Report of the Secretary-General on Oceans and the Law of the Sea, as mandated by United Nations General Assembly resolution 77/248 of 30 December 2022, entitled "Oceans and the Law of the Sea".

These inputs provide an overview of UNEP activities, including adoption of measures and development of programmes, etc., that have been undertaken or are ongoing in the implementation of specific provisions of GA resolution 77/248. The reporting period covers September 2022 to August 2023.

I. Ratification of Regional Seas Conventions and Protocols

Paragraph 271. Encourages States that have not done so to become parties to regional seas conventions and the protocols thereto addressing the protection and preservation of the marine environment, while noting the role of the United Nations Environment Programme Regional Seas Programme;

One of important achievements of the Barcelona Convention in 2023 is the **Ratification of the Mediterranean Integrated Coastal Zone Management (ICZM) Protocol by Tunisia**. Tunisia is now the 13th country to ratify the Protocol following its adoption in 2013 in Madrid, Spain.

Significant progress has been reported on strengthening ratification of the Cartagena Convention and associated Protocols, both by Contracting Parties and Non-Contracting Parties. The Government of Suriname prepared a submission for ratification of the Cartagena Convention and its three Protocols, and provided technical support to the Governments of Saint Kitts and Nevis and Saint Vincent and the Grenadines to assist with the ratification of the Protocol Concerning Pollution from Land-Based Sources and Activities. Discussions are also ongoing with Costa Rica, Guatemala, Jamaica, Mexico, Saint Kitts and Nevis, Suriname and the territories of the United Kingdom regarding their ratification of the Protocol Concerning Specially Protected Areas and Wildlife (SPAW). The Secretariat has also convened a series of consultative workshops to promote ratification of the Convention and its Protocols by Non-Contracting Parties i.e., the 6th Project Steering Committee (PSC) Meeting of the GEF Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States (IWEco) project (18-20 July 2022), and the Meeting of the Directors and Heads of Maritime Administrators of the Caribbean (28-29 July 2022).

II. Marine and Coastal Ecosystems

Paragraph 210. Acknowledges the request by the United Nations Environment Assembly at its second session, in paragraph 6 of its resolution 2/10 of 27 May 2016, to the United Nations Environment Programme to step up its

work, including through its Regional Seas Programme, on assisting countries and regions in the application of the ecosystem approach to managing the marine and coastal environment, including through enabling intersectoral cooperation in integrated coastal zone management and marine spatial planning;

- **Accelerating transition to sustainable, resilient and equitable blue economy**

UNEP is developing a novel approach and capacity-building resource to support Member States in transitioning to environmentally sustainable, resilient and equitable blue economies. A **Sustainable Blue Economy Transition Framework** outlines core elements and enabling conditions to design and initiate steps towards a sustainable, resilient and equitable blue economy tailored to countries' unique settings and needs. The Framework organizes the development and implementation process into three practical phases. At its core is a policy-coherence and integrated policy framework that helps countries unpack the impact of the triple-planetary crisis of climate change, nature loss and pollution on water-related ecosystems. The goal is to maintain and sustainably use the primary natural assets provided by healthy marine, coastal and freshwater systems as a prerequisite for long-term sustainable blue economic development. The Framework further helps countries articulate and operationalize a tangible whole-of-government and whole-of-society approach to mainstreaming biodiversity into integrated ocean, coastal and freshwater policy and action.

As an initial step "zero", a **Blue Economy Rapid Readiness Assessment (RRA**) approach helps provide a clear picture of a country's existing policies, legal frameworks, systems and political landscape and how these would facilitate a sustainable blue economy transition. It identifies key gaps and outlines recommendations for getting started, including the types of resources required. In short, the RRA provides governments with a focused snapshot of how to make the transition tangible and real. This approach has been trialled in two SIDS countries, Antigua & Barbuda and Trinidad & Tobago, in a collaboration between UNEP and the Commonwealth Blue Charter programme. The results have just been presented in two country studies. Further upscaling in countries and regions is under way.

- **Cartagena Convention Secretariat**

The Secretariat supported the development of the full-size GEF PROCARIBE+ project proposal "Protecting and Restoring the Ocean's Natural Capital, Building Resilience and Supporting Region-wide Investments for Sustainable Blue Socio-Economic Development" which is a follow-up to the UNDP GEF CLME+ project. PROCARIBE+ aims to develop sustainable and resilient ocean-based economies through marine spatial planning, marine conservation, sustainable fisheries and addressing land-based sources of pollution, while also considering issues such as gender and climate change. Subject to approval, implementation is expected to start in 2023.

The Cartagena Convention Secretariat signed an agreement with the Gulf and Caribbean Fisheries Institute (GCFI) to implement a small grants programme in support of some activities under the Multilateral Environmental Agreements in ACP Countries – Phase III (ACP MEAs 3) project. Out of the 26 proposals submitted, nine small grants were awarded to Belize, Columbia, Cuba, Honduras, Jamaica and St. Lucia for MPA management effectiveness, capacity assessments and marine litter.

The 75th Annual Meeting of the GCFI took place in Florida, USA, on 7-11 November 2022. The Cartagena Convention Secretariat organized a technical session on Marine Protected Areas (MPAs). The Secretariat aimed to enhance synergies with GCFI by sharing its work on MPAs, identifying future partnership opportunities, and supporting implementation of effective management strategies.

- **Coordinating Body on the Seas of East Asia (COBSEA)**

The resumed session of the 25th Intergovernmental Meeting (IGM) of COBSEA held in Hanoi, Viet Nam, in October 2022, guided efforts to collectively address marine litter, marine and coastal ecosystems, and nutrients management. IGM 25 established the East Asian Seas Regional Node[1] of the Global Partnership on Plastic Pollution and Marine Litter (GPML) as a knowledge management and networking hub and established the Regional Capacity Center for Clean Seas (RC3S) in Bali, Indonesia, as a regional capacity centre on marine pollution.

COBSEA participating countries recently adopted the COBSEA Marine and Coastal Ecosystems Framework. Anchored in Blue Economy, the MCE Framework will support COBSEA participating countries in achieving relevant targets in SDG 14 and the Kunming-Montreal Global Biodiversity Framework through several efforts including the development of marine and coastal spatial plans, the strengthening and expansion of marine protected areas and a potential regional MPA Network, and the conservation and restoration of marine and coastal habitats.

- **Helsinki Commission (HELCOM)**

HELCOM embarked on a broad scale project (2023-2028) to develop a comprehensive protection framework for the Baltic Sea to ensure that getting to 30 per cent protection is done in an optimized way. HELCOM is also participating in several EU-funded projects including:

- **The ReMAP project**[2] "Reviewing and Evaluating the Monitoring and Assessment of Maritime Spatial Planning", that aims to review, assess the performance of, and improve adopted marine spatial plans.
- **The eMSP NBSR project**[3] "Emerging ecosystem-based Maritime Spatial Planning topics in North and Baltic Seas Region" provides a platform that enables MSP planners from the Baltic Sea and North Sea to reflect on current MSP practices, learn from each other, and collectively identify problems and solutions. The project is built around a community of practice model, which will facilitate continuous learning in five strands – ocean governance, ecosystem-based approach, blue economy, monitoring and evaluation, as well as data-sharing.
- **Policy area "Spatial Planning" Support project** (PASPS, 2022-2024),[4] co-led by HELCOM and Vision and Strategies Around the Baltic Sea (VASAB), will strengthen coordination of strategic management of the Policy Area Spatial Planning (EU Strategy for the Baltic Sea) including land-based and maritime planning and implementation of the Regional Baltic Maritime Spatial Planning Roadmap 2021-2030.

