# Theme a. Fostering sustainable fisheries management including supporting small-scale fishers

#### Introduction

This discussion should highlight the value of science and innovation in supporting sustainable fisheries management, including in combatting IUU fishing, supporting fisheries stock assessments, and considering best practices in addressing data-limited and unassessed fish stocks. These approaches include building capacity to assess and manage data-limited and unassessed fish stocks and promote collaborative processes for decision-making and management. These approaches are effective in increasing the sustainable harvest of fish stocks. In addition, the dialogue should explore advancing the equitable use of ocean resources by empowering and protecting the access rights of small-scale and artisanal resource users. This should include the role of small-scale fishers, in particular women, Indigenous Peoples and local communities, and minorities, in achieving sustainable fisheries. Finally, the dialogue should also focus on advancing climate-informed fisheries management and fishing community adaptation to rapidly changing oceans.

#### Status and trends

As the global population and demand for seafood continues to grow, there are more – and bigger – fishing vessels working to feed a growing market. As a result, there is increased pressure on many fish stocks around the world, both on the high seas and in areas under national jurisdiction, which is further exacerbated by the impacts of the climate crisis. Globally, the number of overfished stocks has increased over the last 45 years, according to the FAO's State of the World's Fisheries and Aquaculture. At the same time, new tools and emerging technologies are helping managers improve the effectiveness of fisheries management regimes, including in multi-species and data-limited contexts.

Small-scale fisheries and aquaculture produce two-thirds of the blue foods we eat and provide 90% of capture fishing jobs and associated livelihoods – or 62 million jobs and 500 million livelihoods, especially in coastal, riparian, and Indigenous communities. Women make up 40 percent of the actors throughout the small-scale fisheries and aquaculture value chain.

# **Challenges and opportunities**

# Combating IUU Fishing

Key to supporting sustainable fisheries is preventing, deterring, and eliminating illegal, unreported, and unregulated (IUU) fishing. IUU fishing undermines sustainable fisheries and the law-abiding fishers and communities that depend on them, in addition to threatening economic growth, food security, and ocean ecosystems around the world. IUU fishing can take many forms, from vessels straying into a neighboring country's waters to large-scale, coordinated efforts by transnational crime syndicates. It can be interconnected with a web of other challenges, like forced labor, trade in illicit goods, and undermining the rule of law.

New and innovative tools for monitoring, control and surveillance (MCS) can support efforts to combat IUU fishing, including the development of electronic monitoring, catch documentation schemes, and maritime domain awareness. Additionally, information-sharing initiatives such as the UN FAO Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels --the first global, publicly accessible database of fishing vessels--can also support implementation of other instruments to combat IUU fishing and allow greater transparency. Supporting and implementing key instruments worldwide – especially the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported

and Unregulated Fishing (PSMA) and various FAO Guidelines – is critical for ensuring full MCS of fisheries, so that fisheries can be effectively-managed and communities can continue to benefit from their resources.

# Data-limited fisheries

Developing effective fisheries management strategies for data-limited fisheries is crucial to prevent overfishing and maintain biodiversity, as these ecosystems often lack the robust data needed for precise stock assessments. Tools and methods for assessing and managing data-limited fisheries exist, yet their uptake and implementation is often limited by a lack of capacity, limited knowledge of the many available options, and challenges in application to the unique setting of each fishery.

Decision-support tools and targeted training are needed to empower stakeholders of data-limited fisheries to implement science-based approaches to fisheries management, thereby promoting sustainable practices and harvest strategies that protect marine resources and support long-term livelihoods for small-scale fisheries and coastal communities. FishPath is one such decision-support tool developed in partnership between NOAA, The Nature Conservancy (TNC), and the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO). FishPath operates across thirteen countries connecting trained quantitative fishery scientists and engagement leaders to engage and train local practitioners in the development, implementation, and adaptation of sustainable harvest strategies.

