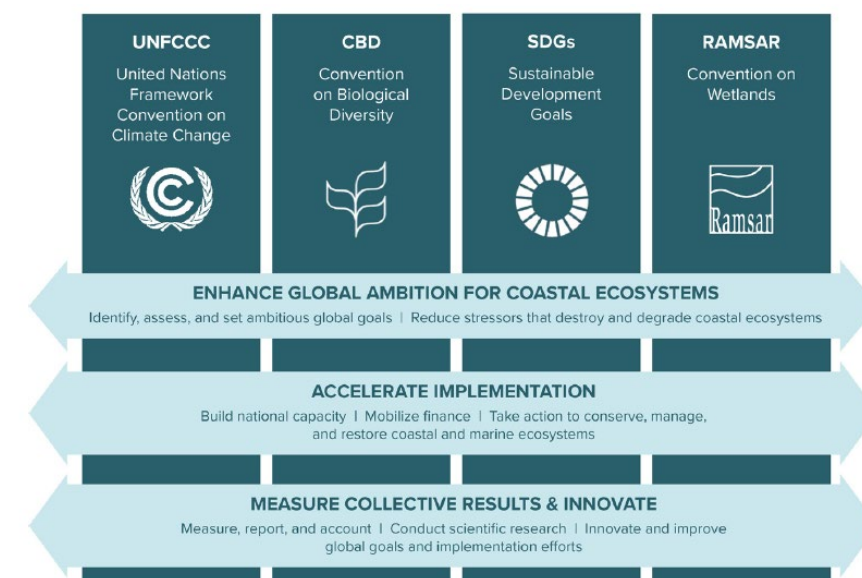
Setting ambitious goals – whether you're a government, business or private citizen – can serve as a guidepost for action. For countries working within international policy processes, this crystalizes in the development of ambitious commitments related to tackling the climate, biodiversity and sustainable development challenges, and developing strategies to achieve them. Some examples of countries' commitments include Nationally Determined Contributions (NDCs) under the UNFCCC, and National Biodiversity Strategies and Action Plans (NBSAPs) under the CBD. Ideally, the commitments and national plans that countries make would be closely aligned and lead to a coherent set of national-level policies to tackle climate change, biodiversity loss and sustainable development – however they seldom do.

Aligning goals and related commitments for blue carbon ecosystem conservation and restoration across international policies and countries' national-level plans can promote streamlined on-the-ground action and lead to stronger future commitments. Capitalizing on synergies across international policy processes can enable the creation of more ambitious goals while simultaneously accelerating the achievement of these goals across processes.

On-the-ground conservation and restoration can be implemented more efficiently and effectively

After setting ambitious goals for conserving and restoring blue carbon ecosystems, countries must take action on the ground. Following through on commitments made in NDCs, NBSAPs and National Development Plans requires knowledge, capacity and funding. Aligning support for on-the-ground action across policy processes can ease capacity and financial limitations by facilitating easier pathways to implementation.

On-the-ground action is often hindered by a lack of information, understanding and technical capacity to effectively conserve and restore blue carbon ecosystems.



Opportunities to align actions across policy processes to enhance ambition, accelerate implementation, and measure

Information and guidance provided by groups such as the Intergovernmental Panel on Climate Change (IPCCC), the Ramsar Scientific and Technical Review Panel (STRP), and others can be leveraged to supplement, inform, and build capacity to implement coastal restoration and conservation national policies, programs and projects. Similarly, guidance and work conducted by programmes, expert groups and thematic groups across policy processes can be integrated into blue carbon projects.

Supporting synergies can promote innovation and better measurement of conservation and restoration outcomes

Measuring results from on-the-ground conservation and restoration work, and innovating to move efforts forward, are essential to meeting the goals set for blue carbon ecosystems, and the broader international goals and targets agreed upon under these policy processes. Using a common set of indicators to measure progress across policy processes would serve as a key step forward.

Scientists, project developers and above all, the coastal communities depending on the services, benefits and jobs they derive from the coastal blue carbon ecosystems need more funding and financing to achieve high-quality conservation and restoration projects on the ground. In many cases, it's the international policy negotiations, and ultimately the recognition of common priorities, that can help unlock crucial support for these communities and countries.

IUCN and CI, along with their many members and partners, have collaborated on coastal blue carbon and other coastal policy issues for over ten years. We are particularly grateful for the technical content and strategic input from many colleagues and experts. This allowed us to provide ongoing recommendations for ocean and blue carbon action in the UNFCCC, including the Ocean and Climate Change Dialogue.

See www.bluecarbonpolicy.org/library for all related policy documents.

First published in *ECO magazine*.



Saving our Mangroves in the Western Indian Ocean Region



Mangrove forests are some of the most complex and awe-inducing ecosystems in the world. In seemingly impossible circumstances in the intertidal zone between land and sea, these miraculous forests not only survive but thrive. They in turn help millions of people thrive too, by providing food security, protection and livelihoods. A [new report](#) by Save our Mangroves Now! takes a closer look at the latest data on extent, loss and gains, and the socioeconomic value of mangroves in Kenya, Tanzania, Mozambique, and Madagascar, as well as governance challenges and policy opportunities.

Mangroves are incredible Nature-based Solutions for the interlinked climate and biodiversity crisis. They convert CO₂ to organic carbon at higher rates than almost any other habitat on Earth, protect coastal communities by serving as a buffer against storms and are a haven for biodiversity. Around 5% of the 14.5 million hectares of mangroves worldwide are located in the Western Indian Ocean (WIO) region. For the communities of the WIO region, these #RootsofHope are not only coastal guardians, but also wealth generators through natural resources such as timber, fuelwood, fish, honey, and traditional medicines.

What we know - report highlights

The findings of the report make clear Kenya, Madagascar, Mozambique and Tanzania share the widely similar ecological and socio-economic benefits provided by mangroves. The fishing industry is particularly dependent on them: 150,000 people rely on mangroves for their livelihoods in Tanzania while Kenya and Madagascar's prawn and trawling industries derive over USD 36 million per year from mangroves. At the same time, mangroves are home to significant animal biodiversity, such as 73 waterbird species, 94 fish species, 19 amphibian species, Nile crocodiles and several other reptiles, including marine turtles and this in Mozambique's Zambezi Delta alone. In Mozambique and Madagascar, mangroves store around one third of the countries' annual CO₂ emissions. While the benefits are similar, so are the challenges. Deforestation for fuel, agriculture, salt mining and urbanization are common themes in all four countries. Given their transboundary nature, coordinated regional action is essential to conserve mangroves and ensure the continued provision of crucial ecosystem services.



Towards a regional mangrove vision and action plan

We are encouraged by the progress and advances made throughout WIO countries. Now is the time to raise ambition at the regional level and commit to shared goals and targets to ensure alignment and attract funding at the scale needed. This is vital to ensure that mangroves can continue strengthening the region's ability to adapt to the rapidly changing climate and its impacts on local communities and their livelihoods.

The mangrove messengers

It is the coastal and local communities who are the first affected by rising temperatures and sea levels. Their livelihoods closely depend on thriving ecosystems. All throughout the WIO region, activists,

(Biologist, Mozambique) and Kaitira Benard Nyahuro (Aquatic Scientist, Tanzania). Read their stories: <https://www.mangrovealliance.org/meet-our-mangrove-messengers/>

Save our Mangroves Now!

The Save Our Mangroves Now! (SOMN) initiative has been working to protect Western Indian Ocean mangroves since its establishment in 2016. Bringing together governments, conservation specialists and coastal communities, the initiative aims to reverse the decline of WIO mangroves to restore biodiversity, protect livelihoods and mitigate against the impacts of the climate crisis. It is a joint initiative by the German Federal



Ministry for Economic Cooperation and Development (BMZ), World Wide Fund for Nature (WWF), the International Union for Conservation of Nature (IUCN) and Wetlands International.

For more information, please visit www.SaveOurMangrovesNow.org.



An initiative by:



#rootsofhope

IMPANA: Strengthening global MPA networks by 2030

The French Biodiversity Agency (OFB) is supporting the promotion and further development of IMPANA, the **International Marine Protected Areas Network Agenda**, as part of their long-term partnership with IUCN.

The objective of IMPANA is to build and strengthen work on the global marine protected areas (MPAs) network for 2030 and beyond.

IMPANA's mission:

Defining how best to use the knowledge and expertise of the world's leading MPA agencies, within the Marine Protected Areas Agency Partnership (MPAAP) community and beyond, to set the global marine conservation agenda for the next decades.

Quick history:

In 2013, at the third international MPA congress (IMPAC-3), the IUCN World Commission on Protected Areas, the Convention on Biological Diversity and the Sustainable Ocean Initiative launched IMPANA in order to assist governments and agencies in the establishment of coherent and efficient networks of marine protected areas and marine conservation areas at all scales - national, regional, and global.

IMPANA's latest achievements:

At the IUCN World Conservation Congress in Marseille, an [IMPANA session on Tools for connectivity of MPAs](#) was proposed back-to-back with the session on Networks of MPA managers of the EU Ocean Governance Project. This double session gathered key experts and practitioners at the Ocean & Islands Pavilion on 5 September 2021.

A series of annual or biannual IMPANA [newsletters](#) also allows the dissemination of activities and shared experiences for a global and connected network of MPA managers.

The Marine Protected Area Agency Partnership ([MPAAP](#)) - a partnership of MPA Agencies from around the world - is part of this large effort supported by OFB. It aims at enhancing collaboration and sharing of information and best practices among members.

One concrete example of what IMPANA is seeking to achieve is the science-to-policy work around the 13 Important Marine Mammal Areas (IMMAs) identified in the Southern Ocean, and which informed the work of the 43rd Antarctic Treaty

Consultative Meeting (ATCM) in June 2021 and well as the work of the Scientific Committee of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) in October 2021.

In one of the world's richest marine mammal areas, an international group of scientists determined new [IMMAs in the Extended Southern Ocean Region](#), featuring habitats for species such as humpback, minke, blue, southern right and fin whales, as well as crabeater, leopard, Weddell, Ross, southern fur and southern elephant seals, New Zealand sea lions and killer whales. These results were presented to the CCAMLR Scientific Committee in October 2021, by means of an *Information Paper* authored by the French Biodiversity Agency (OFB), the Scientific Committee on Antarctic Research (SCAR) and the International Union for the Conservation of Nature (IUCN) ([SC-CAMLR-40](#), Agenda item 4. Spatial management).

An IMPANA session on Tools for connectivity of MPAs will take place at the IUCN Pavilion during the 5th International MPA Congress ([IMPAC-5](#)) in Vancouver, Canada, in February 2023.

SCF, investing bigger for greater climate and nature impact

The [Subnational Climate Finance initiative \(SCF\)](#) is a global blended finance initiative that aims to invest in and scale-up mid-sized infrastructure projects in developing countries, in the fields of sustainable energy, waste and sanitation, regenerative agriculture and Nature-based Solutions.



The multi-skilled SCF consortium partners primarily with [subnational](#) governments, to identify and implement these projects. Projects are financed with a blend of concessional and conventional capital, and the grant-funded Technical Assistance Facility helps mitigate risk and ensure financial and environmental goals are achieved.

The two key components

1.

The Fund - managed by Pegasus Capital Advisors – is comprised of an investment fund of mid-sized infrastructure projects. The Initiative is developing a geographically and sector-diversified portfolio of 15 to 25 scalable, commercial, and primarily greenfield projects with [measurable SDG impact](#) across Latin America and the Caribbean, Asia, Africa, and the Mediterranean.

SCF looks for

- Proven and growing local need for climate infrastructure
- Replicability and scalability of investments
- Ticket size of equity investments in the range of 5-75m USD
- Strong financial return
- Measurable climate impact

Investment risk mitigation is partly enabled through the Green Climate Fund (GCF), an anchor investor and partner which has already invested a first-loss tranche of up to USD 150 million, intended to mitigate risk at the fund level, thereby bridging the gap between public and private investors.

2.

The Technical Assistance Facility (TA)

- a grant-funded technical assistance facility (SCF TA) managed by IUCN and implemented together with Regions of Climate Action (R20). Gold Standard will support the SCF to deliver on its sustainable development strategy at every stage of the investment cycle – feasibility, operation and exit.