The HELCOM Marine Spatial Planning Working Group has published the Voluntary guidance for the assessment of cross-border coherence in Maritime Spatial Planning (MSP).[5] Moreover, work to revise guidelines for the implementation of an ecosystem-based approach in MSP in the Baltic Sea

[1] https://cobsea.gpmarinelitter.org/
[2] https://helcom.fi/helcom-at-work/projects/remap-reviewing-and-evaluating-the-monitoring-and-assessment-of-maritime-spatial-planning/
[3] https://www.emspproject.eu/
[4] https://vasab.org/project/pasps-2/
[5] https://helcom.fi/wp-content/uploads/2022/02/Voluntary-guidance-for-assessment-of-cross-border-coherence-in-MSP-.pdf

area[6] began in spring 2023 under the eMSP NBSR project. This project aims to support the coherence of maritime policy and maritime spatial plans in North and Baltic Sea Regions; support continued development of MSP to identify and address present and future challenges; develop the capacity of responsible authorities to be better equipped to address these challenges; assist Baltic and North Sea countries to establish a structure for cross-border collaboration and learning; and provide practical solutions and recommendations in relation to the most urgent emerging topics identified by partners such as: ocean governance, ecosystem-based management, sustainable blue economy, monitoring and evaluation of MSP, and the future of data technology.

The HELCOM Secretariat is also a partner to Interreg project BalticSea2Land[7] - "Fostering integrated governance for the joint sustainable use of human and natural capital in the near shore zone". The project aims to create a public spatial data platform – Sea2Land Navigator – to assist in harmonizing land and marine planning and balance initiatives that impact coastal development. The Sea2Land Navigator will provide access to the best available knowledge and relevant spatial data sets essential for balancing the interests of local communities in line with a sustainable blue economy and preservation of coastal ecosystems. Baltic Sea2Land started in January 2023 and will be implemented until December 2023.

- **Mediterranean Action Plan/Barcelona Convention (UNEP/MAP)**

The Medprogramme has facilitated production of Coastal Plans in Montenegro and Morocco to ensure sustainable use of marine and coastal resources. In addition, a Lebanese ICZM Strategy has been prepared although it has not been launched due to the financial situation in the country.

As part of the Coastal Area Management Programme (CAMP), UNEP/MAP is supporting Contracting Parties to solve emerging coastal environmental challenges by applying ICZM as a major tool for achieving sustainable development. Three CAMP Projects implemented in the current biennium are: CAMP Bosnia and Herzegovina, Transboundary CAMP Otranto, and CAMP Israel. CAMP Bosnia-Herzegovina has published a report on adaptation to climate change, shared results of monitoring of some of the IMAP[8] indicators, and prepared a legal analysis of national legislation vis-a-vis the ICZM Protocol and a proposal for the establishment of an institutional mechanism for ICZM.

Plan Bleu is a partner of Interreg Mediterranean Blue Growth community.[9] The community has done the groundwork for unique cooperation opportunities aimed at fostering a new paradigm for sustainable Blue Growth.

Efforts to enhance capacity to implement the Barcelona Convention and its Protocols have contributed to training programmes such as MedOpen and Syrian Virtual University, as well as a knowledge management portal on coastal adaptation. Over the years the MedOpen[10] virtual training course has become one of the main instruments for enhancing the expertise needed for the implementation of

[6] https://helcom.fi/wp-content/uploads/2019/08/Guideline-for-the-implementation-of-ecosystem-based-approach-in-MSP-in-the-Baltic-Sea-area_June-2016.pdf
[7] https://interreg-baltic.eu/project/balticsea2land/
[8] https://www.unep.org/unepmap/what-we-do/projects/IMAP-MPA-Project "Towards achieving the Good Environmental Status of the Mediterranean Sea and coast through an ecologically representative and efficiently managed and monitored network of Marine Protected Areas (IMAP-MPA) 2019-2023"
[9] https://planbleu.org/en/projects/blue-growth-community/
[10] http://medopen.org/

ICZM. In the current biennium, the Priority Actions Programme/Regional Activity Centre (PAP/RAC - a key component of MAP), in partnership with the German Agency for International Development Cooperation (GIZ), have delivered several trainings on ICZM and MSP in Algerian coastal zones. For example, PAP/RAC delivered training to the Algerian inter-ministerial committee to support implementation of the Algerian ICZM Strategy and offered lecturers on ICZM at the National School of Marine Sciences and Coastal Planning (ENSSMAL) on 23-26 October 2022.

PAP/RAC provided a series of lectures on ICZM at the Syrian Virtual University in the third semester (September-October 2022). The lecturers targeted master's students specializing in Integrated Management of Natural Resources. The lectures covered important areas of ICZM in the Mediterranean such as the ICZM Protocol, MSP and land-sea interactions, IMAP, and climate change adaptation through an ICZM approach.

A Mediterranean MSP Workspace[11] was published in English and French in June 2022 with the aim of giving planners and policymakers quick access to rapid assessment tools purely focused on Mediterranean MSP. Rapid assessment and planning tools take users through the MSP seven-stage preparation process, setting milestones and giving practitioners specific actions to be adapted to their local context. By using a simple traffic light system, the tools, in the form of a checklist, allow users to measure their own progress and identify gaps and priorities. The planning tools can be used for assessing and strengthening governance, climate action, the ecosystem approach and land-sea interactions.

Following the launch of MSP Workspace, a two-month MSP seminar was organized within the GEF MedProgramme to support the establishment of a common basis for the implementation of MSP within the Barcelona Convention system by providing the opportunity to share practices and lessons learnt from the MSP application across the Mediterranean region. The MSP sessions were conducted online between November 2022 and February 2023.

DG MARE (European Commission) and IOC (Intergovernmental Oceanographic Commission)-UNESCO jointly organized the 3rd edition of the International Conference on Marine/Maritime Spatial Planning, in Barcelona, Spain, on 22-23 November 2022 to assess developments in MSP and discuss challenges and opportunities for its implementation. The conference was structured around six thematic panels, including transboundary cooperation, climate-smart MSP and marine protection and restoration**.** PAP/RAC shared its insights and experiences on transboundary cooperation and promoted its MSP tools during the panel exhibition.

- **Nairobi Convention Secretariat**

The Nairobi Convention Secretariat continues to work closely with its partners to develop two key frameworks relevant to ICZM: the Protocol on Integrated Coastal Zone Management (ICZM), and the Regional MSP Strategy. The MSP strategy should be ready to be adopted by the 11th Conference of the Parties to the Nairobi Convention in April 2024. Further, the Nairobi Convention has developed a Regional Ocean Governance Strategy for the Western Indian Ocean (WIO) for adoption by the end of 2023. The strategy aims to enhance cooperation in addressing regional emerging issues, including plastic pollution and climate change, as well as hazards and disasters.

[11] https://msp.iczmplatform.org/

The German Agency for International Development Cooperation (GIZ), in partnership with the Nairobi Convention, held an MSP capacity development workshop in November 2022 to promote shared learning on MSP implementation at national and regional levels for the sustainable management of the WIO's coastal and marine resources.