#### Climate Change

Climate-driven change in ocean ecosystems is one of the major challenges facing sustainable fisheries management and fishing-dependent communities and economies worldwide. The large-scale, climate-driven redistribution of fish stocks poleward and/or deeper with changing ocean conditions is expected to have global implications, including negative impacts on fisheries-based economies and food sources in tropical areas, and increased need for cross-jurisdictional collaboration to ensure sustainable fisheries management as fish stocks move across international boundaries. Domestically, NOAA is implementing the Climate and Ecosystem Fisheries Initiative (CEFI) to provide resource managers, fishing communities, and other decision makers with robust information on what's changing, what's coming, what's at risk and best strategies to reduce impacts and increase resilience to rapidly changing conditions. On the international level, the NOAA-sponsored Ocean Decade Program SUPREME (Sustainability, Predictability and Resilience of Marine Ecosystems) is building a global network to share knowledge and capacity to support sustainable, climate-ready fisheries.

# Small-Scale and Artisanal Fisheries

The United States is committed to supporting sustainable fisheries and aquaculture and recognizes the role small-scale fisheries in particular can play in food and nutrition security, gender equity, cultural tradition, and as social safety nets.

This dialogue should encourage efforts to support fishing communities in the context of fisheries management and, more broadly in ocean resource management. Key opportunity areas include increasing government accountability for co-management through support for fisher organizations, civil society, and academia; empowering fisherfolk in co-management, particularly women, Indigenous Peoples and communities, and minorities; and increasing transparency in licensing, management, and enforcement.

- What steps can we take to increase cooperative approaches to fisheries management, whether within or between countries, including science programs and information-sharing initiatives?
- How can we more effectively minimize food loss and waste and discards in the seafood supply chain?
- How can we support resource-limited countries with data-limited fisheries to adequately manage fisheries resources sustainably through monitoring, regulation and enforcement?
- How can we better prioritize addressing the specific challenges facing small-scale artisanal fishers, fish farmers, and fish workers in our fisheries management efforts and, more broadly, in ocean resource management?
- How can we drive innovation in MCS technologies and fisheries management approaches that reflect the realities of small-scale and artisanal fisheries?
- How can we leverage the Ocean Decade to build capacity and support sustainable fisheries?
- How can we further empower and engage women, Indigenous Peoples and local communities, and minorities in fisheries management and sustainable supply chains?
- How can we advance operational delivery of the information needed for climate-informed fisheries management including forecasts of future ocean and ecosystem conditions, assessment of risks and identification of best fishery management strategies for changing oceans?
- How can we better prepare for and respond to shifts in fish stocks across jurisdictional boundaries where the distributions are already shifting or expected to shift in the next few years?
- How can we build on existing and new approaches to help fishing dependent communities and economies better prepare for and respond to changing fisheries?

# Theme b. Conserving, sustainably managing and restoring marine and coastal ecosystems including deep-sea ecosystems

#### Introduction

Since the second UN Ocean Conference in 2022, global momentum on area-based conservation and management has only increased through initiatives such as the High Ambition Coalition (HAC) for Nature and People and the Ocean Conservation Pledge (OCP). For 2025, key topics for discussion under *Theme b. Conserving, sustainably managing and restoring marine and coastal ecosystems including deep-sea ecosystems* could include:

- The road to conserving 30 percent of ocean areas by 2030 (30x30), including under the BBNJ Agreement and the Kunming-Montreal Global Biodiversity Framework, as appropriate;
- Opportunities for spatial planning, co-management and co-stewardship of area-based management tools, including MPAs and other effective conservation measures (OECMs); and
- Priority areas for enhanced scientific information to inform the conservation and sustainable management of deep-sea ecosystems.

The panel should consider how to turn the political ambition of the last few years into concrete action. It should encourage the development, strengthening, and expansion of MPA and OECM networks to advance ocean science and management of shared or connected marine ecosystems, as well as scientific partnerships to advance research and management of less understood deep-sea ecosystems. It could offer case studies on effective financing for area-based management; the role of science, data, and technology in MPA and OECM implementation; and/or coastal restoration for climate change adaptation and resilience. Finally, this panel should emphasize the role of sustainably managed marine and coastal ecosystems in providing important socio-economic benefits for coastal communities and beyond, highlighting its interconnectedness with the nine other Ocean Action panel themes.