The grant-funded facility provides technical support and grant funding to all stakeholders, while identifying and strengthening investment proposals for the Fund. In addition to financial stakeholders, it supports implementers in ensuring the achievement of Nationally Determined Contributions (NDCs), SDG impacts, and Nature Based Solutions (NbS).

The Technical Assistance combines

- **Pipeline development** (project sourcing, selection, pre-feasibility and feasibility assessment, and Environment Social Impact Assessment).
- **Capacity building** aimed at [boosting capacities in the pre-investment phase](#) to design and develop investable projects and strengthen the enabling environment for sustainable finance
- **SDGs Impact** Identification, Measurement, Management and Maximisation

Capacity building is aimed at project developers, subnational authorities, and regional investors in the [pre-investment phase](#), to [design and develop investment-ready projects](#). At the same time, the initiative aims to strengthen the enabling environment for sustainable finance and the replication of successful models more broadly.

There are critical areas for capacity building intervention across all target groups

- Raising awareness about the potential for investing in green infrastructure and NbS in key sectors,
- Enhancing capacity in design and delivery of investment-ready deals with high potential to address major social and environmental challenges,
- Increasing local understanding of innovative financing instruments, blended financial instruments, Public Private Partnership (PPP), and similar,
- Strengthening the enabling environment for investments in green infrastructure and NbS,
- Replication and scaling-up of high-integrity, green infrastructure projects.

The process and performance required to secure gold standard fund certification will ensure that the portfolio is not about “greenwashing”, but that projects are held to account, to deliver the best impacts that are possible.



Blue Action Fund

More than a third of the global population lives in coastal areas and hundreds of millions of people rely on ocean-based industries like fishing and tourism. In developing countries in particular, where more than 95% of the world's fishers live, fish are a vital source of both protein and income. [Blue Action Fund](#) (hereafter 'Blue Action') is a non-profit foundation that helps conserve marine biodiversity for the benefit of future generations and improve the lives of vulnerable coastal communities in developing countries. Today, Blue Action has government funding partners from Germany, Sweden, France, Norway and Ireland. The Green Climate Fund joined in 2021 to provide additional funding for projects focusing on Ecosystem-based Adaptation. The partners have contributed more than €175 million since the start of the foundation's unique [Grant Programme](#), turning Blue Action into one of the world's largest public funders promoting marine conservation and sustainable livelihoods for coastal communities.

In 2022, Blue Action is celebrating the 5th anniversary of its Grant Programme that has increased its global reach and impact by initiating 22 projects in 17 countries to provide a lifeline for efforts to restore ocean health. With an overall project funding of more than €72 million already committed to grants, Blue Action supports the creation

of about 261,000 km² of marine protected areas (MPAs) and improved management of more than 227,000 km² of existing MPAs, whilst supporting improved livelihoods for more than 333,000 beneficiaries that are dependent on the ocean.

Blue Action's projects are taking diverse approaches in combating dramatic losses in marine biodiversity while creating new opportunities for local people. Working closely with artisanal fishers, women's cooperatives, grassroots conservationists, local authorities and other stakeholders, Blue Action's grantees are driving change both in the water and in the heart of the communities by expanding effective marine protection and strengthening local livelihoods and food security. Since 2019, numerous projects have additionally focused on Ecosystem-based Adaptation measures in the Western Indian Ocean to address climate change related risks by protecting and restoring adaptation-relevant coastal ecosystems, e.g. through mangrove or coral reef restoration.

In its [Impact Report](#), Blue Action showcases some of its projects, highlighting key achievements from the past five years.



© Hanz Rippe



© Ashok Menon

MANAGING OCEAN CLIMATE MULTISTRESSORS

Coral reef ecosystems within Marine Protected Areas serve as Early Warning Systems for monitoring and addressing Ocean multistressors

The Issue

Maintaining our climate and supporting the natural resources we depend on has been recognised as a key global challenge. Chapter 3 of the recently released IPCC report notes "Anthropogenic climate change has exposed ocean and coastal ecosystems to conditions that are unprecedented over millennia". The report notes that warming, acidification and deoxygenation are altering ecological communities by increasing the spread of physiologically sub-optimal conditions for many marine fish and invertebrates. These and other responses have a cascading effect leading to habitat loss and population declines.

With the support of the Government of Sweden, IUCN has been working expanding our knowledge on ocean acidification, warming and deoxygenation and engaging with stakeholders across the spectrum of science, policy and resource practitioners.

In World Heritage Marine Protected Area's (MPAs), local managers indicate that 74% of sites lack knowledge on how to protect against the impacts of climate change. Further, 70% are unclear about how climate change will impact local species.

MPAs and vulnerable marine ecosystems such as coral reefs can serve as monitoring systems where the impacts of multistressors are likely to be observed first and can serve as sentinel sites for monitoring.

IUCN's findings: The Way Forward

Current practices for monitoring and managing ocean multistressors within and outside MPA's in the Mediterranean and Eastern Africa varies. Building on the WIOMSA approach addressing ocean acidification and incorporating the other ocean stressors can serve as a good model. By harnessing existing systems, a network of sentinel sites could serve as a global monitoring network.

Promoting adaptive management strategies coupled with innovative coastal management strategies based on a precautionary approach that incorporates risk theory to management, hazards, vulnerability and exposure are required.

Localised conservation strategies are a good foundation but need to be adapted to the global context and customized for application platforms, such as Panorama Solutions, and serve to exchange and share practices.

A need for increased investment at all scales is required. Monitoring water quality and marine environmental health variables to inform management planning, requires monitoring infrastructure and/or collaboration with researchers and observation systems.

Data to inform mitigation and adaptation to the impacts of global changes is particularly essential for managing valuable marine resources. The ability to understand local scenarios, which inform local responses to marine species management and include societal benefits, needs to be enhanced.

Understanding and mitigating secondary/local sources of multistressors by managing water quality requires MPA practitioners to identify and monitor such local stressors. Managers need to have the authority to intervene on pollution or other causes or sources of local stressors.

An important aspect of monitoring is the linking of global and societal priorities. It is necessary to monitor the co-benefits of ecosystem services provided by effectively managed MPAs and strengthen the case for MPA funding. Nature-Based Solutions can be a framework for action.



MARPLASTICCs

Novel approaches to move from Plastic Waste and Pollution Measurement to Interventions and Solutions

The completion of the Marine Plastics and Coastal Communities Project (MARPLASTICCs) in December 2021 was a milestone for countries in Eastern and Southern Africa and Southeast Asia to move beyond the measurement of their plastic waste and pollution and begin to focus on interventions that will provide long-term solutions.

MARPLASTICCs assisted governments and regional organisations in Kenya, Mozambique, South Africa, Thailand, and Viet Nam to promote, enact and enforce legislation and other effective measures which contained and reduced marine plastic pollution. Main outputs achieved within the project were delivered via five areas:

- **Understanding** the state and impact of plastic pollution in the two regions;
- **Building** local and regional capacity for national action to control plastic pollution;
- **Supporting** national and regional policy frameworks and legislative reform processes to address plastics;
- **Engaging and mobilising** business actors; and
- **Creating** an operational monitoring, evaluation, learning and reporting system.

MARPLASTICCs raised awareness of the plastic pollution crisis and its causes, but more importantly, established [effective measurement methodologies](#), policy and [economic interventions](#), and a package of [solutions](#) to move towards a circular economy and begin drawing down dependence on plastics.

Two knowledge products from the project that are important for countries wishing to measure their plastic pollution are the [tutorial with step-by-step video guidance](#), and a [global webinar](#) to learn to apply the [UNEP/IUCN National Guidance to Plastic Pollution Hotspotting and Shaping Action](#). Once applied, countries can determine the national hotspots of plastic pollution caused by polymers,

sectors, and applications (especially packaging), with supporting maps and waste management grids to prioritise interventions.



Key uptake of the [UNEP/IUCN National Guidance to Plastic Pollution Hotspotting and Shaping Action](#) outside of the project included use by several organisations – showcasing its value:

- [APEC](#)
- [JICA](#)
- [PLASTEAX](#)
- [South Africa – EU Dialogue Facility](#)
- [Southeast Asian Fisheries Development Centre](#)
- [UN News](#)
- [UNIDO](#)
- [World Bank Seureca/Veolia](#)

From the work [preventing marine plastic pollution via novel circular economy models](#), to the [national hotspotting research reports](#), and the [policy analysis for Extended Producer Responsibility](#), the results from this project were impactful and wide-ranging.

To ensure that MARPLASTICCs outcomes were shared, IUCN followed an adaptive strategy of sharing the project outcomes through [52 news articles](#), [19 knowledge products](#) including [one multi-project plastics publication](#), social media, webinars, in-person events, and training courses. Using ESRI mapping technology, the [policy and economic outcomes were shared with a story map](#) and [all project outcomes were displayed in a digital dashboard](#).

So what's next?

IUCN would like to see other countries use the [UNEP/IUCN National Guidance to Plastic Pollution Hotspotting and Shaping Action](#) to prepare baselines in anticipation for the upcoming negotiations based on the UNEA Resolution 5/14, “End plastic pollution: Towards an international legally binding instrument” which may end up as a Global Plastics Treaty in 2024. The first [Intergovernmental Negotiating Committee \(INC\) meeting was held in Uruguay in November 2022](#). The instrument is to be based on a comprehensive, multi-stakeholder approach that addresses the full life cycle of plastic. The core goals of a plastics agreement should be to:

- **Minimise** virgin plastics production and consumption;
- **Facilitate** safe circularity of plastics, with an inclusive circular economy; and
- **Eliminate** plastic pollution in the environment.

In the next two years, it will be imperative for countries to quantify their plastic pollution, rethink their waste management, and begin the move towards a circular economy – using harmonised systems and methodologies. This will ensure the treaty will be effective and that we are all speaking the same language for prevention, measurement, implementation, management and monitoring of the aspects of this global crisis.

PLASTIC WASTE FREE ISLANDS

Tremendous progress for six island countries toward “Plastic Waste Free Islands”

Launched in 2019 with support from the Norwegian Agency for Development Cooperation (Norad), IUCN's [Plastic Waste Free Islands \(PWFI\) project](#), has seen great progress towards its goals in 2022. Implemented in Fiji, Samoa, and Vanuatu in Oceania, and Antigua and Barbuda, Grenada, and Saint Lucia in the Caribbean, the project has [delivered eight circular economy business plans](#) and demonstrated effective, quantifiable solutions to address plastic pollution on Small Island Developing States (SIDS). By adding value to plastic waste and deploying solutions for better waste disposal, there has been a measurable impact on waste flows from source to sea, leading to reduced plastic leakage into the environment for all six islands. Specific sectors that have been engaged in the project are fisheries, tourism, and waste management.

The project aimed to repurpose waste into commercially viable products, generating job opportunities and income for local communities. Innovative solutions that use recycled plastic material for reusable food containers, construction materials, furniture, and partnerships for bottle-to-bottle recycling are highlighted in the eight business plans and in the model [waste segregation guide](#). Waste segregation is a key component to move toward more sustainable waste management, and towards a circular economy at national levels. Source-segregated waste streams are easier to recycle, and they can help achieve a cleaner plastic waste stream for more efficient processing of materials. Optimising waste management creates many inclusive economic and livelihood opportunities in small island developing states.

Key stakeholders from governments, private sector, and civil society united in the project to form a learning network in both regions. They have co-created demand-responsive solutions to plastic waste – using a holistic approach that includes nationally validated policy recommendations such as these from [Grenada](#) and [Fiji](#), civil society ([especially women's groups for waste management](#)) and citizen behaviour changes.

In Fiji, for example, at a 2022 policy workshop, the top three recommendations for moving beyond plastic pollution were:

1. Legislate for, and implement a Container Deposit Scheme, that will facilitate the establishment of a waste transfer station / resource recovery centre(s) for recycling;

2. Improve waste collection and management, especially in rural and remote areas where a large part of the population does not benefit from a public waste collection system; and
3. The development of a National Plastic Pollution Prevention Plan (N4P) to be incorporated in the Ministry of Waterways and Environment's Waste Management and Pollution Control Strategy and Action Plan, which would include measures to control (and eventually eliminate) the import of problematic and unnecessary plastics.