Implementation of the Blue Growth project, a partnership initiative between the Nairobi Convention and the Southwestern Indian Ocean Fisheries Commission (SWIOFC) of the Food and Agriculture Organization (FAO), is ongoing and will be completed by end of 2023. One of its aims is to establish a participatory, science-supported and evidence-based fisheries management system that takes account of the impact of environmental health on fisheries as well as the direct impact of fisheries on the marine and coastal environment.

- **Northwest Atlantic Action Plan (NOWPAP)**

NOWPAP participated in the 2022 annual meeting of the North Pacific Marine Science Organization (PICES-2022) between 2 September and 2 October 2022. The Conference reviewed regional progress in achieving the objectives of the United Nations Decade of Ocean Science for Sustainable Development, identified existing gaps, and established future priorities for the North Pacific region. The 2023 PICES Conference is scheduled for October in Seattle, USA, with a focus on connecting science and communities for sustainable seas.

- **Secretariat of the Pacific Regional Environment Programme (SPREP)**

Integrated approaches offer an opportunity to overcome development and environmental challenges in the Pacific including high population growth rates, increased urbanization, vulnerability to environmental threats, and overreliance on relatively few sectors on which to base economic growth. This is demonstrated by the **By-Catch and Integrated Ecosystem Management (BIEM) Initiative** led by SPREP under the Pacific-European Union Marine Partnership (PEUMP). The initiative is promoting sustainable utilization of coastal and marine biodiversity by improving marine spatial planning, increasing climate change resilience, and enhancing conservation and management. So far, it has informed the development of key documents such as the Fiji National Oceans Policy,[12] the Solomon Islands National Ocean Policy,[13] and the Pacific regional Turtle Action Plan 2022-2026.[14]

- **Go Blue Project: to advance the Blue Economy Agenda through Coastal Development in Kenya**

Paragraph 204. Calls upon States to implement the 2030 Agenda, including Goal 14 to conserve and sustainably use the oceans, seas and marine resources for sustainable development, and recalls that the Goals and targets are integrated and indivisible;

The Go Blue project is a partnership between the European Union (EU) and the Kenyan government set to advance the blue economy agenda in the coastal counties of Kenya. The project aims to support the development of a thriving sustainable blue economy across Kenya's coastal region by combining environmental, social and economic considerations and embedding nature at the heart of coastal planning and decision-making. The project's primary goal is to enhance integrated, ecosystem-based land-sea planning and management by addressing key socioeconomic and environmental challenges

[12] https://library.sprep.org/content/republic-fiji-national-ocean-policy-2020-2030
[13] http://macbio-pacific.info/wp-content/uploads/2019/02/SINOP_finalversion_26.11.18-digital-file.pdf
[14] https://library.sprep.org/content/pacific-islands-regional-marine-species-programme-2022-2026-marine-turtle-action-plan

through capacity-building and pilot activities in the six coastal counties. In doing so, the project contributes to ensuring sustainable coastal development, and healthy and resilient marine and coastal ecosystems and their natural capital, all of which directly supports the delivery of the Sustainable Development Goals and specifically SDG 14.

Paragraph 209. Encourages competent organizations and bodies that have not yet done so to incorporate an ecosystem approach into their mandates, as appropriate, in order to address impacts on marine ecosystems;

The Go Blue project is developing integrated, ecosystem-based land-sea planning guidelines as an approach to effectively consider marine and coastal ecosystem services in policymaking and integrated management, and reconcile sectoral conflicts. It provides an opportunity to promote the sustainable management of Kenya's coastal and marine resources. Through a highly participatory process, the guidelines will be customized and applied/piloted by the counties and national administrations for planning and management purposes to address impacts on marine ecosystems within and beyond areas of county/national jurisdiction.

Paragraph 210. Acknowledges the request by the United Nations Environment Assembly at its second session, in paragraph 6 of its resolution 2/10 of 27 May 2016, to the United Nations Environment Programme to step up its work, including through its Regional Seas Programme, on assisting countries and regions in the application of the ecosystem approach to managing the marine and coastal environment, including through enabling intersectoral cooperation in integrated coastal zone management and marine spatial planning;

Kenya is currently in the process of developing its national MSP framework in order to sustainably harness its ocean economy while protecting the coastal and marine environment against degradation. The Go Blue project seeks to provide technical support to the national MSP process. Through an expert group workshop, the project identified the land-sea interface as a potential gap in the MSP framework. While there are existing plans in Kenya to regulate the land-sea interface, the linkage between land and sea is often not taken into consideration from a planning perspective. This lack of recognition of the interdependence of land and offshore systems jeopardizes the country's blue economy as well as the sustainable management of the land-sea interface. The Go Blue project will support the integration of the national MSP framework and the land-sea planning guidelines.

Paragraph 230. Encourages States, in accordance with the commitment expressed in "The future we want" and based on collected scientific data, to take action by 2025 to achieve significant reductions in marine debris to prevent harm to the coastal and marine environment; & Paragraph 238. 238. Urges States to integrate the issue of marine debris into national and, as appropriate, regional strategies dealing with waste management, especially in the coastal zone, ports and maritime industries, including recycling, reuse, reduction and disposal, to consider developing an integrated waste management infrastructure and to encourage the development of appropriate economic incentives with the aim of reducing marine debris to address this issue, including the development of cost recovery systems that provide an incentive to use port reception facilities and discourage ships from discharging marine debris at sea, and support for measures to prevent, reduce and control pollution from any source, including land-based sources, such as community-based coastal and waterway clean-up and monitoring activities, and encourages States to cooperate regionally and subregionally to identify potential sources and coastal and oceanic locations where marine debris aggregates and to develop and implement joint prevention programmes for marine debris and to develop and implement environmentally sound options for recovery programmes, as well as to raise awareness of the issue of marine debris and the need to consider environmentally sound options for its removal;

The Go Blue project is supporting two counties in Kenya with solid waste management and wastewater treatment. The Project seeks to enhance Municipal Solid Waste Management, decrease leakage of plastic and other waste into the environment, including water bodies, and increased waste collection and recovery rates. The project supports Taita Taveta county to upgrade solid waste management recycling and aggregation facilities while supporting the involvement of women and young people in waste recycling and management. Additionally, the project – through another flagship pilot intervention – promotes the use of a constructed wetland as a low-cost technology for wastewater treatment. This intervention addresses the threat to ecosystem health and resilience of domestic wastewater discharges and provides an example of good wastewater practice for other coastal regions globally.

Paragraph 237. Encourages States to further develop partnerships with Indigenous Peoples, local communities, including coastal communities, industry and civil society to raise awareness of the extent of the impact of marine debris on the biological diversity, health and productivity of the marine environment and consequent economic loss and to cooperate with other States, Indigenous Peoples, local communities, including coastal communities, industry and civil society, as appropriate, on environmentally sound and cost-effective measures to prevent and reduce, as appropriate, marine debris and microplastics in the marine environment, including through strengthened cooperation under the Global Partnership on Marine Litter;

The Go Blue solid waste management and wastewater interventions all incorporate community members as key stakeholders/beneficiaries. Project interventions on solid waste and wastewater management are people-oriented to ensure sustainability beyond the project's lifetime. The project builds the capacity of local communities, through trainings, to facilitate maintenance and project management even after the Go Blue project ends in 2024. Furthermore, Indigenous Peoples and local communities are also engaged in the management of coastal and marine resources through locally managed marine areas. This strengthens the bottom-up management approach that will foster better governance and decision-making processes, thus benefiting the natural environment and local communities.