#### Status and trends

The United States launched its *America the Beautiful* initiative in 2021, setting a voluntary domestic 30x30 goal for U.S. lands and waters, a goal the United States also endorsed at the global scale through the HAC and the OCP. The White House launched *Conservation.gov* in April 2024 to serve as a public information hub for U.S. national efforts, and the website includes the *American Conservation and Stewardship Atlas* for tracking progress. As of 2024, approximately one-third of U.S. marine areas are conserved, with 26 percent of marine areas in designated MPAs. The U.S. National Strategy for a Sustainable Ocean Economy, released in June 2024, includes a goal to conserve, protect, restore, and maintain healthy ecosystems, including by promoting additional international action and global ambition.

#### **Challenges and opportunities**

Enhanced conservation, sustainable management, and restoration will require continually improving our understanding of marine ecosystems, increasing community support for area-based management tools, thoughtful planning for the co-location of ocean uses across seascapes, and expanding finance options, among addressing other challenges.

¹ https://www.whitehouse.gov/ostp/news-updates/2024/06/03/national-strategy-for-a-sustainable-ocean-economy/

Documentation and monitoring of biodiversity in oceanic waters and the deep seabed lag behind that of coastal ecosystems. Prioritizing areas for enhanced scientific research in these areas could feed directly into processes such as the development and refinement of Regional Environmental Management Plans (REMPs) under the International Seabed Authority (ISA). The REMPs are an essential area-based management tool for ensuring effective protection of the marine environment in the Area and include designated areas of particular environmental interest (APEIs) that are protected from exploration and exploitation activities. For example, the 13 APEIs in the REMP for the Clarion-Clipperton Zone (CCZ) cover about half of the entire CCZ area, or 1.97 million square kilometers. Having established a REMP in the CCZ, the ISA is now developing REMPs in the Northern Mid-Atlantic Ridge, Northwest Pacific Ocean, and Indian Ocean.

Closer to shore, co-stewardship and co-management agreements with Indigenous communities advance conservation efforts by incorporating Indigenous knowledge into decision making and ensuring those closest to the ecosystems support management actions. The United States designated in 2024 the first Indigenous-focused marine sanctuary, the Chumash Heritage National Marine Sanctuary, following nearly a decade of work by Tribes, Indigenous Peoples, community leaders, organizations, businesses, state and local officials, and members of Congress, and committed to work meaningfully with Indigenous Peoples to help guide sanctuary management. The sanctuary's boundaries take into account the need to connect offshore wind to the electrical power grid, ensuring the sanctuary meets both conservation and clean energy goals. With more than 15 gigawatts of offshore wind energy projects approved nationwide, the United States has been working to identify areas<sup>2</sup> for deployment using comprehensive spatial planning<sup>3</sup> to avoid conflicts and minimize environmental impacts<sup>4</sup>.

Underpinning all of these solutions is financing. The United States, Indonesia, and four NGOs signed a \$35 million debt-for-nature swap in July 2024 to conserve coral reefs in eastern Indonesia, home to some of the most biologically diverse coral reef ecosystems. Governments, international financial institutions, private banks, industry, philanthropies, and NGOs must all continue the momentum to scale up blue finance to achieve Sustainable Development Goal 14 and 30x30 for the global ocean.

- What policy strategies should the international community prioritize in order to meet the global 30x30 goal in the face of changing climate?
- How can we engage internationally and support science to be more cross-sectoral to better inform management decisions? For example, how can we improve engagement and cooperation across climate scientists and fisheries managers and scientists, both domestically and internationally?
- Can some scientific lines of effort under the UN Decade focus on areas of active seabed mineral resource interest in the Area, such as the Clarion-Clipperton Zone and areas where the ISA is developing REMPs, to better inform policy decisions?
- How do we effectively manage and enforce marine conservation measures to conserve biodiversity and ecosystem health? What role does technology play in effective management and enforcement?
- How do we ensure that the location and management of MPAs and OECMs consider community support?