Next steps in the project include the production of several knowledge products, including a gender analysis, a Caribbean- and Oceania-specific funding research guide, a set of quantification reports, and policy analysis reports. Evidence and



lessons are being packaged into a scalable and replicable 'blueprint' for use beyond the initial six islands. Key regional bodies will endorse the blueprint for the full plastic value chain, from production to disposal.

As IUCN approaches the end of the PWFI project – what is next for small islands? In the next two years, it will be necessary for small islands to [have a voice at the Intergovernmental Negotiating Committee meetings](#) for what may become the Global Plastics Treaty. Islands will need to quantify their plastic pollution, rethink their waste management, and begin the move towards a circular economy – it is hoped that the products from the PWFI project, and other IUCN projects on plastics, can be leveraged to provide islands with a strong foundation of support to solve the complex and difficult issues of plastic waste management.

PLASTIC WASTE FREE ISLANDS IN THE MEDITERRANEAN

Envisioning solutions to plastic leakage in Menorca and Cyprus

IUCN Med launched the Plastic Waste Free Islands Med (PWFI Med) project in 2019, as part of IUCN's global *Close the Plastic Tap Programme*. Supported from the Didier and Martine Primat Foundation, the project is being implemented in Menorca and Cyprus, and it is demonstrating effective, quantifiable solutions to address plastic leakage from both islands.

First, the hotspot methodology was used to assess and to identify key sectors and their problems with respect to plastic waste. This enabled IUCN to devise action plans for Menorca and Cyprus. They are focused in three key sectors: tourism, fisheries and waste management with the aim to reduce plastic waste leakage and to increase the circularity of the plastics economy on each island.








In this sense, the Plastic Waste Free Islands-Med project investigated circular economy business models for key plastic resources, with the aim of facilitating the development of better practices. Examples of outcomes are the deposit-return scheme in Menorca and the waste to product proof of concepts developed in each island. As result, the ongoing PescArt project in Menorca started with the pilot testing of reusing fishing nets by artisans and with the participation of fishermen, artisans, the Foundation for the People with Disabilities of Menorca, the Plastic Free Menorca Alliance and Menorca Preservation.

Finally, the PWFI Med project fostered the sharing of lessons learnt and insights among several organisations and actors working across the Mediterranean basin to close the plastic tap. In this sense, the lessons learned from this project and other initiatives around the Mediterranean have been assembled into a 'blueprint' – with several best practices that can be replicated in other islands to manage plastic waste more effectively.

Nowadays, the project is at its final stage as it will end by December 2022. Until then and in both islands, local partners are implementing some of the measures highlighted in the action plans.

For more information, please contact:
mercedes.munoz@iucn.org

Best practices and actions have been group in the following categories:

-  **Assemble allies & Mobilise:** bring people together in a community of practice to focus, coordinate and collaborate.
-  **Experimentation & data collection:** collect and analyse data concerning the sources of plastics and their impacts.
-  **Reuse & find alternatives to plastics:** eliminate single use, give second life to plastic and develop alternatives to limit the production and/or use of plastic.
-  **Recommendations & new regulations:** develop and implement action plans and new regulations concerning plastic.
-  **Improve waste management:** improve systems to collect and process plastic wastes.
-  **Spread the word:** raise awareness amongst both the public and institutions concerning the sources and consequences of plastic pollution.
-  **Capitalisation activities:** organise technical sessions, transfer workshops, etc. to put lessons learned into practice.

SAO TOME AND PRINCIPE PLASTIC FREE ISLANDS

Finding tailored solutions to small island waste management needs

Island States worldwide are faced with accelerating change and environmental challenges, which are more intense and rapidly felt because of their small physical scale, remoteness from international markets, and small economies. In recent years the effects of marine litter and plastic waste has been highlighted as a major concern for many small island developing states (SIDS). However, solutions to address marine and coastal plastic pollution need to account for the unique characteristics of SIDS and often practices and approaches that work in mainland countries are not as effective.

Sao Tome and Principe, with its high biodiversity, faces many of the issues related to waste management and plastic pollution that are common to other SIDS. With a population of 193,000, São Tomé and Príncipe, located in the Gulf of Guinea, West Africa is facing acute waste management problems. The problems are numerous, ranging from the lack of adequately engineered landfills, inadequate waste logistics, non-existent segregation of end-of-life processing of plastics and a high dependence on import of plastic/plastic packaged goods.

IUCN, in collaboration with WACA and the Government of Sao Tome and Principe, is jointly working to identify practical solutions that can minimise plastic waste in the country. To achieve meaningful solutions, an assessment of plastic hotspots is being conducted in consultation with stakeholders. Using the information collected, appropriate interventions using a standardised approach will be identified that will have a measurable impact on reducing plastic waste flows and leakage into the environment.

To demonstrate the practicality of the approach, Príncipe has been identified as a location for developing a case study for implementing the identified solutions. Príncipe was chosen for its size and population as an example for scaling and replication. This was also due to the high commitment from the Regional Government to address plastic pollution with ongoing projects being implemented by a local NGO, Fundacao Principe, as well as its importance as a biosphere reserve.

To date, initial stakeholder assessments have been conducted, identifying the key issues affecting the island. Additionally, the project has been identifying and engaging with potential international partners to support the delivery of the goals of reducing plastic waste.

Key Findings to date

- While information on plastic waste trends exist at the National level, more detailed information is needed to address the root causes effectively.
- There is a strong will from the National and Regional government to face the challenges of tackling plastic waste.
- While there are examples of small-scale enterprises using plastic waste, the long-term financial sustainability of the existing options are a challenge.
- Stakeholder groups that have been engaged see the need for targeted solution-based approaches that create jobs and generate revenue (for e.g. recycling).
- Solutions that benefit local communities should be prioritised. They should support job creation through decent work with emphasis on generating jobs for women and youth.
- Capacity building and training for plastic value addition using recycled materials that have a sustainable and viable market should be supported.
- Options to use plastic waste as a source for energy could be a solution in Principe as the island imports 100% of energy needs from the mainland. The financial and environmental viability of such options need to be considered as a potential alternative.

© IUCN Joao Sousa

The “Out of sight, out of mind” attitude towards pollution from WWII shipwrecks is no longer an option

Recent international agreements increased prevention efforts and led to the reduction in the number of ships sinking. But what about the thousands of historical shipwrecks from World War II around the world? Many of the ships that sunk during that time contained oil and unexploded ordinance with major negative impacts for livelihoods, biodiversity and ecosystems. Improvements in underwater technologies now allow states to safely conduct oil removal operations from sunken ships, but where to start?

Time for an international legal treaty on wartime shipwreck pollution

WWII shipwrecks contain thousands of tons of oil and represent a risk to the marine environment. Oil spills can damage coral reefs, mangrove forests, and marine life. These shipwrecks also carried munitions that have already started to leak significant quantities of toxic substances, with consequences for human health. They also have the potential to be used to make dirty bombs.

Nowadays, technology can be used to find vessels and mitigate the threats each vessel poses to the marine environment. An international joint effort is necessary to start planning for a peak in the number of leaks. The

international community can learn from proactive national maritime pollution bodies that have been working on this issue for decades in the United States and Norway. Swedish, Finnish and Estonian researchers have identified more than 1,000 wrecks in the northern Baltic Sea and have been in the process of prioritizing the response to the risk posed by these ships.

Currently, there is a body of customary international law governing the treatment of sunken warships and military aircraft. But there is no international multilateral legal instrument governing ownership of sunken warships or military aircraft. The Law of the Sea Convention, Article 95, recognizes that state sunken vessels are entitled to sovereign immunity. This means that any

action which disturbs sunken state vessels can only be undertaken with the consent of their Flag State. The historical value of World War II wrecks, plus their status as war graves, is an added challenge slowing the process of managing these environmental threats.

Since salvage efforts are expensive, time-consuming and risky, decisions to salvage oil from a sunken wreck must be based on a risk assessment and a cost-benefit analysis. These steps should be included in a legally binding international agreement on oil salvage from sunken warships.

Small Island Pacific Nations' environment and economies at risk

Without an international treaty to determine threat level, legal ownership, and hazard mitigation, numerous small island nations will be negatively impacted by oil spills. Oil pollution has a detrimental affect on Pacific nations' economies, but it will also affect Pacific nations' economies as they rely mostly on tourism and fisheries.

The Second World War in the Pacific has left a legacy of over 3,800 wrecks on the ocean floor. Most of these wrecks belong to the United States and Japan. Removing oil from a single wreck costs millions of dollars, and Pacific Island governments likely won't be able to cover the cost alone. The South Pacific Regional Environment Program (SPREP) has developed a comprehensive programme to address marine pollution from ship-based sources. An international fund to meet the cost of investigating and treating shipwrecks that pose a threat to the environment is paramount for Pacific nations.

In conclusion, the need for establishing a worldwide database on wrecks, their location, and pollution potential is urgent. IUCN is seeking funds to spearhead a worldwide effort to address this need in coordination with national maritime pollution bodies or within the framework of the Regional Seas conventions. The threat of marine pollution from World War II shipwrecks can be avoided with the necessary international framework as the required expertise and technology already exist.

The need for establishing a worldwide database on wrecks, their location and pollution potential is urgent.

Ocean optimism: Important Shark and Ray Areas (ISRAs), an innovative approach to conservation

Sharks, rays and chimaeras – collectively known as Chondrichthyes, the cartilaginous fish species – are one of the most threatened animal groups in the world. They are extremely susceptible to overfishing and other human-induced impacts, like habitat degradation, and it is crucial that global conservation strategies consider new ways to protect these species before it's too late.

Some species rely on specific habitats and locations and some may only be found in one part of the world, whereas others may depend on habitats for only part of their various life stage – like mangroves, which can serve as nursery grounds for the juveniles of species such as lemon, and hammerhead sharks. Knowing where these areas are – and what threats overlap them – is essential to informing future conservation strategies and ensuring that they are targeted, systematic, and beneficial for sharks.

As Dr Rima Jabado, chair of the IUCN Species Survival Commission Shark Specialist Group explained: “Sharks are a long-lived species: many take a long time to reach sexual maturity and then only give birth to a few young. This makes them particularly susceptible to fishing pressure and with an estimated 37% of species with an elevated risk of extinction, they are facing a biodiversity crisis. The Important Shark and Ray Area (ISRA) project will inform policy and ensure that areas critical to the survival of sharks, rays, and chimaeras are considered in spatial planning.”

From 2022, the delineation of ISRAs using bio-centric criteria, will ensure the right areas for sharks, rays, and chimaeras are considered in marine spatial planning efforts around the globe. The ISRA process is a valuable tool for conservationists, and it is our role to ensure they become a reality to turn the tide on this biodiversity crisis.

The journey from idea to implementation has made a critical important step as of October 2022, when the first regional workshop on ISRA delineation was held in Bogota, Colombia. Dr Jabado and Dr Giuseppe Notarbartolo di Sciarra – co-chair of the IUCN Important Marine Mammal Areas Task Force, chaired the workshop with the ISRA team. Representatives from the Ministry of Environment and Sustainable Development of the Government of Colombia, Dr Madhu Rao, Chair, IUCN World Commission on Protected Areas, Dr Cecilia Tobar, Regional Coordinator – Latin America, Key Biodiversity Areas, and others welcomed the participants, urging them to consolidate their knowledge and work on preliminary areas of interest (pAols) and candidate ISRAs. The process to submit areas for ISRA consideration was accomplished, and the group agreed by consensus on the final list of candidate ISRAs in this region for review. These areas are now being evaluated by an Independent Review Panel and results will be available by early 2023.

This is the first of several workshops that are being held globally over the next five years to implement the ISRA process. The results from the first workshop will be available soon on the ISRA website (<https://sharkrayareas.org/>).

To learn more and read about the ISRA Criteria, please view the paper in *Frontiers in Marine Science* and this news item:

<https://www.frontiersin.org/articles/10.3389/fmars.2022.968853/full>

<https://www.iucn.org/story/202209/new-hope-conservation-sharks-rays-and-chimaeras-important-shark-and-ray-areas-isras>

Supported by Save Our Seas Foundation, Shark Conservation Fund, and other donors.