Paragraph 265. Calls upon all States to ensure that urban and coastal development projects and related land-reclamation activities are carried out in a responsible manner that protects the marine habitat and environment and mitigates the negative consequences of such activities;

The Kenyan coast has attracted diverse large-scale developments, e.g. port developments and expansion, commercial mineral extraction, agricultural expansion and urbanization, all of which are critical for the region's and Kenya's development, but they lack an integrated approach. Integrated, ecosystem-based land-sea planning, as proposed in the Go-Blue project, seeks to effectively consider marine and coastal ecosystem services in policymaking and integrated management. It seeks to reconcile sectoral conflicts, and promotes sustainable management of the country's coastal and marine resources. Furthermore, the Go Blue project – through pilots – promote the value of coastal public spaces to support sustainable, climate-resilient and inclusive blue economies.

Paragraph 282. 282. Calls upon States to strengthen, in a manner consistent with international law, in particular the Convention, the conservation and management of marine biodiversity and ecosystems, and national policies in relation to area-based management tools, including marine protected areas;

The Go Blue project aims to strengthen and enhance: the effectiveness of existing MPAs in Kenya (developing management plan for the Kisite-Mpunguti MPA); the establishment of new MPAs

(focusing on the Diani-Chale seascape); and co-management models for sustainable management, conservation and enhanced benefits and livelihoods for communities. The project aims to develop sustainable management structures and business plans for marine conservation areas and improve capacity through training on enforcement and management of MPAs.

Paragraph 284. Encourages States, in this regard, to further progress towards the establishment of marine protected areas, including representative networks, and calls upon States to further consider options to identify and protect ecologically or biologically significant areas, consistent with international law and on the basis of the best available scientific information;

The Go Blue project is supporting Kenya in the establishment and management of MPAs through the Kenya Wildlife Service (custodians of MPAs in Kenya) under the Wildlife Research Training Institute, a national entity mandated to provide capacity development through training to enhance wildlife conservation and management. The project is also supporting locally managed marine areas, which have the potential to substantially increase coastal areas under conservation management.

III. Minimizing the Impacts of Climate Change

Paragraph 219. Welcomes the Paris Agreement102 and its early entry into force on 4 November 2016, encourages all its parties to fully implement the Agreement and parties to the United Nations Framework Convention on Climate Change103 that have not yet done so to deposit their instruments of ratification, acceptance, approval or accession, as appropriate, as soon as possible, notes the entry into force of the Doha amendment104 to the Kyoto Protocol105 on 31 December 2020, and recognizes the importance of raising awareness of the adverse impact of climate change on the marine environment, marine biodiversity and sea level;

Paragraph 227. Encourages States, individually or in collaboration with relevant international organizations and bodies, to enhance their scientific activity to better understand the effects of climate change on the marine environment and marine biodiversity, support continued coordination of scientific work to study and minimize the impacts of ocean acidification and develop ways and means of adaptation, taking into account, as appropriate, the precautionary approach and ecosystem approaches;

- **Cartagena Convention Secretariat**

The climate crisis in the Caribbean has led to an increase in sea temperatures, causing a proliferation of sargassum, a warm-water seaweed that thrives in nutrient-rich and warm water. Tackling the sargassum crisis is a complex problem that requires a coordinated effort. On 27 April 2023, the Cartagena Convention Secretariat and Climate Tracker held an online meeting titled "**Blue Resilience: The Approaches to the Sargassum Crisis in the Caribbean**" that brought together a diverse range of experts to share knowledge, best practices, and innovative solutions for addressing the crisis. The aim was to promote innovative solutions, foster dialogue and collaboration, and inspire action towards the creaton of a more sustainable and climate-resilient Caribbean.

- **Mediterranean Action Plan/Barcelona Convention (UNEP/MAP)**

Within the framework of MedProgramme[15] (Mediterranean Sea Programme: Strengthening Environmental Security, 2020-2024), UNEP/MAP aims to reduce the main transboundary environmental stresses in Mediterranean coastal areas, while strengthening climate resilience and water security and improving the health and livelihoods of coastal populations. Currently, PAP/RAC and Plan Blue are working closely to implement the **MedProgramme Child Project 2.1 "Mediterranean Coastal Zones: Water Security, Climate Resilience and Habitat Protection"** and the **GEF/Special Climate Change Fund (SCCF) Project on adaptation to climate change**. The MedProgramme Child Project 2.1 has prepared coastal plans for two areas – Kotor Bay in Montenegro and Tanger-Tetouan-Al Hoceima Region in Morocco, while GEF/SCCF, led by Plan Bleu, is undertaking risk assessments to support climate change adaptation solutions and the development of national ICZM strategies.

The AdriAdapt project, implemented up to 2021, developed a knowledge platform[16] on coastal adaptation. The platform contains an overview of different adaptation options, case studies, guidance documents, legal frameworks and other useful material on climate change adaptation. Although the platform is tailored for Adriatic countries, more than 150 countries worldwide have visited the platform, demonstrating its relevance to common coastal challenges around the Mediterranean and beyond.

As a follow-up of the AdriAdapt project, a new EU Interreg Italy-Croatia project "**CREATE**" started in June 2022, in which PAP/RAC is a partner. In this one-year capitalization project, PAP/RAC has produced a communication strategy and organized monthly webinars (six so far) to promote the results and outputs of various climate change-related projects in the Mediterranean, including those from GEF MedPartnership, MedProgramme and SCCF projects. Participants from all Mediterranean countries have benefited from these webinars – the so called "Thursday CREATivE Talks" – which continued ~~will continue~~ until the closure of the project in June 2023.

The conference room of the **Mediterranean pavilion,**[17] the first-ever regional pavilion at United Nations Climate Change Conferences, was packed on Saturday 12 November 2022, when PAP/RAC held a side event entitled "From science to action". Participants embarked on a journey from scientific findings on the impacts of climate change on the sea and the coast (MedECC Report) to their application on the ground, namely through Coastal Plans based on the ICZM Protocol. The event highlighted the importance of an integrated and systemic approach to coastal planning, one that not ony prevents maladaptation, but also contributes to mitigation.

- **Northwest Atlantic Action Plan (NOWPAP)**

The Republic of Korea, in partnership with NOWPAP and Jeju National University, organized a three-day hybrid workshop titled "Key Indicator Species and Habitats for Marine Biodiversity Change in East Asia" on 28-30 November 2022. The workshop was sponsored by the Asia-Pacific Network for Global Change Research (APN) and focused on enhancing research on environmental threats and pressures. It also supported identification of key indicator species and ecosystems and science-based decision-making in the region and beyond.

[15] https://planbleu.org/projets/fem-medprogramme/
[16] Adriadapt Platform: http://www.adriadapt.eu
[17] https://ufmsecretariat.org/mediterraneanpavilion/

SPREP is participating in the ClimSA Programme "Intra-ACP Climate Services and related Applications Programme (ClimSA)", an initiative of the Organisation of African, Caribbean and Pacific States (OACPS) and the European Union. ClimSA's objectives are to provide members and regions of the OACPS with innovative and collaborative solutions to manage climate-related risk considerations in their sustainable development policy, planning and practice decisions, by strengthening science-based information, and by building the capacity of decision-makers at all levels.

- **Secretariat of the Pacific Regional Environment Programme (SPREP)**

SPREP is implementing the project "Pacific Ecosystem-based Adaptation to Climate Change" (PEBACC+) which is funded by the Kiwa Initiative and ends in January 2026. The project seeks to strengthen the resilience of ecosystems, economies and people in Fiji, New Caledonia, Solomon Islands, Vanuatu and the Territory of the Wallis and Futuna Islands to the impacts of climate change. The PEBACC+ project will develop, sustain and institutionalize the ecosystem-based approach to climate change adaptation in participating countries and territories.