<sup>&</sup>lt;sup>2</sup> https://www.boem.gov/renewable-energy/offshore-renewable-activities

 $<sup>^{3}\</sup> https://www.boem.gov/renewable-energy/state-activities/where-can-offshore-wind-turbines-go$ 

<sup>4</sup> https://coastalscience.noaa.gov/science-areas/offshore-wind-energy/spatial-planning/

# Theme c. Promoting and supporting all forms of cooperation, especially at the regional and subregional level

#### Introduction

The United States welcomes a new theme on advancing cooperation and actively engages in regional dialogues on conservation and sustainable use in all ocean basins. Key topics for discussion under *Theme c. Promoting and supporting all forms of cooperation, especially at the regional and sub-regional level* could include:

- Reflecting on decades of regional fisheries management;
- Coordinating on regional observing and improving modeling capacities, including in support of marine ecosystems and biodiversity;
- Raising awareness and increasing understanding of existing mechanisms for regional governance in the Arctic and Antarctic and how they differ; and
- Highlighting the benefits of dialogue and relationship-building at the regional and sub-regional levels, including how such dialogues feed into global discussions on ocean governance.

# **Challenges and opportunities**

U.S. participation in regional fisheries management organizations around the world helps drive science-based conservation and management measures to regulate the global fishing industry, promoting both core conservation values and economic growth and fair competition for U.S. fishers, processors, and distributors. Such measures also contribute to U.S. efforts to build resilient ecosystems, mitigate the impacts of climate change, and support global food security. Through the RFMOs, the United States consistently pushes for international standards comparable to the national standards applied to U.S. fishers, and for reporting and monitoring requirements to ensure transparency and compliance with agreed rules by all Parties.

## Atlantic and Caribbean

Launched in 2023, the Partnership for Atlantic Cooperation is a multilateral forum that specifically recognizes the Atlantic Ocean as a convening space of like-minded nations coming together to address the interconnected goals of advancing a peaceful, stable, prosperous, open, safe, and cooperative Atlantic region and conserving the Atlantic Ocean as a healthy, sustainable, and resilient resource for generations to come. The Atlantic Partnership now has 42 coastal Atlantic states from Africa, the Americas, Europe, and the Caribbean, representing more than 75 percent of the Atlantic coastline. It is designed to complement existing efforts, such as the All-Atlantic Ocean Research and Innovation Initiative (AAORIA), which is in the process of identifying additional Atlantic basin country experts to contribute to its efforts to advance marine research and innovation and prioritize "science for society."

The United States also participates as an active member to the Cartagena Convention, a regional agreement that protects the marine environment of the Gulf of Mexico, the Caribbean Sea, and parts of the Atlantic Ocean. A UN-hosted secretariat and four Regional Activity Centers support the work of the Convention's three Protocols: the Oil Spill Protocol, the Land-Based Sources of Marine Pollution Protocol, and the Protocol for Specially Protected Areas and Wildlife (SPAW).

## **Pacific**

In the Pacific, the United States participates in several regional groupings with an ocean nexus. The United States interfaces as a Dialogue Partner with the Pacific Islands Forum (PIF), the region's leading foreign policy body. The PIF and its Secretariat facilitate dialogues on topics of regional importance, including climate change and the environment, fisheries, governance.

The United States is also a founding member of the Partners in the Blue Pacific (PBP) initiative, an informal coordination mechanism launched in June 2022 to bring new energy and resources to deliver practical, tangible results in support of Pacific priorities. The PBP works on Pacific-identified priorities, including by co-funding a Pacific-owned ocean and fisheries research vessel. Once fully funded, this vessel, to be owned and operated by the Pacific Community (SPC), will provide critical research for supporting sustainable management of marine ecosystems, including the region's tuna fisheries.

As an SPC member, the United States has provided a grant for a marine spatial planning project through the SPC to support the Republic of Palau's efforts to sustainably develop its ocean area under its national jurisdiction. In the Pacific Regional Environment Program (SPREP), the United States is a member of the SPREP Troika from 2024 through 2026. The Troika advises on SPREP activities and issues.

#### Arctic

Founded in 1996 by the eight Arctic States, the Arctic Council is the leading intergovernmental forum for Arctic issues, with a particular focus on environmental protection and sustainable development. The Arctic ocean includes areas within and beyond national jurisdiction, and is governed by a number of multilateral instruments. The Arctic Council's inclusion of Arctic Indigenous Peoples as Permanent Participants – with full consultation rights at all levels of the Council's work – makes the Council uniquely positioned to address the region's most pressing environmental challenges at regional and sub-regional levels. Much of the Council's work focuses on the marine environment, including working groups that focus on issues such as marine protected areas, biodiversity conservation, emergency preparedness and response, the Sustaining Arctic Observing Networks, and blue bioeconomy in the Arctic region. Non-Arctic States, intergovernmental organizations, and NGOs engage in the work of the Council as Observers. UN specialized agencies, including the International Maritime Organization, World Meteorological Organization and UN Environment Programme, are also Observers in the Council.