Did the super year for the Ocean change the paradigm for high seas biodiversity?

Ever-increasing pressures on the ocean, from coastal usage to the looming threat of deep-sea mineral exploitation activities, have led to a real momentum for the conservation of marine biodiversity in 2022. This ocean super year positioned governance of the high seas at the centre of international discussions, with two Intergovernmental conferences (IGC) and numerous ocean-themed conferences organised. Such prominence helped accelerate the negotiation process of the legally binding instrument under the UN Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ), which has been ongoing for several years.

Key 2022 conferences

One Ocean Summit Brest (France)

During the One Ocean summit in Brest, France, from 9 to 11 February 2022, more than 100 countries agreed to conclude a robust UN High Seas Agreement. During this historic summit of leaders, the ocean was acknowledged to be a global commons and the importance of this "super" year of the ocean was stressed.

A high ambition coalition on Biodiversity Beyond National Jurisdiction (BBNJ) was launched at the One Ocean Summit. The coalition gathers parties which are committed, at the highest political level, to achieve an ambitious outcome of the ongoing negotiations for a UN Treaty of the High Seas. IUCN works with stakeholders of the HAC BBNJ to raise the ambition in adopting an ambitious and future-proof BBNJ treaty.

BBNJ-IGC 4 New York (USA)

From 7 to 18 March 2022, UN Member States, IGOs and civil society gathered in New York to continue negotiations on the BBNJ treaty. Civil society, initially not allowed in the meeting room due to sanitary protocol, was eventually able to attend in person, reinstating a sense of transparency and inclusiveness in the process. In spite of all efforts deployed, this supposedly-last session was not concluded, meaning that the BBNJ stakeholders would have to meet again in 2022. IUCN made a [closing statement](#).

UNOC Lisbon (Portugal)

From 27 June to 1st July 2022, the United Nations Ocean Conference hosted more than 6,000 participants including 24 Heads of State and Governments in Lisbon. This conference led to hundreds of commitments, pledges and actions, from actions on blue carbon ecosystems to new financial instruments, and pledges towards larger and more effective protection of the Ocean, including bold statements calling for a pause on mining. IUCN reflected on the proceedings via a [blog](#).

BBNJ-IGC 5 New-York (USA)

From 15- 26 August 2022, UN Member States, IGOs and civil society gathered for the 5th Intergovernmental Conference on the High Seas Treaty. The IUCN delegation was pleased to witness other participants draw from its commentary on the revised draft text during negotiations. While it did not result in the adoption of a treaty, the conference saw significant progress on many fronts. IUCN called for negotiations to resume before the end of the year, so that a strong, effective and equitable BBNJ Treaty for the benefit of human- and ocean-kind can become a reality. IUCN and its [Commission on Environmental Law](#) compiled [key takeaways from treaty negotiations](#) and members of the IUCN delegation were invited to provide an [editorial](#) for Science Magazine.

The work of IUCN

To maintain momentum on the importance of concluding the negotiations on the BBNJ treaty as soon as possible, the IUCN Ocean team prepared a series of resources:

- a multimedia story entitled « [High Time for the High Seas](#) »;



© IISD/ENB | Diego Noguera

- a workshop on « Area Based Management Tools in Marine Areas Beyond National Jurisdiction », providing guidance building on the experiences of the Sargasso Sea and Thermal Dome initiatives to date and key [takeaway messages](#). The [report](#) showcased key governance gaps and challenges.
- IUCN and partners have also generated a [series of knowledge products](#) for negotiators addressing the main elements of the treaty: marine genetic resources, benefit sharing, area-based management tools (including marine protected areas), environmental impact assessments, capacity building and the transfer of marine technology. Of particular significance was the [commentary on the further revised draft text of the Agreement](#), which was referred to several times during the negotiations.



Conclusion

The necessity to urgently conclude a legally binding treaty for the high seas was at the forefront of environmental international conferences in 2022. However, complex issues have so far impeded the finalisation of a BBNJ treaty, notably with regard to the creation of standards for environmental assessments, an equitable financial mechanism, and the sharing of monetary benefits from marine genetic resources that could be used for products such as drugs or cosmetics.

The packed agenda with the UNFCCC COP27 climate conference in November, and the CBD COP15 meeting in December were two opportunities for member states to maintain the pressure and keep momentum for the BBNJ negotiation to conclude as soon as possible. Finding the balance between the importance of a universal agreement on stewardship of high seas biodiversity and the necessity to sign the treaty rapidly will be a priority in the remaining negotiation window.

Deep seabed mining

Final frontier on the edge

The deep ocean remains one of the least explored ecosystems on Earth. Yet, the little that we know already makes clear that the deep ocean plays an integral role in supporting ocean ecosystem services and ultimately all forms of life on Earth, including humans belonging to present and future generations.

The deep ocean (generally, at depths greater than 200 m) was previously thought to be devoid of life and unimportant for the sustenance of human life. However, despite the many knowledge gaps, we are now starting to learn that the value of the deep ocean - as natural capital when preserved - could far outweigh any potential short-term financial gains from mining activities, which will cause irreversible harm on human timescales.

The deep seabed, which covers about two-thirds of the total ocean seafloor, is a subject of mining interest, both in areas within national jurisdiction as well as in areas beyond national jurisdiction. Given the interconnected nature of the ocean, it does not really matter where the mining activities take place; they should be seen as a matter of concern for all of humankind. However, the international seabed, i.e. beyond the limits of national jurisdiction, presents a special case that raises additional questions, including ones on equity and fairness, since the seabed and its mineral resources are the common heritage of humankind under the United Nations Convention on the Law of the Sea (UNCLOS).

By May 2022, the International Seabed Authority (ISA), which regulates activities in the seabed beyond national jurisdiction ('the Area'), had issued 31 contracts to explore deep-sea mineral deposits. More than 1.5 million km² of international seabed, roughly the size of Mongolia, has been set aside for mineral exploration.

To date, the ISA has only issued exploration contracts, but is developing regulations to govern the transition to exploitation. In June 2021, the Government of Nauru notified the ISA of their intention to start deep-sea mining; triggering a rush to finalise the ISA regulations despite the deep sea remaining understudied and poorly understood. Since this triggering, the development of regulations has accelerated at ISA to enable mineral exploitation activities to commence by as early as mid-2023.

The good news is that not everyone is on board with how things are shaping up. In September 2021, at its World Conservation Congress in Marseille, IUCN adopted Resolution 122 calling for a moratorium on deep seabed mining. Subsequently, further voices have called for a pause or moratorium on deep seabed mining unless and until a number of conditions are met. These conditions include:

- The risks of mining are comprehensively understood and effective protection can be ensured;
- Rigorous and transparent impact assessments are conducted based on comprehensive baseline studies;
- The **Precautionary Principle** and the 'Polluter Pays Principle' are implemented;
- Policies incorporating circular economic principles to reuse and recycle minerals have been developed and implemented;
- The public are consulted throughout decision-making;
- The governance of deep-sea mining is transparent, accountable, inclusive, effective and environmentally responsible.

Meanwhile, a recent academic publication undertook a comprehensive analysis of the invocation of the said treaty provision by Nauru and argued that the two-year deadline is not an absolute one that must be met under any circumstances, whereby member states actually still retain the power to follow the advice from science and delay or postpone the commencement of mining activities.

As negotiations continue at the International Seabed Authority, the coming months may prove to be decisive. IUCN continues to engage in the negotiation process while seeking to convince states that a pause or moratorium on deep seabed mining is urgently needed.

SARGADOM Project:

protecting natural treasures in the Sargasso Sea and the Thermal Dome

The Sargasso Sea Commission, hosted by IUCN in Washington DC, will receive €961,000 from the Fonds Français pour l'Environnement Mondial (FFEM) over five years as part of the 'SARGADOM' project. The objective of the project is to contribute to the protection of biodiversity and ecosystem services in the high seas of the Thermal Dome and the Sargasso Sea.

'SARGADOM' combines the names of the project's two focus sites - the Sargasso Sea in the North Atlantic and the Thermal Dome in the Eastern Tropical Pacific. Project partners include Mar Viva, Université de Bretagne Occidentale (UBO), and Office Français pour la Biodiversité (OFB).

Great progress has been made so far this year putting project management teams in place, beginning work on a DPSIR (drivers-pressures-states-impacts-responses) - analysis that will provide an up-to-date picture of both natural and social factors at play in the two focus sites - and hosting numerous events in international fora to share and promote the work of the SARGADOM project.

The SARGADOM project team hosted a side event at the UN Ocean Conference in June 2022. This event was

held on a boat in the Tago River and brought together co-financiers, supporters, and other partners of the project. Presentations were given from Mar Viva and the Sargasso Sea Commission, and representatives from each organization made calls to action.

Haydée Rodríguez, Project Coordinator for Mar Viva, called for the formation of a technical working group focused on the Thermal Dome to be established as part of the High Ambition Coalition for BBNJ, saying "let it be a blueprint for ocean governance in the future." The Deputy Premier of Bermuda and Minister of Home Affairs, the Hon. Walter H. Roban, JP, MP, called for more governments to become signatories to the Hamilton Declaration, saying "though we often feel as if they belong to no one, the high seas are the responsibility of everyone."



Mia Oenoto and Fae Sapsford at COLACMAR



Honourable Walter H. Roban, JP, MP, Deputy Premier of Bermuda and Minister of Home Affairs speaking at the SARGADOM UNOC side event

"Though we often feel as if they belong to no one, the high seas are the responsibility of everyone."

Hon. Walter H. Roban, Deputy Premier of Bermuda and Minister of Home Affairs

In addition, the SARGADOM project hosted a roundtable event entitled 'Generating science for high seas conservation: the SARGADOM project' as part of the Congreso Latinoamericano de Ciencias del Mar (COLACMAR) conference held from September 19-23 in Panamá. The event saw presentations from Dr. David Freestone and Dr. Jorge Jiménez on the context and conservation challenges for the Sargasso Sea and the Thermal Dome high seas areas respectively. This roundtable was the only event focused on high seas issues at the COLACMAR conference, providing a valuable opportunity to network with Latin American scientists.

The Sargasso Sea Commission, with the SARGADOM team, hosted a series of in-person meetings in Costa Rica in October to progress with work under the separate but complementary FFEM and GEF grants. In Costa Rica, implementing partners for the FFEM SARGADOM project will meet to analyze gaps in scientific data for the Sargasso Sea and the Thermal Dome, an essential first step in the development of an Ecosystem Diagnostic Analysis for the Sargasso Sea to be funded by the GEF. An Inception Workshop for the GEF project, 'Strengthening the stewardship of an economically and biologically significant high seas area - the Sargasso Sea,' will also take place in coordination with this meeting.

A European programme aiming to foster action in 4* of the 7 regions of global importance targeted by the BEST initiative

LIFE4BEST

The objective of the LIFE4BEST programme is to promote biodiversity conservation and the sustainable use of ecosystem services in the European Union's (EU) Outermost Regions. LIFE4BEST, funded by the LIFE Programme of the European Commission together with the French biodiversity office (OFB) and the

French development agency (AFD), continues the EU's BEST Initiative and is a direct follow up to BEST RUP, under which 12 small grants were awarded, three of which tackled marine-related topics (mortality causes in marine mammals and sea turtles in French Guiana, conservation measures for elasmobranch species

in the French Caribbean, echinoderm inventory in Mayotte).

Of the 40 LIFE4BEST projects funded under the two calls for proposals launched in 2019 and 2020, 13 touch on marine subjects.