- **Protection of the Arctic Environment (PAME)**

The Secretariat adopted Resolution 36/41Climate change in November 2022. It encourages Member States to commit to integrating climate change science across all Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) activities to better mitigate, prepare for and respond to impacts, including through adaptation measures that can ensure ecosystem resilience. Further, it calls on Member States to support climate change science, including ocean observation.

IV. Strengthening the Science-Policy Interface

Paragraph 324. Notes the discussions at the twentieth meeting of the Informal Consultative Process, from 10 to 14 June 2019, on the theme of ocean science and the United Nations Decade of Ocean Science for Sustainable Development, during which delegations, inter alia, stressed the importance of marine scientific research, international cooperation and coordination, as well as of a stronger science-policy interface in understanding and effectively addressing the unprecedented pressures on the ocean, provided input to assist in preparing for the Decade and considered that the Decade will be an important opportunity to address gaps in ocean science, increase knowledge, improve synergies and support the sustainable conservation and management of marine resources, and during which several delegations underlined the important complementary role of traditional knowledge held by Indigenous Peoples and local communities;

The first series of the Western Indian Ocean (WIO) Science-Policy Platform[18] "Transitioning to a Sustainable Blue Economy in the WIO region: Addressing the challenges and harnessing opportunities" was launched during the 12th Western Indian Ocean Marine Science Association (WIOMSA) Scientific Symposium in October 2022 in Nelson Mandela Bay, South Africa. The WIO Science-Policy Platform was initiated in 2019 to support Nairobi Convention Members States in integrating relevant scientific evidence in an effort to protect, manage and develop their marine and coastal environment sustainably. The document features discussion papers designed to provide a scientific basis for decision-making at nation and regional level. In the context of a sustainable blue economy, policy

18 https://www.nairobiconvention.org/clearinghouse/sites/default/files/WIO%20Science%20to%20Policy%20Platform%20Series_Complete%20Issue_1_Volume_1_2022.pdf

recommendations in the document underline the need for increased technical support for Member States, peer learning and cooperation on the development of the blue economy, and public-private partnerships for conservation and resource utilization.

V. Addressing Marine Pollution

Paragraph 37. Also recognizes the need to build the capacity of developing States to raise awareness of and support the implementation of improved waste management practices, noting the particular vulnerability of small island developing States to the impact of marine pollution of all kinds, in particular from land-based activities and marine debris and nutrient pollution

Paragraph 229. Recalls that, in "The future we want", States noted with concern that the health of oceans and marine biodiversity are negatively affected by marine pollution, including marine debris, especially plastic, persistent organic pollutants, heavy metals and nitrogen-based compounds, from a number of marine and land-based sources, including shipping and land run-off, and that States committed to take action to reduce the incidence and impacts of such pollution on marine ecosystems, including through the effective implementation of relevant conventions adopted in the framework of the International Maritime Organization, and the follow-up of relevant initiatives such as the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities,110 as well as the adoption of coordinated strategies to this end, and that they further committed to take action, by 2025, based on collected scientific data, to achieve significant reductions in marine debris to prevent harm to the coastal and marine environment;

Paragraph 261. Recognizes that most of the pollution load of the oceans emanates from land-based activities and affects the most productive areas of the marine environment, and calls upon States, as a matter of priority, to implement the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities;

- **Cartagena Convention Secretariat**

The Cartagena Convention Secretariat launched the Compendium of Sanitation Systems and Technologies[19] in November 2022 within the framework of the GEF-CReW+ project "An integrated approach to water and wastewater management in the Wider Caribbean Region using innovative solutions and sustainable financing mechanisms". The Compendium is a guidance document for engineers and planners in the Wider Caribbean Region and beyond and is primarily intended to be used for communicative planning processes involving local communities.

The Secretariat, in collaboration with the Institute of Marine Affairs (IMA), the Mexican Agency for International Cooperation for Development (AMEXCID), the Centre for Research and Advanced Studies of the National Polytechnic Institute (CINVESTAV), and the Regional Training and Technology Transfer Centre of the Basel Convention for the Caribbean (BCRC-Caribbean), delivered a virtual course titled "Microplastics in the Caribbean: Sources, Impacts and Monitoring Methodologies" from 31 October 2022 to 4 November 2022. The training aimed to increase awareness of the sources of plastic waste, environmental impacts and possible solutions to plastic pollution.

[19] https://gefcrew.org/resources/reports/11-compendium-of-sanitation-systems-and-technologies

UNEP Early Warning and Assessment Division (formerly Science Division) and the Cartagena Convention Secretariat co-financed the development of the Saint Lucia Marine Litter Action Plan, which was endorsed by the Cabinet of Ministers in March 2023.

The Secretariat, in partnership with Adelphi, is implementing the "Prevention of Marine Litter in the Caribbean" (PROMAR) project in the British Virgin Islands, Guyana, Saint Kitts and Nevis, Suriname and Trinidad and Tobago with financial support from the German government. PROMAR aims to reduce the flow of plastic waste (mainly packaging) from terrestrial sources into the Caribbean Sea and coastal areas.

"Reduce Marine Plastics and Plastic Pollution in Latin American and Caribbean Cities Through a Circular Economy Approach (GEF LAC Cities)": This project aims to reduce regional marine plastic pollution by facilitating circular actions at the city-level and accelerating the transition to a circular economy through improved waste management. It directly responds to national, regional and global marine litter and plastics-related action plans, resolutions and commitments such as the Regional Action Plan for Marine Litter (RAPMaLi) for the Wider Caribbean Region. The project is expected to start in the last quarter of 2023.

The 7th International Marine Debris Conference (7IMDC) was held on 18-23 September 2022 in Busan, Republic of Korea. The Cartagena Convention Secretariat and the Gulf and Caribbean Fisheries Institute, co-hosts of the Caribbean Node of the Global Partnership on Marine Litter (GPML-Caribe), chaired a technical session titled "Fostering Partnerships to Address Marine Litter in the Wider Caribbean Region". The session elevated the profile of plastics management, supported the development of national marine litter strategies, and mobilized resources for supporting countries in the Wider Caribbean Region in addressing plastics management and the circular economy.

- **Coordinating Body on the Seas of East Asia (COBSEA)**

In 2022 and 2023, COBSEA conducted national and regional trainings on marine litter monitoring methods and baseline surveys in Cambodia, Malaysia, Philippines, Thailand and Viet Nam to further harmonize monitoring and collect comparable data. The East Asian Seas Regional Node web platform[20] launched in November 2022 provides access to policies, resources, a map of good practices, capacity-building resources, and a unique database with over 700 peer-reviewed publications from the ASEAN+3 region. In March 2023, a regional workshop on ghost fishing gear, held by COBSEA and the Environmental Justice Foundation, emphasized the urgency of preventing, recovering and recycling abandoned, lost and discarded fishing gear (ALDFG). It highlighted the need for increased investment, a possible regional framework, and consideration of ALDFG in an international instrument on plastic pollution.