## Antarctic

The Antarctic Treaty System (ATS) has provided a structure of international cooperation since 1961 for Antarctica and the waters around it. It includes the Antarctic Treaty and its Protocol on Environmental Protection, as well as the Convention on the Conservation of Antarctic Marine Living Resources, referred to as the CAMLR Convention, and all of the binding measures adopted under these instruments. The United States leads cooperative international efforts through the Antarctic Treaty System to maintain the Antarctic Region for peaceful purposes, protect its relatively pristine environment and ecosystems, and conduct scientific research.

- How can regional ocean observing and modeling efforts, such as under AAORIA, engage additional countries to expand their coverage?
- What can we do to support RFMOs' efforts to integrate global issues such as climate change into their scientific and management processes?

# Theme d. Preventing and significantly reducing marine pollution of all kinds, in particular from landbased activities

#### Introduction

Plastic pollution, in particular ocean plastic pollution, is a global problem. Plastic pollution affects environmental and food security, maritime transportation, tourism, economic stability, resource management, and human health. When plastic waste and scrap are not properly managed, they can leak into the environment—most notably into the ocean near coastal cities. Plastic waste and scrap originate from both land-based sources (e.g., littering and illegal dumping, mismanaged waste, storm water discharge, natural disasters) and sea-based sources (e.g., offshore oil and gas platforms; ships; abandoned, lost or otherwise discarded fishing gear (ALDFG); abandoned and derelict vessels). In many parts of the world, local governments do not have the resources to collect and manage all the waste and plastic generated. It is estimated that two billion people <sup>1</sup> do not have access to organized waste collection services, resulting in vast amounts of uncollected plastic and other types of pollution released into the ocean through sewers and waterways.

#### Status and trends

Global demand for plastics is high and rising, spurred by the material's barrier properties, lightweight nature, malleability, and favorable production economics. It is estimated that 11 million metric tons of plastics enter our ocean every year on top of the estimated 200 million metric tons that currently circulate in our marine environments.<sup>2</sup> Moreover, plastic production and consumption are predicted to double over the next 10 years which could result in more than 300 million metric tons of plastics in the ocean within 10 years.<sup>3</sup> As a result, the annual amount of uncontrolled plastic waste released into the aquatic environment is estimated to reach 53 million metric tons by 2030.<sup>4</sup> Experts have estimated that the equivalent of one garbage truck of plastic enters the ocean every minute.<sup>5</sup> Globally, plastic waste is either disposed of in landfills, incinerated, placed in unmanaged dumps, or littered. Only 16 percent of global plastic was collected for recycling in 2016. <sup>6</sup> According to the Ocean Conservancy, 80 percent of ocean plastic pollution comes from land-based sources and 75 percent comes from waste that was never collected.

# **Challenges and opportunities**

Since plastic pollution that enters the ocean does not respect political boundaries, addressing plastic pollution is a global challenge that requires international cooperation. The fifth session of the United Nations Environmental Assembly in February 2022 (UNEA 5.2) adopted a resolution to develop an international legally binding instrument on plastic pollution, including in the marine environment. The resolution (5/14) requested the Executive Director of the UN Environment Programme to convene an Intergovernmental Negotiating Committee (INC) to develop an instrument that comprehensively addresses the full life cycle of plastic, including its production, design, and disposal. The United States

<sup>&</sup>lt;sup>1</sup> https://www.un.org/sustainabledevelopment/water-and-sanitation/

<sup>&</sup>lt;sup>2</sup> https://oceanconservancy.org/climate/plastics-climate/

<sup>&</sup>lt;sup>3</sup> https://oceanconservancy.org/trash-free-seas/plastics-in-the-ocean/

<sup>&</sup>lt;sup>4</sup> https://www.science.org/doi/full/10.1126/science.aba3656

<sup>&</sup>lt;sup>5</sup> https://nap.nationalacademies.org/catalog/26132/reckoning-with-the-us-role-in-global-ocean-plastic-waste.