2020 call (ongoing)

- “Sea classes” & “Rays and sharks in French Guiana: raising awareness, involvement and training of maritime stakeholders”: raising awareness with field activities (Amazonia, French Guiana)
- “Management and conservation tools for sharks and rays” (Caribbean, St. Martin)
- “SCAN’R: Collective monitoring of nautical and maritime activities, for the assessment of the risks of exposure of cetacean populations to maritime traffic” (Indian Ocean, La Réunion)

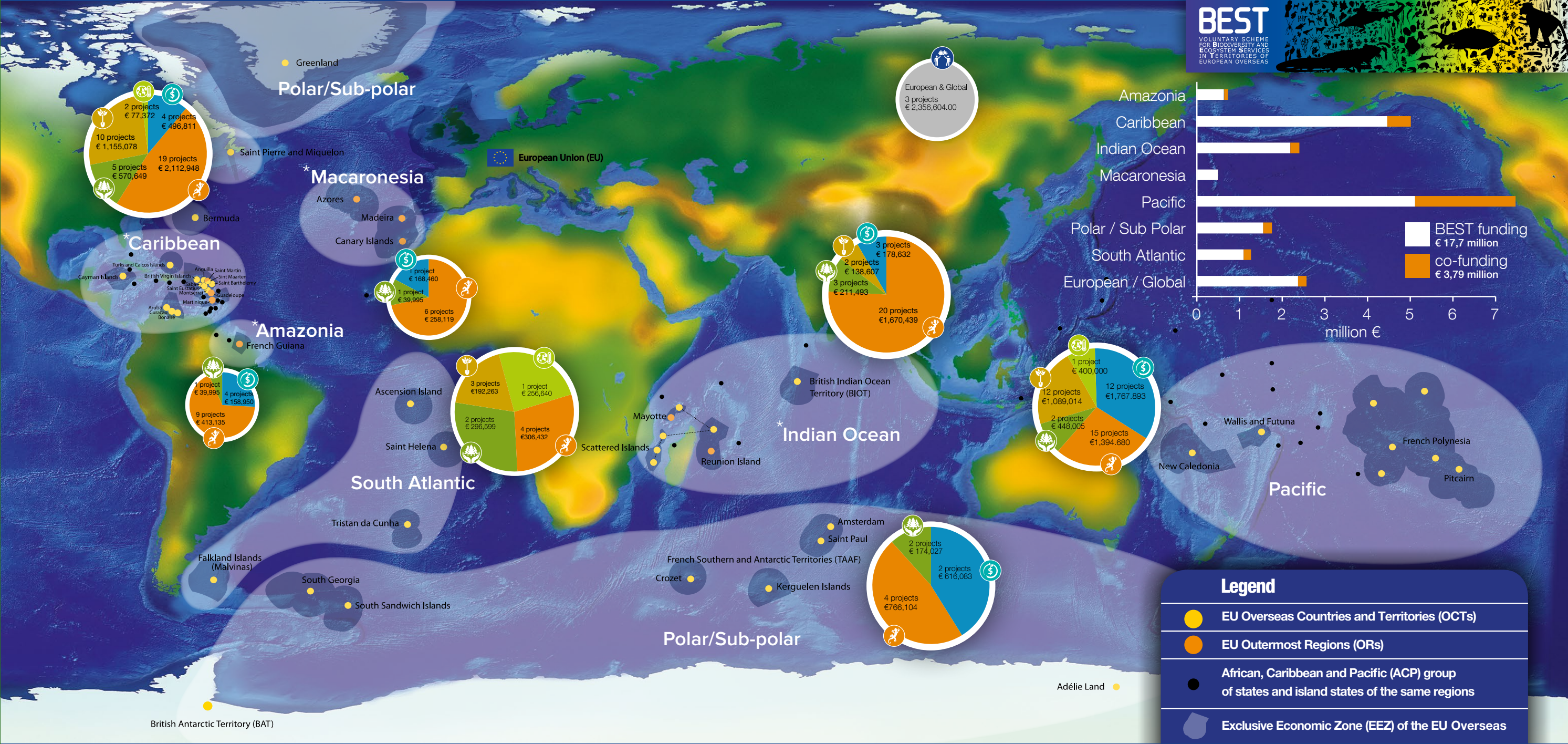
2019 call (finalised)

- “Véti’VERT”: restoration of a coastal site – sea turtle nesting habitat (Caribbean, Martinique)
- “MesoRun”: fauna inventories of mesophotic coral ecosystems (Indian Ocean, La Réunion)
- “REBIOMA-3D”: 3D structure of reefs, pilot study for improving reef biodiversity management (Indian Ocean, Mayotte)
- “Sea turtle conservation” (Indian Ocean, Mayotte)

- “EDUCOCEAN”: raising awareness on marine biodiversity – cetaceans, sea turtles, fish, birds (Indian Ocean, La Réunion)
- “UTOPIAN”: identification of priority conservation areas within coral reefs (Indian Ocean, La Réunion)
- “M3C: maerl mapping and conservation” (Macaronesia, Madeira)
- “MACRODO: Macaronesian rhodolith beds – factories of carbon sequestration” (Macaronesia, Canary Islands)

- “B-CHARMED: black coral forests as unexplored biodiversity hotspots” (Macaronesia, Canary Islands)

The results of all funded projects will be processed in early 2023 and used to update the regional impact factsheets published on the dedicated website.



Larval propagation: an innovative technique to scale-up Bonaire's coral reef restoration

Although some reefs in Bonaire feature significant populations of some coral species, they may be effectively extinct if they can't reproduce through sexual reproduction. Since 2019, Reef Renewal Foundation Bonaire (RRFB) has implemented the use of larval propagation to produce millions of genetically unique coral offspring. Francesca Virdis, Chief Operating Officer at RRFB, speaks to Marine News about their work, partly supported by BEST 2.0+, a European financial mechanism to support biodiversity projects in the EU Overseas, implemented by IUCN.

© Lorenzo Mittiga

1. What are the challenges around marine protection and conservation in the Caribbean?

Balancing nature, culture, and development might be the biggest challenge for Caribbean islands. Support for the local economy is needed, which often translates into over-tourism and overdevelopment. The coral reef around Bonaire is one of the healthiest in the Caribbean. However, research shows that a large part is no longer in good shape. The reefs close to human activities appear to be the most affected due to overfishing, pollution and coastal development.

2. How does RRFB's larval propagation project, fit into this narrative?

In the face of climate change and increasing human pressure on nature, coral reefs need our help to become more resilient. Their capacity to adapt to complex environments is potentially hidden within the coral's genetic diversity. Although Bonaire's coral reef still features significant populations of coral species, the healthy colonies may be too far apart to reproduce successfully through sexual reproduction alone, limiting the formation of new genetic strains. Assisting the copy of ecologically important coral species through the larval propagation method is critical for recovering the degraded populations.

3. Tell us more about your efforts to engage the local community.

Knowledge sharing is key to scaling up and impacting the reef. A significant part of the project directly involves the community in restoration efforts. Trained residents and visiting tourists provide RRFB with the additional workforce needed. Local divers are also an essential part of the programme, i.e. through presentations and volunteer training, they are the first contact the public to get involved in the project.

4. What has been the project's most notable achievement to date?

RRFB's outplanted corals on the reef have been spawning for years. During the project, we collected the released gamete (eggs and sperms) from our outplantings, fertilised and produced

new genetic strains that returned to our coral fragmentation nursery system. This has increased our coral stock's genetic diversity and resulted in fully integrating our coral production techniques, larval propagation and fragmentation.

5. What would you wish to have as a legacy of this work?

I wish our legacy would be about tangible results that can be witnessed underwater. In terms of Bonaire corals thriving, offering shelter and new reef habitat, and contributing to the conservation of its biodiversity and ecosystem services. A wonder of nature for people and future generations to enjoy.



**BEST
2.0+**



© Paul Selvaggio

IUCN Save Our Species looks towards a blue future

Following the 2021 IUCN World Conservation Congress, where the importance of both oceans and species was highlighted, IUCN Save Our Species wants to increase its impact in delivering effective conservation action for threatened marine species.

In order to contribute to the resilience of marine ecosystems and the communities dependent upon them, [IUCN Save Our Species](#), the [IUCN Ocean](#) and [IUCN Protected Areas](#) teams, and the [IUCN Species Survival Commission](#), are working together on their first ever joint conservation initiative. This innovative project combines national and regional marine spatial planning approaches, such as the [Important Shark and Ray Areas \(ISRA\)](#) and the [Important Marine Mammal Areas \(IMMA\)](#) with national-level expertise to improve governance for the conservation of marine mammals and sharks, rays, and chimaeras.

Through grant-making and awareness-raising, this proposed EUR 3 million project seeks to provide financial and technical support to NGO partners and other stakeholders in order to implement actions that protect threatened species in marine and coastal environments. Ultimately, the aim is to advocate for the integration

of ISRAs and IMMAs in Marine Spatial Planning and species conservation policies, as well as to provide scientific guidelines for negotiating provisions in the fisheries' laws to reduce negative impacts on these threatened species.

This initiative, for which funding is currently being sought, is only the latest effort made by IUCN Save Our Species to cast a wider net and implement ocean-based species conservation projects. Last year, a project was funded to protect the Critically Endangered North Atlantic Right Whale under the [Lacoste x IUCN Save Our Species](#) initiative. Its aim is to save this Critically Endangered mammal from extinction by creating incentives for lobster and crab fisheries to embrace whale-safe practices. It also hopes to significantly alleviate the threats of entanglement to Right Whales, reduce the mortality rates from entanglement and eventually eliminate entanglement-caused deaths completely. Indeed, accidental capture by fisheries is one of the reasons marine species such as whales and dolphins are rapidly decreasing in numbers.

Another IUCN Save Our Species project launched this year under the [Fondation Segré Conservation Action Fund](#) seeks to protect Critically Endangered Scalloped

Hammerhead sharks in Golfo Dulce, Costa Rica. This area is host to one of the poorest local communities in the country, and is severely threatened by environmental and socio-economic pressures that worsened during the coronavirus pandemic. In order to change the situation, this project has launched the Mujeres Martillo (Hammerhead Shark Ladies) programme, which aims to establish a business model for local women inspired by the Hammerhead shark and nature conservation. By implementing a self-sustaining conservation model, the programme creates revenue streams for women while supporting Hammerhead shark conservation strategies.

The alarm was raised at last year's IUCN World Conservation Congress in Marseille, and the current climate emergency and the future of our oceans were extensively covered during the event. These issues are interlinked with species conservation, as changes in water temperature and ocean acidification directly impact the diversity of marine life, and can ultimately jeopardise the ecosystems people depend on. The prominence of oceans at Congress signals the important role they will play in species conservation and the post-2020 global biodiversity framework.



Photos: Nick Hawkins

Unifying efforts to save the Mediterranean Sea

46 partners are working together across the Med as part of an ambitious initiative to protect its marine biodiversity and restore fisheries

TOGETHER
FOR THE MED

The Mediterranean Sea is bordered by over 20 countries across three continents and is home to more than 10,000 islands. For millennia, its serene and turquoise waters have seen the exchange of both goods and traditions, fusing together cultures and shaping civilisations throughout history.

The Mediterranean is also one of the largest marine biodiversity hotspots on Earth, hosting up to 18% of all identified marine species; an astonishing feat considering that the Mediterranean Sea represents less than 1% of the global ocean surface area. However, marine habitats and species in the Mediterranean continue to be threatened by anthropogenic impacts such as overfishing, coastal development and marine pollution.

“The Together for the Med Initiative is perhaps one of the most ambitious in the region’s history.”

The Together for the Med (TGFM) initiative was born as a response to the need for creating a positive impact in the Mediterranean through the development of strategies and technical solutions that strengthen No-Take Zones (NTZs) and Marine Protected Areas (MPAs) and tackle the complex issues around bycatch and dolphin depredation.

Launched in 2017, the TGFM initiative is perhaps one of the most ambitious in the region’s history. Funded by the MAVA Foundation and co-led by IUCN Centre for Mediterranean Cooperation and BlueSeeds, it has successfully mobilised almost 50 partners on a joint mission to connect the countries bordering the Mediterranean Sea.

As a collective, TGFM has launched 16 high-impact projects that aim to prevent bycatch, mitigate conflicts between marine mammals

and fishers, monitor marine life and fish stocks, share scientific knowledge, help design MPAs, promote sustainable seafood consumption and foster responsible marine entrepreneurship. The TGFM initiative helps partners avoid duplication of efforts, provides opportunities to engage in new projects and increases their ability to expand their work into new locations and communities.

Capitalizing on the results obtained thus far and determined to go on working together, the partnership will continue scaling up results to restore key habitats, improve sustainable coastal Small-Scale Fisheries (SSF) and improve community livelihoods, minimize conflicts and increase survival of vulnerable species. The partnership will also broaden its scope by working on social inclusiveness, equality and climate change, as well as continue advocating at the local, national and regional levels towards the achieving 2030 global targets.