The Government of the Republic of Korea, COBSEA, NOWPAP, UNEP Regional Office for Asia and the Pacific and UN-Habitat co-organized a side event entitled "**Catalysing Local and National Action on Plastic Pollution to Achieve Regional Priorities and Global Goals in South-East and East Asia**" on 29 March 2023 at the 10th Asia-Pacific Forum on Sustainable Development held in Bangkok, Thailand. The session provided a platform for knowledge sharing and highlighted the need for regional partnerships to address marine plastic pollution. It stressed the importance of leveraging existing

[20] https://cobsea.gpmarinelitter.org/

regional mechanisms to enhance cooperation on marine litter to achieve both regional priorities and global goals.

- **Helsinki Commission (HELCOM)**

The HELCOM Secretariat recently revised the Regional Marine Litter Action Plan (RAP ML)[21] and developed an associated implementation plan. RAP ML is the main regional tool to achieve the marine litter ecological and management objectives of the Baltic Sea Action Plan. HELCOM has also published guidance documents to support monitoring of microlitter in the water column[22] and in seabed sediments.[23]

HELCOM representatives participated in the side event "Source-to-sea collaboration: A game changer for the whole water cycle" at the UN 2023 Water Conference and contributed to the discussion on "Preparing the foundations for source-to-sea governance".[24] Moreover, HELCOM pledged three commitments for the Water Action Agenda: 1) Baltic Sea Regional Nutrient Recycling Strategy[25] 2) Pollution Load Compilations – regional transboundary watershed cooperation[26] and 3) Regional strategic approach and an action plan for HELCOM work on hazardous substances in the Baltic Sea region.[27]

- **Mediterranean Action Plan/Barcelona Convention (UNEP/MAP)**

With funding from the European Commission, DG Environment, UNEP/MAP is executing the Marine Litter MED II Project in support of the implementation of the updated Regional Plan on Marine Litter Management in the Mediterranean adopted by COP 22 (Antalya, Türkiye, 7-10 December 2021). The project will also focus on enhancement of inter-basin cooperation, particularly by strengthening collaboration with the Commission on the Protection of the Black Sea Against Pollution (BSC), the General Fisheries Commission for the Mediterranean (GFCM) and other regional partners.

- **Nairobi Convention Secretariat**

The Nairobi Convention and WIOMSA prepared a synthesis report on marine litter in the WIO Region. The report shows the status of marine litter at national and regional levels and existing policy actions with their gaps and challenges.

A National marine litter management strategy and action plan for Comoros was prepared with the support of the ACP MEAs III Programme to reduce the influx of plastics entering the marine environment. The strategy and action plan will be validated in the third quarter of 2023. Further, the Secretariat will provide support for the development of a marine management strategy and litter action plan for Seychelles and a marine litter inventory for Tanzania in 2023.

[21] https://helcom.fi/wp-content/uploads/2021/10/HELCOM-Recommendation-42-43-3.pdf
[22] https://helcom.fi/wp-content/uploads/2022/11/HELCOM-Guidelines-on-monitoring-of-microlitter-in-the-water-column-in-the-Baltic-Sea.pdf
[23] https://helcom.fi/wp-content/uploads/2022/11/HELCOM-Guidelines-on-monitoring-of-microlitter-in-seabed-sediments-in-the-Baltic-Sea.pdf
[24] https://siwi.org/event/source-to-sea-collaboration-a-game-changer-for-the-whole-water-cycle/
[25] https://sdgs.un.org/partnerships/baltic-sea-regional-nutrient-recycling-strategy
[26] https://sdgs.un.org/partnerships/pollution-load-compilations-regional-transboundary-watershed-cooperation
[27] https://sdgs.un.org/partnerships/regional-strategic-approach-and-action-plan-helcom-work-hazardous-substances-baltic

- **Northwest Pacific Action Plan (NOWPAP)**

As part of the "**Microplastics abundance in river runoff and coastal waters of the Russian part of NOWPAP area ~~region~~**" project, NOWPAP aims to present recent information on the microplastics in river run-off within the NOWPAP region and estimate possible trends during the last decade. This goal is closely connected with the analysis of existing monitoring schemes and methods used in NOWPAP countries. Comparison of the monitoring schemes and methods, including the environmental standards and norms, is the second major goal of this project. The overview is based on the compilation of National Inputs prepared by the nominated experts from all NOWPAP countries, along with an analysis of the previous NOWPAP POMRAC (Pollution Monitoring Regional Activity Center) Regional overviews of the river and direct inputs (POMRAC country technical reports).

- **Secretariat of the Pacific Regional Environment Programme (SPREP)**

To promote a Cleaner Pacific, SPREP actively participated in the International Coastal Clean-up Day (ICCD) 2022, bringing together nearly 2,000 volunteers from six Pacific Island countries – Cook Islands, Fiji, Samoa, Solomon Islands, Vanuatu and the Territory of the Wallis and Futuna Islands. The volunteers collected 9.1 tons of waste along 35 beaches and coastal areas, including fabrics and textiles (23% in terms of weight), plastic (19%), metal (19%), glass and ceramic (9%) and other items (e-waste, rubber, paper, etc.). The clean-up was conducted within the framework of the Pacific Ocean Litter Project (POLP, 2019-2026) and the Sustainable Waste Actions in the Pacific Project (SWAP, 2020-2023).

The Pacific Ocean Litter Project (POLP, 2019-2026), funded by the Australian Government, aims to provide support to Pacific Island countries through an integrated approach addressing legislation, policy and planning, increasing consumer awareness and changing behaviour, working closely with industry groups and small businesses and by identifying and providing information about sustainable alternative products and practices.

- **Protection of the Arctic Environment (PAME)**

PAME through the **Management of Arctic Marine Oil and Gas Associated Noise** project is taking stock of practices for noise reduction or elimination related to offshore or nearshore oil and gas operations in the Arctic to consider if specific guidance related to noise from Arctic oil and gas operations is needed. Additionally, PAME is implementing the Arctic coastal clean-up project to enhance efforts to remove litter from Arctic beaches and waterways. The project will establish partnerships with local organizations, community leaders and regional experts to increase knowledge and awareness of the problem throughout the Arctic, contributing to reducing discharges of marine litter to the Arctic in the long term.

- **South Asia Co-operative Environment Programme (SACEP)**

SACEP and the World Bank are collaborating to formulate and implement a US$50 million regional project **Plastic Free Rivers and Seas for South Asia** to catalyse actions that reduce the flow of plastic pollution into the region. In the context of a circular economy, the project seeks to develop a "Sustainability Fund" to accelerate circular plastic economy solutions.

Paragraph 197. Encourages States and competent international organizations and bodies to support the effective implementation of the requirements of the International Code for Ships Operating in Polar Waters (Polar Code), adopted by the International Maritime Organization under the International Convention for the Safety of Life at Sea and the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended,91 including relevant requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended;

- **Protection of the Arctic Environment (PAME)**

The Arctic State Polar Code group is currently developing a paper containing Polar Code interpretations. The paper will establish a "common ground" for interpretation and give PAME an overview of any remaining challenges. The paper will be submitted to the International Maritime Organization (IMO) to inform future revision of the Code.

Paragraph 249. Further notes that the global limit of 0.50 per cent on sulphur in fuel oil under annex VI to the International Convention for the Prevention of Pollution from Ships entered into force on 1 January 2020, encourages States that have not yet done so to become parties to the Protocol of 1997 (annex VI – Regulations for the Prevention of Air Pollution from Ships) to the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended, and encourages the effective implementation of that Protocol;

- **Protection of the Arctic Environment (PAME)**

An ongoing joint project by PAME/EPPR (Emergency Prevention, Preparedness and Response Working Group) prepared a report “Low sulphur and ultra-low sulphur fuel oils used by ships in Arctic waters” showing the toxicity and behaviour of both very low sulphur fuel oils (VLSFOs) and ultra-low sulphur fuel oils (ULSFOs) in cold water. The information will support marine oil spill prevention, preparedness and response activities.