<sup>&</sup>lt;sup>6</sup> https://www.mckinsey.com/industries/chemicals/our-insights/addressing-the-challenges-of-plastic-waste-circularity-and-leakage

engages in the INC's ongoing work to conclude a global agreement to tackle plastic pollution based on a comprehensive approach that addresses the full life cycle of plastic. Stakeholder engagement and technical and financial support for countries most in need are also critical success.

As a part of combating sea-based sources of waste, the UN Ocean Conference could address ALDFG. In addition to being a significant form of ocean plastic pollution, ALDFG has a detrimental impact on marine ecosystems and entangles marine life. Properly designed and implemented risk-based gear marking systems are one tool of a holistic fishing and aquaculture management strategy that can contribute to reducing the impacts of ALDFG in the marine environment. Implementation of the FAO's Guidelines for Sustainable Aquaculture should be reflected in the discussion under theme one.

Monitoring is another key area where science and innovation can spur efforts to address marine pollution. Marine debris monitoring is critical for understanding the scope and scale of the issue, determining hot spots and areas with heavy accumulation to target for priority intervention, and, in the longer term, the impacts of interventions to address marine pollution. This dialogue theme should include discussions of the importance of accurately monitoring marine debris, especially on shorelines and in the coastal water column.

The United States has a wide array of technology and expertise to assist countries in improving their waste management, recycling systems, and materials research. The Department of State has provided grants to combat marine debris and plastic pollution in other countries. USAID is working together with governments, the private sector, the informal sector (waste collectors), and civil society to identify priorities to support developing countries in Africa, Asia, Pacific Islands, Latin America, and the Caribbean, as they seek to improve their waste management systems and reduce plastic pollution. Domestically, NOAA's Marine Debris Program builds capacity to address many aspects of marine debris, including plastic pollution. NOAA is funding \$92 million on 27 projects in the United States to remove large volumes of marine debris, such as ALDFG and abandoned or derelict vessels, and to install trash interception technologies to prevent marine debris from entering the coastal and marine environment. These projects also include aspects to help prevent the further occurrence of debris in the environment to provide continued benefits to communities and ecosystems.

The private sector also plays an important role in our efforts to combat plastic pollution and increase innovative solutions. Addressing ocean plastic pollution provides opportunities for businesses to innovate and create sustainable supply chains and green jobs across a diverse set of industrial sectors and geographic regions.

- How can we promote the prevention or reduction of plastic pollution from fishing and aquaculture activities, including ALDFG, across the plastics lifecycle, most critically including aspects of gear design, gear management, as well as collection and end-of-life environmentally sound management, including gear recycling.
- How can we build national marine debris monitoring capacities around the globe and support regional cooperation and information sharing?
- How can we increase participation and commitment from the private sector to prevent plastic from entering into the ocean?

# Theme e. Leveraging ocean, climate and biodiversity interlinkages

#### Introduction

Ocean ecosystems face mounting threats as climate change intensifies. Climate change and unsustainable development are causing shifts in the diversity and productivity of marine organisms everywhere, affecting food security, public health, and the sustainable use of the ocean, and the most vulnerable communities are often the ones that are disproportionately impacted. At the same time, ocean biodiversity (from plankton to commercial fisheries and whales) plays a critical role in the global carbon cycle, affecting rates of carbon drawdown, export to the deep ocean, ocean pH, and other biogeochemical pathways. As the global community works to develop effective policy solutions to the challenges facing the ocean, it is critical that links between climate and biodiversity change are acknowledged, further researched, and considered jointly. For 2025, key topics under the theme "Leveraging ocean, climate and biodiversity interlinkages" could include:

- Research and data needed to better understand and address the linkages between climate change and biodiversity loss, including expanding the collection and use of data on changing ocean biodiversity and monitoring critical threats to biodiversity;
- Opportunities to restore and harness the multiple benefits of healthy, biodiverse marine and coastal ecosystems for climate adaptation, including their importance for resilience for coastal communities.
- Management and policy responses to support the recovery and resilience of coral reefs;
- Leveraging coastal and ocean biodiversity as ocean-based climate mitigation solutions, including by protecting, enhancing, and restoring blue carbon ecosystems and by furthering research to assess innovative climate solutions, such as those that utilize ocean biodiversity to support marine carbon dioxide removal.
- Scaling up innovative finance from all sources to implement solutions that address the impacts
  of climate change on the ocean and ocean-dependent communities, including ocean biodiversity
  loss.