Together for the Med Documentary © Isaac en Catalonia

WEST AFRICA

Coastal erosion and flooding in Togo:

the WACA project opts for a local protection initiative

In Togo, livelihoods, particularly those of artisanal fishermen, gardeners and local residents are threatened by coastal erosion. The West Africa Coastal Areas Resilience Investment Project (WACA ResIP), with the support of the World Bank (WB) and the Global Environment Facility (GEF), intervenes to help fight against the advance of the sea and help populations to strengthen their level of resilience to floods by preserving their means of subsistence.

The project carries out multifaceted actions on the ground, including coastal protection work, community sub-projects and income-generating activities. These protection works cover an 18 km stretch of coastline, from Agbodrafo to Aného (Togo-Benin border).

Given the threats to some residences, WACA opted for an emergency solution based on a local initiative to protect the coast by vertical nozzles placed perpendicular to the direction of the waves. With this protection technique which extends over approximately 1.2 kilometers, the populations of the localities of Gbodjomé, Adissem, Tango Kopé, Nimagna and Dévikinmé experience a respite with a remarkable slowdown in the advance of the sea.

In parallel with this work, the WACA project provided Edoh-Wokui Copé, a village of 600 inhabitants, with an enlarged water retention basin for the rainy season.

“After the heavy rains, our fields are destroyed, our homes are flooded, we find ourselves completely invaded by water which causes the collapse of some buildings. Sometimes, the population had to move out to find refuge in the surrounding villages until the situation returned to normal. We already had a retention basin, but today, with the support of the WACA project, we have enlarged the basin and it will be able to contain enough water to keep the settlement protected,” says Koffi Edoh Wokui, president of the Village Development Committee (CVD).

Momentum building for a Great Blue Wall in the Western Indian Ocean...

...and beyond

The Western Indian Ocean region is home to a broad range of marine species, including marine mammals, sharks and rays, turtles, sea birds and important fish species. Whilst some of these are iconic, others are hugely important from a commercial standpoint. Supporting all this are productive ecosystems estimated to provide at least USD 21 billion annually to the regional economy (WWF report), notably pristine coral reefs, carbon-rich mangrove forests and sheltered seagrass beds.

Growing human pressures, unregulated fishing, pollution and climate change are converging to put many of these ecosystems into a downward spiral of degradation. This is having impacts not only on biodiversity but also on resource-dependent communities across the region. The region has been characterised by the loss of unprotected coral reefs, mangroves, seagrasses and fish stocks and the loss of associated livelihoods.

Many important programmes are being implemented to address this crisis and one of the more recent international efforts to join the growing movement towards restoration and sustainability is the Great Blue Wall Initiative (GBW). The GBW is an African-led effort to enhance environmental and social resilience by

creating interconnected protected and conserved marine areas ("seascapes") that will counter the worst effects of climate change and bring the realisation of various international targets – from national contributions for climate mitigation to sustainable development goals and biodiversity protection – much closer.

Local communities, including indigenous peoples and other stakeholders, will play a central role in the effective management of this connected ecological network and will be supported in their efforts to sustainably use and benefit from natural resources. GBW's ambition is to protect 2 million km² of marine areas, restore 2 million hectares of critical coastal and marine ecosystems, and thus help sequester 100 million tons of CO₂ and create 1 million blue jobs by 2030.

Great Blue Wall

2021-2022 MILESTONES

IUCN's World Conservation Congress

Foundational high level meeting is convened by IUCN, and brought together WIO countries, CEO's of INGOs, COP26 High Level Climate Champions and the Government of France. The Great Blue Wall (GBW) is then included in the WCC's *Marseille Manifesto* as one of its 10 Key Action Commitments, endorsed by all WCC parties

High level technical meeting hosted in Nairobi

High level representatives from Kenya, Mozambique, Tanzania and Seychelles mandate IUCN to establish an official secretariat for the GBW

UN Ocean Conference

High level event that included the announcement of President Ramkalawan of Seychelles's official endorsement, former President of Seychelles Danny Faure's full support, several large funding commitments by public and private institutions, as well as the announcement of Mozambique's Northern Seascapes and Tanzania's Tanga-Pemba Seascapes.

UNFCCC COP27

Heads of State event showcasing African Leadership, announcing commitments and mobilise strategic partnerships

COP27 African Finance Roundtable

5 GBW projects are selected (out of 200 submissions and 18 selected projects) and presented as key mechanisms to be accelerated and supported by COP27's Presidency and High Level Climate Champions in order to mobilise ambitious political commitments and financial support

African Protected Area Congress

GBW presented and identified as key initiative to accelerate large scale people-positive ocean conservation efforts in Africa

High Level Political Forum on Sustainable Development

Presentation by African Countries of ARFSD's Kigali Declaration and GBW as key outcome of the forum and co-hosting of an official high level event by UNECA and IUCN's leadership with high level participation from GBW countries and the World Bank

African Regional Forum on Sustainable Development (ARFSD)

GBW endorsed by all parties attending ARFSD and subsequently included in the Forum's outcome document, the *Kigali Declaration*

UNFCCC COP26

Global launch of the GBW with the participation at Minister level of Kenya, Seychelles, Mozambique, Tanzania, France, UK, Sweden, Portugal, Ireland, and USA and with the participation of the co-Chair of the International Indigenous Peoples Forum on Climate Change, Hindou Oumarou Ibrahim, UNSG's Special Envoy for the Oceans, COP26 High Level Climate Champion, IUCN's Patron of Nature Sylvia Earle, Seychelles former President James Alix Michel, and high level representatives of the private sector

The overall goal is to accelerate and upscale ocean conservation actions while building socio-ecological resilience and supporting local livelihoods. This effort is built around three pillars:

1. Support the establishment of fair, inclusive, and participatory governance mechanisms at seascape level that will contribute to reaching the objective of protecting 30 percent of the oceans by 2030 while empowering local communities to secure rights to access and benefit from natural resources;
2. Scale up the operationalization of Nature-based Solutions (such as conservation and restoration of ecosystems) that will contribute to achieving a net gain for critical marine and coastal ecosystems;
3. Unlock the development of a regenerative blue economy by accelerating the development of blue entrepreneurship opportunities that benefit the people and nature.

IUCN has taken the opportunity presented by the marathon year of ocean-focused international events to garner considerable political support for its ambition and the opportunities it brings to strengthen institutional capacities for marine resource management, to scale up national-level projects to a regional level, and to boost local entrepreneurship in achieving conservation and socioeconomic outcomes through economic activities within a sustainable blue economy.

This year, the initiative received financial commitment from several public donors and foundations for a running total of almost USD 40 million with an ultimate target of catalysing USD 1.5 billion of funding by 2025 and USD 15 billion by 2030. There is strong interest from founding parties in turning GBW into a pan-African initiative.

IUCN ASIA

Green listing marine protected areas in the Asia region

IUCN Asia's marine programme has continued to focus on strengthening capacity for MPA management by promoting understanding and uptake of the IUCN Green List of protected and conserved areas. The IUCN Green List is the first sustainability standard comprising of 17 criteria and 50 indicators for assessing and enhancing the governance and management of protected and conserved areas. The use of the IUCN Green List can lead to tangible improvements on the ground for the management and governance of protected and conserved areas. In Asia, the GL is being applied as a planning tool, a diagnostic gap analysis tool as well as serving to incentivise countries to attain global best practice recognition for specific MPA sites.

At the 2nd Asia Parks Congress in Kota Kinabalu, Sabah, Malaysia, **the Sugud Islands Marine Conservation Area (SIMCA) became the first recognised Green Listed Marine Protected Area in Asia.** SIMCA is a co-managed marine protected area located within the Sulu

Sea region of Malaysia, encompasses 46,317 hectares and includes three islands – Lankayan, Billean and Tegaipil, and is home to at least 600 species of fish, 300 species of corals, 2 species of sea turtles, 6 species of giant clams and 26 species of seagrass and algae.

Dr Achier Chung, Reef Guardian, "We, the Reef Guardian team, feel delighted and proud to have the Sugud Islands Marine Conservation Area (SIMCA) recognised on this international platform, honouring our hard work in managing SIMCA since 2004. All of SIMCA's achievements result from the collaborations and partnerships from many individuals as well as different government and private agencies, which shape the SIMCA's operational strategies along the way. We are hopeful that this recognition will garner external support and funding opportunities from local and international parties to further enhance the SIMCA governance and management." The Green Listing of SIMCA has led to Malaysia putting forward further MPA GL candidate sites since.

In Thailand the Green List has been adopted as the MPA management planning guide by Department of National Parks (DNP)

Guided by the Green List and feedback from local MPA officers and communities for the need for more inclusive MPA management planning, the Department of National Parks (DNP) is now strengthening active engagement of the local communities and local government in the MPA planning process beginning with two sites in the Trang Sea; the Koh Libong Non-Wildlife Hunting Area and the Haad Chao Mai National Park.

In June, officers from the DNP and Department of Marine and Coastal Resources (DMCR) regional and provincial offices were invited to take part in a training on MPA management planning based on the three pillars of the Green List; Good governance, Sound Design and Planning and Effective Management.

Based on the training, the DNP have adapted and developed guidelines for MPA planning to be used in all DNP sites. During the training MPA officers assessed the strengths and weaknesses of the existing MPA management effectiveness of their respective MPA sites using the various analytical tools introduced. During the proceedings keynote speakers from DNP, Kasetsart University and Prince of Songkla Nakhon University shared their technical knowledge and insights with the participants.

This activity was organised as part of the project activities that IUCN and the Ministry of Oceans and Fisheries (MOF) have agreed to collaborate on for the implementation of the "Coastal and Marine Ecosystems Conservation and Management Project" in Bangladesh, Cambodia, Pakistan, Thailand, Vietnam and China, a five-year project which aims to build the capacity of MPA managers and improve management in specific select national MPAs sites.



© Scubazoo / Alamy

DNP MPA officers attend a training facilitated by IUCN and national Advisers from Kasetsart University and Prince of Songkla Nakhon University



© IUCN Thailand Pratheep Mekattam

People and the Ocean Specialist Group, IUCN Commission on Environmental, Economic, and Social Policy

Re-imagining marine conservation through centering social equity

Many past marine conservation practices were largely developed without considering justice, equity, diversity, and inclusion. Humans were viewed separate from nature. The knowledge of Indigenous and small-scale fishers was often dismissed. And Indigenous Peoples and Local Communities (IPLCs), who had rights to and relied on areas for food security and livelihoods, were left out of decisions that directly impacted them.

There are too many examples of marine conservation initiatives that resulted in disenfranchisement, abrupt displacement, undermining of human rights, and outright exclusion of local and Indigenous communities. Understandably, this has resulted in conflict and opposition to marine conservation in many places. Yet, we need more allies to achieve biodiversity conservation.

A different approach to marine conservation is possible and within reach. In the coming quadrennium, the IUCN Commission on Environmental, Economic and Social Policy (CEESP) is focusing on “[Reimagining Conservation](#)”. A [re-imagined marine conservation](#) embraces and advances social equity in both governance and management – in line with the text contained within the Convention on Biological Diversity Aichi Target 11 and Post-2020 Global Biodiversity Framework. This approach to marine conservation acknowledges and places local people’s rights, livelihoods, knowledge, needs and visions for the future at the centre of marine conservation efforts. It also rests on decision-making processes that are participatory and collaborative. A re-imagined marine conservation places management authority and leadership with the communities who are most intimately connected to and rely on the ocean - for example, in the form of [Locally Managed Marine Areas](#)

(LMMAs) and [Indigenous and Community Conserved Areas](#) (ICCAs) that are designated and managed by Indigenous Peoples and Local Communities (IPLCs).

There is a critical gap that must be addressed to achieve more equitable marine conservation. Even though the mainstreaming of social equity has become a central concern of ocean sustainability efforts, many ocean-focused governmental, non-governmental and funding organisations often lack the foundational knowledge, mandate, capacity, and diversity to be able to adequately account for and address equity and justice issues in their policies, practices, programmes, and funding portfolios.