- **Mediterranean Action Plan/Barcelona Convention (UNEP/MAP)**

The 79th session of the IMO Marine Environment Protection Committee (MEPC 79) adopted on 15 December 2022 the Mediterranean Sea Emission Control Area for Sulphur Oxides and Particulate Matter (Med SOx ECA). With effect from 1 May 2025, Med SOx ECA further limits air pollution from ships, pursuant to Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL).

The Mediterranean Sea has thus become the fifth area worldwide to be designated as an Emission Control Area for Sulphur Oxides and Particulate Matter. Once Med SOx ECA comes into effect, ships operating in the Mediterranean Sea will be required to comply with a limit for sulphur content in fuel oil that is a fifth of the legal limit outside this area (0.10 per cent mass by mass (m/m), compared with 0.50 per cent m/m allowed outside Med SOx ECA). This translates into a 78.7 per cent drop in emissions of sulphur oxides and an annual reduction of 8.5 million tonnes of SOx released into the atmosphere. In addition, emissions of Particulate Matter (PM 2.5) would be slashed by 23.7 per cent.

Paragraph 263. Expresses its concern regarding the spreading of hypoxic dead zones and harmful algal blooms in oceans as a result of eutrophication fuelled by riverine run-off of fertilizers, sewage outfall and reactive nitrogen resulting from the burning of fossil fuels and resulting in serious consequences for ecosystem functioning, and calls upon States to enhance their efforts to reduce eutrophication, particularly by reducing total

nutrient pollution from land-based sources and, to this effect, to continue to cooperate within the framework of relevant international organizations, in particular the Global Programme of Action and the Global Partnership on Nutrient Management and Global Wastewater Initiative, including through capacity-building initiatives and efforts to monitor, via the Global Ocean Observing System, stressors such as harmful algal blooms, areas of hypoxia, sargassum seaweed invasions and jellyfish blooms, to assess their possible linkage to eutrophication and their potential adverse impacts on the marine environment as well as on human health;

Nutrient enrichment is a growing environmental issue of concern for aquatic systems. While nutrients can initially be beneficial to ecosystems, continuous accumulation can result in eutrophication with a series of undesirable ecological effects. In coastal marine estuaries and bays, eutrophication has been linked to harmful algal blooms – often called "red tides"– that cause widespread fatalities in fish and other marine organisms. Therefore, monitoring and/or assessment of eutrophication is important in providing information for coastal managers to make the required management interventions.

- **Updates on sustainable wastewater management**

In 2021, UNEP and Sustainable India Trust implemented a **project on the nutrient recovery from wastewater in Delhi, India.**[28] This was achieved by assessing nutrients lost through wastewater in Delhi/New Delhi and their recovery potential; and by mapping the current nutrient recovery, recycling, and reuse practices in Delhi/New Delhi against available options, technologies and best practices. There were two major outcomes of this project: one was the development of an ecosystem health card based on water quality parameters to monitor the revival of selected water bodies by regulating nutrient loading from wastewater. The second outcome was a stakeholder engagement workshop to discuss the findings from the study with relevant stakeholders, universities and members of the government. The project was concluded in January 2023, but due to its success, discussions are ongoing to implement a follow-up phase, also expanding the scope of the work to microplastics and with the idea of fully integrating the source-to-sea approach to address pollution in the Yamuna River.

The Massive Open Online Course (MOOC) "From Source to Sea to Sustainability", developed by UNEP and Concordia University, has now been transferred to Moodle and is up and running in 2023.

NOWPAP and COBSEA participated in the development of **Global Eutrophication Watch**, a Google Earth Engine-based interactive assessment tool of coastal eutrophication potential. Global Eutrophication Watch can identify known areas of eutrophication in addition to areas that potentially suffer from the effects of eutrophication. The tool is very adaptable and has promising potential in monitoring SDGs using Earth Observations. On 2 February 2023, the developing team held its final meeting to review the tool and discuss further dissemination in regional and global fora – for example, the annual meeting of the Regional Seas Programme scheduled for autumn 2023 in Barbados.

In the Baltic Sea, excess supply of nutrients (nitrogen and phosphorus) remains a major source of environmental pressure on ecosystems. To address this challenge, HELCOM is implementing the Pollution Load Compilation project (2020-2024), intended to supply the most up-to-date information on land-based inputs of nutrients and selected hazardous substances to the marine environment, their

[28] UNEP story on this project: https://www.unep.org/news-and-stories/story/how-reduce-pollution-delhis-waterways-study.

sources and pathways. The assessment of nutrient input ceilings (NIC) was conducted in 2022,[29] while assessment of the sources of nutrient inputs and results will be published by the end of 2023.

The 2023 OSPAR (acronym derived from the **Os**lo and **Par**is Conventions of 1972 and 1974) Assessment Report indicates a substantial reduction in nitrogen and phosphorus inputs to the OSPAR Maritime Area.[30] Reductions in total nitrogen inputs are largely due to reductions in atmospheric emissions. The reduction rate in the total input is more than twice the reduction rate of the waterborne inputs alone for the whole assessment period.

VI. Marine biodiversity

At the **SOI (Sustainable Ocean Initiative) Global Dialogue with Regional Seas Organizations and Regional Fisheries Bodies** (October 2022), Regional Seas representatives from COBSEA, MAP Barcelona, HELCOM, OSPAR, SACEP, SPREP, NOWPAP and the Lima, Abidjan, Cartagena and Nairobi Conventions reported on progress on efforts to build capacities for the management of coasts and oceans in their respective regions, highlighting the actions taken to preserve marine biodiversity and address marine pollution.

UNEP Regional Seas Programme participated in the 15th meeting of the Conference of Parties to the Convention on Biological Diversity held in December 2022 in Montreal, Canada. COP 15 adopted the "Kunming-Montreal Global Biodiversity Framework" (GBF), including four goals and 23 targets for achievement by 2030. The Regional Seas Programme will continue to support and strengthen its collaboration with the Convention on Biological Diversity (CBD), particularly in the conservation and sustainable use of marine and coastal biodiversity and supporting the implementation of the Kunming-Montreal global biodiversity framework with respect to marine and coastal biodiversity. It will also contribute to monitoring, assessment and reporting on the implementation of the framework.

The ACP MEA III Programme in November 2022 launched a Toolkit on Pro-Environmental Youth Engagement[31], developed by youth for youth, which provides hands-on guidance on how to engage in pro-environmental change.

- **Cartagena Convention Secretariat**

The Nature Conservancy, in collaboration with the Caribbean Hotel & Tourism Association and UNEP, developed a Guide to Coral Reef Restoration for the Tourism Sector[32] to support reef restoration and identify pilot projects and capacity-building opportunities across the region.

The 2021-2030 Regional Strategy for the Caribbean Environment Programme (CEP) has been updated and is expected to be approved by the 17th meeting of Contracting Parties in October 2023. The

[29] https://helcom.fi/wp-content/uploads/2022/09/Evaluation-of-the-2017-progress-towards-updated-Nutrient-Input-Ceilings-NIC.pdf
[30] https://oap.ospar.org/en/ospar-assessments/quality-status-reports/qsr-2023/indicator-assessments/inputs-nutrients/
[31] https://www.acpmeas.com/resources/pro-environmental-youth-engagement-toolkit
[32]https://www.nature.org/content/dam/tnc/nature/en/documents/Coral_Restoration_Guide_for_the_Tourism_Sector.pdf

strategy will strengthen the operational capacity of the Cartagena Convention network to fulfil its mandate as a Regional Seas Programme.