### Status and trends

The United States' Fifth National Climate Assessment, released in 2023, summarizes ocean-climate impacts that are already affecting marine biodiversity within U.S. domestic waters. This includes large-scale degradation of critical habitats like coral reefs and seagrass beds due to climate stressors, shifting range distributions of ecologically and economically important species, increased incidences of harmful algal blooms, and accelerating sea-level rise. In particular, mass coral bleaching poses a significant threat to marine biodiversity. Urgent actions that can help reefs survive bleaching events and recover from them include sustainable management of reef fish, with a focus on herbivores; improving water quality in reef areas; and sustainable management of tourism. The United States has taken an ambitious and coordinated whole-of-government approach to tackling ocean-climate and ocean biodiversity needs, and the intersection between the two, through the Ocean Climate Action Plan (OCAP)<sup>2</sup> (March 2023) and the National Ocean Biodiversity Strategy<sup>3</sup> (June 2024).

<sup>&</sup>lt;sup>1</sup> https://nca2023.globalchange.gov/

 $<sup>^2\</sup> https://www.whitehouse.gov/wp-content/uploads/2023/03/Ocean-Climate-Action-Plan\_Final.pdf$ 

<sup>3</sup> https://www.whitehouse.gov/wp-content/uploads/2024/06/NSTC\_National-Ocean-Biodiversity-Strategy.pdf

#### **Challenges and opportunities**

The United States has made significant strides in advancing ocean-climate science, with large investments to modernize the U.S. Integrated Ocean Observing System (IOOS)<sup>4</sup> and to support U.S. National Oceanic and Atmospheric Administration labs, programs, cooperative institutes and other research partners. However, gaps still remain in our understanding of the ocean and climate system, and particularly the ways in which climate change affects ocean life. One collaborative framework the United States is using to meet this need is the co-development of a national and international marine biodiversity observation system by the Marine Biodiversity Observing Network (MBON), Smithsonian Institution's Marine Global Earth Observatory (Smithsonian's MarineGEO) program, the Global Ocean Observing System (GOOS) Biology and Ecosystem Panel, and the Ocean Biodiversity Information System (OBIS). The National Ocean Biodiversity Strategy lays out a roadmap to expanding and using biodiversity information to help protect and conserve marine ecosystems and maximize the ocean's benefits to people. Similarly, the OCAP calls for additional research, development, and demonstration to close knowledge gaps and determine the effectiveness of particular ocean-based climate solutions and actions.

Innovative policy solutions, including nature-based solutions, are needed to address the complex challenges at the nexus of the ocean, climate change, and biodiversity loss. For example, in 2022 the United States launched the Ocean Conservation Pledge (OCP), through which countries commit to conserve or protect at least 30 percent of ocean waters under their national jurisdiction by 2030 ("30x30"). The OCP has been endorsed by 24 countries. Prioritizing nature-based solutions like the conservation and protection of coastal and marine ecosystems can yield multifold climate and biodiversity benefits, including sequestering carbon, providing space to rebuild biodiversity, and protecting coastal communities from storms and flooding.

Coral reefs epitomize the value of nature-based solutions in coastal protection and adaptation to climate change because they offer coastal protection by reducing flooding and erosion through wave breaking and friction. On average, coral reefs dissipate 97% of wave energy before it reaches coastlines. The protection and biodiversity values of coral reefs encouraged the United States Coral Reef Task Force to work with federal agencies and State and Territorial governments in 2023 to formally recognize coral reefs as National Natural Infrastructure. This recognition helped States and Territories with coral reefs more easily secure federal hazard mitigation funding for coral reef restoration from agencies like the Federal Emergency Management Agency.

Advances in technology, including through public-private collaborations, are critical to address the complex challenge of making major advances in ocean-based climate solutions, ocean observing, and high-resolution tracking of living resources and the biodiversity they depend on. Additionally, the United States' National mCDR Research Strategy<sup>5</sup> (November 2024) outlines a national strategy for conducting research on marine carbon dioxide removal to safely and effectively determine whether these approaches can serve as viable climate solutions, including research to better understand impacts on marine biodiversity. The United States also contributes to the UN Ocean Decade Communities of Practice, which advances understanding of the connections between the ocean, climate, and biodiversity through networks, workshops, webinars, and other knowledge exchange tools.