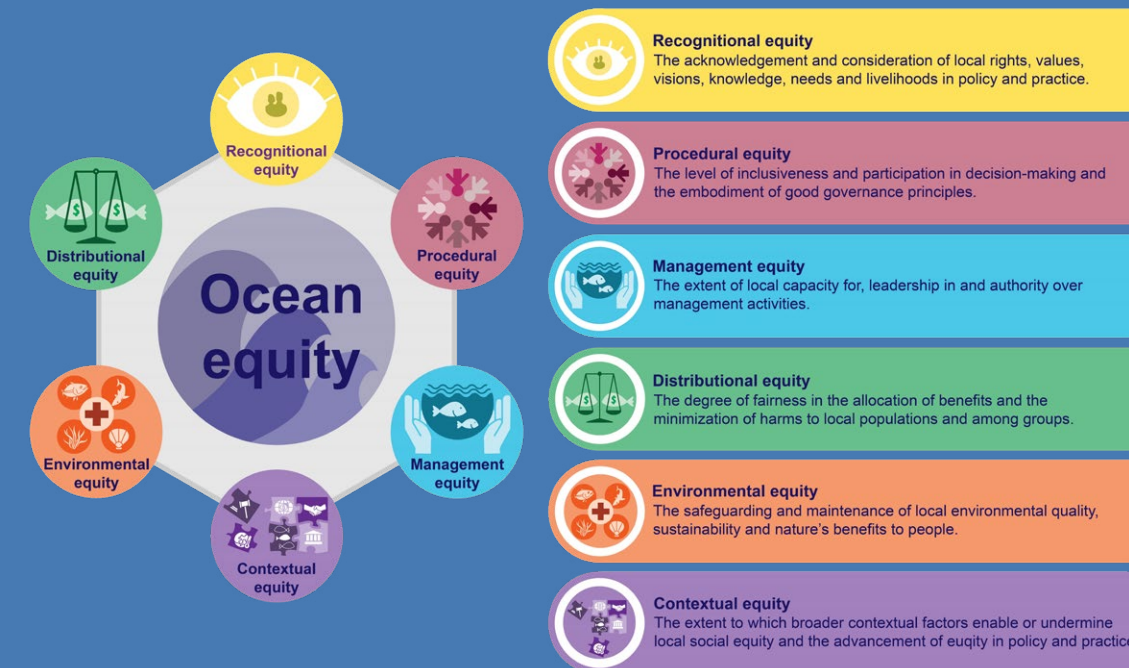
Re-imagining marine conservation through centering social equity will align practice with policy, create allies, and enable greater effectiveness. An important starting place for marine conservation organisations is to establish a strong internal foundation for this work.

Nathan Bennett, Chair of the People and the Ocean Specialist Group, Commission on Environmental, Economic, and Social Policy, IUCN

For more information about these topics:

Bennett, N. J. (2022). Mainstreaming Equity and Justice in the Ocean. *Frontiers in Marine Science*, 9. <https://www.frontiersin.org/articles/10.3389/fmars.2022.873572>

Bennett, N. J., Katz, L., Yadao-Evans, W., Ahmadi, G. N., Atkinson, S., Ban, N. C., Dawson, N. M., de Vos, A., Fitzpatrick, J., Gill, D., Imirizaldu, M., Lewis, N., Mangubhai, S., Meth, L., Muhl, E.-K., Obura, D., Spalding, A. K., Villagomez, A., Wagner, D., ... Wilhelm, A. (2021). Advancing social equity in and through marine conservation. *Frontiers in Marine Science*, 8, 711538. <https://doi.org/10.3389/fmars.2021.711538>



Six recommendations to help marine conservation to overcome this gap and establish a strong internal foundation for [advancing social equity](#) are:

1. Develop awareness of past equity and justice issues in marine policy spheres where the organisation works;
2. Explore how equity and justice are defined and can be operationalised in marine policy and practice;
3. Mainstream equity and justice in organisational policies, practices, programmes, and portfolios;
4. Increase organisational human dimensions capacity and ability to think socially;
5. Support marine social science research and engage with evidence regarding the human dimensions; and,
6. Commit to internal [organisational equity, diversity and inclusion](#) as a foundation for external equity and justice work.



IUCN WORLD COMMISSION ON ENVIRONMENTAL LAW

IUCN's Conservation Law efforts centred on the High Seas, plastics and deep-sea mining

The Ocean Law Specialist Group (OLSG) of the IUCN World Commission on Environmental Law (WCEL) has long [contributed](#) to global ocean health, productivity, and resilience to climate change, particularly for the open ocean far from land, with members' work to breathe life into the UN Law of the Sea Convention's marine protection [provisions](#). This work is increasingly vital as technology allows human activities to move farther offshore and into the half of Earth's surface that is subject to national laws only via the registration of ships to a particular "flag state". The Blue Economy and carbon dioxide removal are only two currently trending examples of commercial interest in these mostly unregulated water column and seabed regions (together, the high seas). Yet, they contain rich, diverse communities of life that we still know very little about.

In the face of scientific uncertainty, OLSG has counselled a [precautionary pause](#) for seabed mining in interventions at the meetings of the International Seabed Authority (the international administrative body responsible for supervising seabed mining in the Area), building on the OLSG team's arguments before the International Tribunal for the Law of the Sea in 2010.

The OLSG's [legal analysis and textual proposals](#) are relied on by the States that are negotiating a new legally binding agreement for the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction, called "the BBNJ Agreement". The new agreement is expected

to include provisions that will facilitate creation of a network of marine protected areas in ABNJ, based significantly on the [Guidelines for applying the IUCN protected area management categories to marine protected areas](#). It will also require parties to undertake environmental impact assessments for their activities and will address equitable sharing of marine genetic resources. Negotiations will resume in [February 2023](#), with the expectation of a successful adoption of text.

With the launch of work on a new treaty to reduce plastics pollution, especially in the ocean, the OLSG fostered a new [Task Force](#). That negotiation is scheduled for completion in a lightning-fast two years, so expect to hear more.

Looking forward to the next year, WCEL-OLSG plans to contribute to the implementation of a bold, visionary, and pragmatic BBNJ Agreement for high seas biodiversity conservation, a precautionary pause on mining that will allow the development of regulations that will effectively protect the sensitive, rich deep seabed ecology, and innovative design of a new plastics pollution treaty.

In all its work, the OLSG appreciates the collaboration of our many members, our sister Commissions, and the IUCN Secretariat Ocean Team.

For further information, please contact Cymie Payne on info@cymiepayne.org.

New Marine Publications and Resources



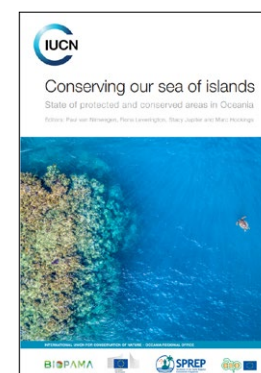
A solution package for plastic pollution – from measurement to action

Knowledge gathered over the past four years in the IUCN Close the Plastic Tap programme is the basis of this publication. It presents a summary of methodologies, results, and key lessons learned from the use of the UNEP/IUCN *National Guidance for Plastic Pollution Hotspotting and Shaping Action* in Kenya, Menorca (Spain), Mozambique, Republic of Cyprus, South Africa, Thailand, United Republic of Tanzania, and Viet Nam. The key takeaway from this research is that there is a pressing need to use science-based plastic leakage assessments to drive policy and behavioural changes that will reduce plastic pollution. Furthermore, IUCN's comprehensive methodology and tools provide a holistic package to build capacity for stakeholders to understand and manage marine plastic pollution.



Aquaculture and Nature-based Solutions

Aquaculture production has very significantly increased in tonnage and value over the last decades. It is seen as a potential solution to replace the declining wild fishery stocks. This publication is a first attempt to examine aquaculture systems within the recent framework of the IUCN Global Standard for Nature-based Solutions (NbS). It reviews the critical contextual situation, highlighting major issues related to climate change, biodiversity losses and endangered marine ecosystems. It stresses the need for new approaches, such as the concept of NbS, to improve human ability to implement sustainable development and to reach the UN Sustainable Development Goals (SDGs).



Conserving our sea of islands

This report provides the first comprehensive assessment of area-based conservation in the Oceania region. The 23 countries and territories that it covers are diverse but share a common identity and geography, as well as many other features such as extensive customary ownership. The purpose of the report is to document the status of protected and conserved areas in Oceania; review and outline progress made towards achieving national and international targets for protected and conserved areas, including for coverage, representativeness, connectivity and effectiveness; showcase lessons learned from across the region to promote effective management practices; and provide guidance for strengthening their management effectiveness, governance and equity.



Investments in Coastal Nature-based Solutions: Opportunities for National and Local Governments

There is a growing understanding for the opportunities provided by Nature-based Solutions (NbS) to respond to climate change and improve the resilience of communities and ecosystems. The paper provides a cursory overview of the topical challenges and explores options for addressing them. The paper also highlights how investments from both the public and private sectors can be combined to promote and enable sustainable growth and to strengthen mitigation and adaptation capacity and action. It finds that success depends on an adequate interaction among stakeholders, the careful gauging of synergies between investment, environment and climate protection, and the mainstreaming of policy areas including tax, trade, planning and labour policies.

Case studies and grey literature

The last 15 months has seen the release of an array of IUCN short reports and case studies on marine plastics.

Action Plan to prevent plastic waste in the Republic of Cyprus 2030

Business Plans, Waste Segregation Resources for Plastic Pollution Solutions

Case study on net fisheries in the Gulf of Thailand

Economic assessment of abandoned, lost and otherwise discarded fishing gear (ALDFG) in the fishery sector of The Republic of Cyprus

Economic Assessment: Deposit Refund System (DRS) for a Plastics Circular Economy: Menorca, Spain

Governing plastic waste management in Menorca

Governing Plastic Waste Management in Cyprus: Assessment of legal, policy and institutional frameworks

Marine plastics, fisheries and livelihoods in Mozambique

MARPLASTICCs South Africa National Plastic Pollution Hotspotting Report and data

MARPLASTICCs Outcomes Report 2021

MARPLASTICCs Economic Briefs - Viet Nam

MARPLASTICCs Thailand National Plastic Pollution Hotspotting Report summary in Thai

MARPLASTICCs Thailand National Plastic Pollution Hotspotting Report and data in English

MARPLASTICCs Mozambique National Plastic Pollution Hotspotting Report and data

MARPLASTICCs Mozambique National Plastic Pollution Hotspotting Report and data in Portuguese

MARPLASTICCs Kenya National Plastic Pollution Hotspotting Report and data

MARPLASTICCs Viet Nam National Plastic Pollution Hotspotting Report and data in English

MARPLASTICCs Economic Briefs - Thailand - Case study on net fisheries

MARPLASTICCs Viet Nam National Plastic Pollution Hotspotting Report and data in Vietnamese

Plastic Waste Free Islands in the Mediterranean

Plastic Pollution Regional Report from Eastern and Southern Africa Mediterranean and Southeast Asia

Policy analysis and development of policy recommendations to reduce plastic waste in Grenada Final report

Policy and Legal Recommendations in the Republic of Cyprus: Plastic Pollution

Policy and Legal Recommendations in Menorca: Plastic Pollution

South Africa: Efficiency of beach clean-ups and deposit refund schemes (DRS) to avoid damages from plastic pollution on the tourism sector in Cape Town, South Africa

The economic impact of marine plastics, including ghost fishing, on fishing boats in Phước Tinh and Loc An, Ba Ria Vung Tau Province, Viet Nam

Waste Segregation Guide to Prevent Pollution

Who we are

IUCN Ocean Team – HQ and outposted



Minna Epps
Head, IUCN Ocean Team



Janaka De Silva
Senior Programme Coordinator



Dorothée Herr
Manager, Oceans and Climate Change



James Oliver
Senior Programme Officer



Aurélie Spadone
Senior Programme Officer,
Ocean Governance



Joao Sousa
Senior Programme Officer,
Marine Plastics



Anete Berzina-Rodrigo
Project Manager



Clément Chazot
Marine Programme Officer



Lynn Sorrentino
Marine Programme Officer



Melissa Abderrahim
Marine Programme Officer



Anthony Hobson
Communications Associate



Victoria Romero
International Policy Centre
Project Officer, Biodiversity and
Climate Change Policy Tools