- **Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)**

The CCAMLR Secretariat is implementing a range of measures to support the conservation and management of Antarctic marine living resources. At the 41st Meeting of the Commission held in Hobart, Australia, on 24 October - 4 November 2022, Contracting Parties adopted Conservation Measure 26-01 (2022) "General environmental protection to be taken by fishing vessels",[33] which prohibited fishing vessels from discharging plastics, among other waste, into the sea. Contracting Parties also adopted conservation measures to enhance protection of toothfish, icefish and krill in the Convention Area.[34]

CCAMLR has developed an electronic catch documentation scheme (e-CDS) to track the toothfish trade and combat illegal, unreported and unregulated (IUU) fishing in the Convention Area. To ensure efficient use of the system, CCAMLR will provide a series of user training sessions in the near future.

- **Helsinki Commission (HELCOM)**

Good progress has been made on the establishment marine protected areas (MPAs) in the Baltic Sea. The Baltic network of marine protected areas (MPAs) currently covers 16.5 per cent of the Baltic Sea, and significant increase in spatial coverage is expected in the future.[35] Despite the success, much work needs to be done to address the deteriorating trend in marine mammals and seabirds.

HELCOM Secretariat and UNEP MAP-PAP/RAC are participating in the EU-funded MSP4BIO[36] project "Improved science-based maritime spatial planning to safeguard and restore biodiversity in a coherent European MPA network (2022-2025)". The main objective of MSP4BIO is to develop an integrated and modular Ecological-Socio-Economic (ESE) management framework for the protection and restoration of marine ecosystems, within its more general objectives of promoting sustainable blue growth and integrating maritime policies. The applicability of the ESE will be validated through six pilot sites in the Atlantic ocean and the North, Baltic, Mediterranean and Black Seas. The project mainstreams biodiversity, supporting implementation of EU Biodiversity Strategy 2030, the Kunming-Montreal Post-2020 Global Biodiversity Framework and the EU Green Deal.

- **Nairobi Convention Secretariat**

The Nairobi Convention revised its Protocol Concerning Protected Areas and Wild Flora and Fauna in the Eastern African Region[37] with the support of the ACP MEA III programme. The first amendment

[33] https://cm.ccamlr.org/en/measure-26-01-2022

[34] https://cm.ccamlr.org/?season=2022-12-01%3A2023-1130&search_terms=&restrict_to_new=1&type=mes&search_terms=&cmc_category=All&search_terms=&op=Apply&form_build_id=formNlxpdEnUi0wGhVuYUquJJvD6YW3tIRoAQ4kZJEg4bFU&form_id=conservations_and_resolutions_filter. Additionally, by-catch limits were set to protect skates and rays https://cm.ccamlr.org/en/measure-33-03-2022

[35] https://helcom.fi/wp-content/uploads/2023/03/HELCOM-Thematic-assessment-of-biodiversity-2016-2021-pre-publication-1.pdf

[36]https://msp4bio.eu/

[37]https://www.nairobiconvention.org/clearinghouse/sites/default/files/Draft%20Revised%20Protocol%20Concerning%20Protected%20Areas%20and%20Wild%20Fauna%20and%20Flora%20%28Biological%20Diversity%29%20in%20the%20Eastern%20Africa%20%28Western%20Indian%20Ocean%29%20Region.pdf

meeting of this Protocol took place in the last quarter of 2022, with a second amendment meeting scheduled for the second quarter of 2023.

The ACP MEAs III programme, in collaboration with partners (The Western Indian Ocean Marine Science Association - WIOMSA and the Swedish Agency for Marine and Water Management - SwAM), and Nairobi Convention projects (Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities - WIOSAP and the Strategic Action Programme Policy Harmonisation and Institutional Reforms - SAPPHIRE) are organizing a series of seminars for design, implementation and adaptive management of regional networks of MPAs in 2023.

The 12th WIOMSA Scientific Symposium was held from 10-15 October 2022 in Nelson Mandela Bay, South Africa under the theme "A New Decade of Western Indian Ocean Science". The event was organized by WIOMSA, the Sustainable Seas Trust and the Nairobi Convention, with the aim of mobilizing the marine and coastal community behind the ideas of sustainable development and focusing research and technological development in ocean science on existentially important issues of protection and sustainable use of the ocean.

- **OSPAR Commission**

The condition of hydrothermal vents in the OSPAR Maritime Area is stable or improving.[38] Nevertheless, the status of seamounts is declining due to their continued vulnerability to fishing impacts. While fishing pressure has reduced in some parts of the OSPAR Maritime Area because of new legislation, there remain large numbers of seamounts outside areas protected by some form of legislation.

- **Permanent Commission of the South Pacific (CPPS)**

In November 2023, CPPS launched a Regional Action Plan to combat IUU fishing.[39] The Action Plan aims to enhance monitoring, control and surveillance, and improve control measure at ports in the Southeast Pacific.

- **Protection of the Arctic Environment (PAME)**

PAME is updating the Arctic Marine Protected Areas Toolbox to support efforts to establish MPA networks and chart a course for future collaborative planning, management and actions for the conservation and protection of the Arctic marine environment. Further, PAME is promoting **integration of Indigenous and local knowledge in marine planning and management**,[40] by demonstrating how indigenous people are addressing area-based conservation and making the information accessible to the planner in the regional MPA Network Toolkit.

VII. Preparedness measures for natural disasters

[38]The 2023 OSPAR Quality Status Report: https://oap.ospar.org/en/ospar-assessments/committee-assessments/biodiversity-committee/status-assesments/oceanic-ridges-hydrothermal-vents/#geographical-range-and-distribution

[39]http://cpps.dyndns.info/cpps-docs-web/dircient/pesca-indnr/documentos/PAR-PescaINDNR.pdf

[40] https://pame.is/projects-new/marine-protected-areas/current-mpa-projects/404-different-ways-of-knowing-applying-indigenous-local-and-scientific-knowledge-to-arctic-conservation-planning

321. Stresses the need for continued efforts in developing mitigation and preparedness measures for natural disasters, particularly following such tsunami events as that on 11 March 2011 in Japan, those on 28 September and 22 December 2018 in Indonesia, and that on 15 January 2022 following the Hunga Tonga-Hunga Ha'apai volcanic eruption in Tonga;

The Permanent Commission of the South Pacific (CPPS) continues to cooperate with the Intergovernmental Oceanographic Commission (IOC) on disaster risk reduction. The organizations have established a platform for strengthening capacities in the detection, evaluation, monitoring and dissemination of tsunami events, based on lessons learned and the latest developments worldwide. This will generate opportunities to improve Tsunami Warning Centers (CATs) of Member States. The platform provides educational material for disasters such as tsunamis and floods. Additionally, CPPS issues a monthly "Boletín de Alerta Climático"[41] (Climate Alert Bulletin) on the oceanic and atmospheric conditions related to El Niño as part of the GRASP ("Global Ocean Observing System Regional Alliance for the Southeast Pacific") programme.

[41] http://cpps.dyndns.info/cpps-docs-web/Fenomenoni%C3%B1o/BAC390.pdf