Maria Hasler
Senior Manager, Programme Finance



Tatiana Chudina Semeniouk
Programme Administrator



David Freestone
Executive Secretary
Sargasso Sea Commission
Washington DC, USA
david.freestone@iucn.org



Fae Sapsford
Marine Research Fellow
Sargasso Sea Commission
Washington DC, USA
fsapsford@sargassoseacommission.org

Sargasso Sea Commission

IUCN ocean regional focal points and collaborators



Maeve Nightingale
Senior Programme Officer, Coastal and Marine, Asia



Renaud Bailleux
Regional and Coastal Programme Coordinator, West and Central Africa Programme



Tania Ammour
Regional Programme Coordinator
Regional Office for Mexico, Central America and the Caribbean



Francis Akatsa Okalo
Program Manager, Coastal and Ocean Resilience
East & Southern Africa



Isabel Ramos
Programme Manager
Mozambique Country Office



Paula Katirewa
Climate Change Mitigation Coordinator
Oceania Regional Office



Yaprak Arda
Marine Programme Officer
Centre for Mediterranean Cooperation



Maria-Goreti Muavesi
Head Environmental Legal Officer
Oceania Regional Office



Varea Romanu
Climate Change Programme Assistant
Oceania Programme Coordination Unit



Thomas Sberna
Regional Head, Coastal and Ocean Resilience,
East & Southern Africa



Hans Wendt
Marine Programme Coordinator,
Oceania Regional Office



Cécile Fattebert
Programme Officer, Solutions
Global Protected Areas Programme
IUCN HQ



Thi Thu Hien Bui (Hien)
Coastal and Marine Coordinator
Vietnam Country Office



Peter Manyara
Programme Manager, Coastal and Ocean Resilience
South Africa Country Office



Domenique Finegan
Technical Officer
Regional Office for Mexico, Central America and the Caribbean



Emmi Lindqvist
Marine Biodiversity and Blue Economy
Assistant, Centre for Mediterranean Cooperation



Paul Silai Tendeng
Project coordinator, Mangroves
West and Central Africa



Semisi Seruitanoa
Membership Officer
Oceania Regional Office

Commission ocean focal points, Patrons & Ambassadors



Kristina Gjerde
Senior High Sea Policy Advisor
IUCN World Commission on Protected Areas
Kristina.gjerde@eip.com.pl
@4kgjerde



Cymie Payne
Chair, Oceans, Coasts and Coral Reefs
Specialist Group, IUCN World Commission
on Environmental Law
cp@cymiepayne.org
@CymiePayne



Felipe Paredes
Vice Chair, Marine
IUCN World Commission on Protected Areas
fparedesv@gmail.com
@fepar



Rima Jabado
Chair, IUCN SSC Shark Specialist Group
rimajabado@gmail.com
@ElasmoProject



Pradeep Singh
Communication Coordinator
IUCN WCEL Ocean Law Network



Peter Cochrane
IUCN Regional Councillor, Oceania
IUCN Council ocean focal point
@pweeterc



HSH Prince Albert II of Monaco
IUCN Patron of Nature
@FPA2



Andrew Forrest
IUCN Patron of Nature



Dona Bertarelli and Yann Guichard
IUCN Patrons of Nature
@DonaBertarelli @yannguichard



Jean-Louis Etienne
IUCN Ambassador for the Poles & the Ocean
@jletienne



Amanda Vincent
Chair, Marine Conservation Committee,
IUCN Species Survival Commission
a.vincent@oceans.ubc.ca
@SSCmarine



Nathan Bennett
Chair, People and the Oceans Specialist
Group, IUCN Commission on Environmental,
Economic and Social Policy
nathan.j.bennett.1@gmail.com
@NathanJBennett



Despina Symons
Chair, Fisheries Expert Group
IUCN Commission on Ecosystem Management
despina.symons@ebcd.org
@EBCD_bxl



David Obura
Chair, IUCN SSC Coral Specialist Group
dobura@cordioea.net
@cordioea



Torsten Thiele
Senior Advisor, Conservation Finance
tors10th@a.com
@tors10th



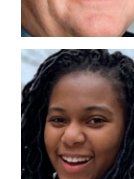
Imen Meliane
Vice President, IUCN
@i_meliane



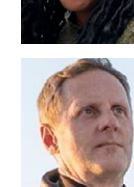
Sylvia Earle
IUCN Patron of Nature
@MissionBlue



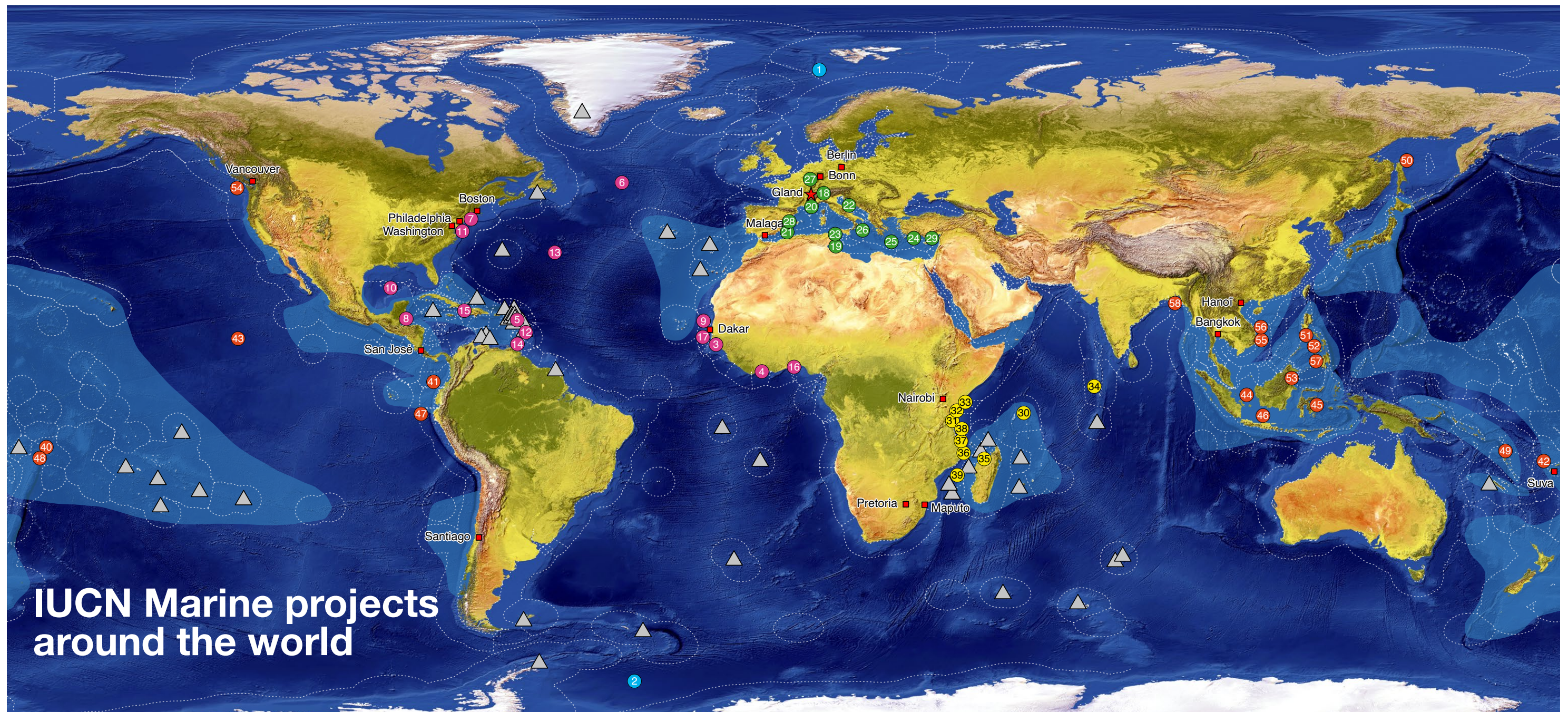
Frank Mars
IUCN Patron of Nature



Kyra Bostic
IUCN High Seas Youth Ambassador



William Winram
IUCN Ocean Ambassador
@WilliamWinram



IUCN Marine projects around the world

OFFICES & COLLABORATORS

- ★ IUCN Headquarters (Gland, Switzerland)
- Outposted locations with marine staff and collaborators

- EEZ (marine regions)
- Marine Biodiversity Hotspots (CI)

MAJOR PROJECTS

- ▲ BEST Initiative – Ecosystem Profiles and Grant Mechanism Programme for Projects in the European Overseas

Polar regions

- 1 Arctic Council engagement
- 2 Network of Antarctic MPAs / CCAMLR engagement

Note:
most projects have a wide geographical scope. In these cases the marker shows either the location of the office in charge of a specific study/pilot site or of the approximate centre of the corresponding region.

Atlantic Ocean & Caribbean

- 3 West Africa Coastal Resilience
- 4 WACA–BAR Coastal Erosion Strategy
- 5 Plastic Waste Free Islands – Antigua
- 6 Marine Heatwaves
- 7 Law of the Sea Implementing Agreements, NY
- 8 BNCFF Tourism and MPAs, Belize
- 9 Mangrove Management from Senegal to Benin
- 10 Ocean deoxygenation policy
- 11 Global Mangrove Alliance
- 12 Plastic Waste–Free Islands – Saint Lucia
- 13 Sargasso Sea Commission
- 14 Plastic Waste–Free Islands – Grenada
- 15 Subnational Climate Fund
- 16 BCAF Mangrove conservation, Benin
- 17 Plastic Waste – West Africa

Europe, Mediterranean & Red Sea

- 18 MAPMAKER – Plankton mapping
- 19 Marine Nature–Based Solutions post–COVID
- 20 REST–COAST coastal restoration

- 21 Green List Standard, Algeria
- 22 TGFM Together for the Mediterranean
- 23 PlastiMed–BeMed North Africa
- 24 POSBEMED2 – Management of Posidonia beaches
- 25 Mediterranean Islands Collective
- 26 Monaco BNCFF Med blue carbon feasibility
- 27 Blue Natural Capital Financing Facility (Luxembourg)
- 28 Plastic Waste Free Islands – Menorca
- 29 Plastic Waste Free Islands – Cyprus

Indian Ocean

- 30 LEAP Locally Empowered Area Protection
- 31 BNCFF – Zanzibar blue carbon
- 32 Zanzibar Community Mangrove Conservation
- 33 BNCFF – Kenya Seagrass Carbon Credits
- 34 REGENERATE – Maldives coastal regeneration
- 35 BCAF Madagascar mangrove restoration
- 36 BMU–IKI Marine Socioeconomical Resilience
- 37 Save Our Mangroves Now 2
- 38 Great Blue Wall Initiative
- 39 Save Our Mangroves Now 2

Pacific Ocean

- 40 Pacific Island Marine Spatial Planning
- 41 Blue Action Fund
- 42 Plastic Waste Free Islands – Fiji
- 43 Deep Sea Mining awareness
- 44 BNCFF – West Kalimantan Forest Carbon
- 45 BNCFF – Seatech seaweed, Sulawesi
- 46 BNCFF – Selva Shrimp
- 47 BCAF Peru mangrove resilience
- 48 Plastic Waste Free Islands – Samoa
- 49 Plastic Waste Free Islands – Vanuatu
- 50 Western Gray Whale Range–wide Conservation Initiative
- 51 BNCFF Blue Finance: Oriental Mindoro
- 52 BNCFF Net–works: Northern Iloilo
- 53 BNCFF – BlueYou
- 54 IMPAC 5 Vancouver
- 55 Viet Nam Circular Economy project series
- 56 Community–based turtle conservation Viet Nam
- 57 BCAF Philippines mangrove restoration
- 58 Conservation of Coastal and Marine Ecosystems in Asia



INTERNATIONAL UNION FOR
CONSERVATION OF NATURE

WORLD HEADQUARTERS
Rue Mauverney 28
1196 Gland, Switzerland
marine@iucn.org
Tel +41 22 999 0000
www.iucn.org/marine
www.iucn.org/resources/publications