<sup>4</sup> https://ioos.noaa.gov/

<sup>&</sup>lt;sup>5</sup> https://www.whitehouse.gov/wp-content/uploads/2024/11/U.S.-Marine-Carbon-Dioxide-Removal-Research-Strategy.pdf

The need for increased and sustained finance from a wide variety of sources to support ocean-climate action, including increased investment in ocean and coastal data and observations, remains high. There is an equally important need to further invest in the knowledge tools required to protect and sustainably manage ocean biodiversity. Funding should also include resources to support capacity-building for communities on the interrelated challenges of ocean-climate impacts and ocean biodiversity loss. The United States has secured historic levels of investment in ocean-climate mitigation and adaptation, including billions of dollars to restore nationally significant estuaries; increase coastal resilience; protect, restore, and enhance carbon-rich wetlands; and other critical actions that both address ocean-climate impacts and bolster ocean biodiversity. Additionally, financial, industry, and non-governmental sectors are increasingly poised to play positive partnering roles in solving the investment challenge to support a healthy ocean, including by mobilizing private capital and helping develop markets that provide both private and public goods and services.

- What are the main frontiers for implementing ocean-based climate solutions that also support and sustain ocean biodiversity, especially in places where the ocean supports other uses?
- How can enhancing ocean biodiversity protection build resilience for ocean resources and coastal communities, including their cultural heritage, threatened by climate change?
- How can we accelerate management and policy responses to support the recovery and resilience of coral reefs, through actions to reduce other stressors from fishing, pollution, and unsustainable tourism?
- How can the global community work to elevate the role of Indigenous and local knowledge in decisions about management of ocean biodiversity and the implementation of ocean-based climate solutions?

# Theme f. Advancing sustainable ocean-based economies, sustainable maritime transport and coastal community resilience leaving no one behind

#### Introduction

A sustainable ocean-based economy is essential to promote the use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystems. For 2025, key topics for discussion under *Theme f. Advancing sustainable ocean-based economies, sustainable maritime transport, and coastal community resilience leaving no one behind* could include:

- Developing sustainable ocean industries and infrastructure and building a skilled and inclusive workforce;
- Decarbonizing maritime transport through green shipping initiatives, deployment of new technologies, and transitioning to sustainable port operations; and
- Creating a "culture of resilience" that recognizes changing conditions and threats that impact social and economic infrastructure, critical lifelines, environmental sustainability, and the provision of ecosystem services.

Sustaining ocean-based economies is dependent on building resilience to the impacts of climate change including sea level rise, extreme weather events, biodiversity loss, shifting habitats and migration patterns of fisheries, and ocean acidification. Developing community resilience should incorporate local and Indigenous and local knowledge and support intercultural collaboration by building relationships and capacity through partnership programs.

#### Status and trends

The United States recognizes the importance of the global ocean economy, which supports millions of jobs worldwide in marine transportation, ocean exploration, fisheries and aquaculture, tourism and recreation, coastal resilience and infrastructure, energy, and scientific research and data collection. The global ocean-based economy is expected to grow to around \$3 trillion by 2030. In the United States, coastal communities are home to more than 129 million people representing about 40 percent of the U.S. population, per the 2020 American Community Survey. The marine economy contributed a total of \$476 billion in 2022, making up nearly 2 percent of the nation's gross domestic product. It generated \$777 billion in sales and supported 2.4 million jobs. To stem the threats of climate change, pollution, overfishing, and habitat and biodiversity loss, the dialogue should focus on policies and actions that advance healthy ecosystems, strong communities, and thriving, sustainable ocean-based economies.

### **Challenges and opportunities**

The United States released its National Strategy for a Sustainable Ocean Economy in June 2024, committing to 100% sustainable management of ocean areas under U.S. national jurisdiction. The Strategy focuses on three interconnected goals – conserve healthy ocean and coastal ecosystems; support resilient people and communities; and advance sustainable and just economic development.

Advancing sustainable ocean-based economies requires developing sustainable industries and infrastructure, building a skilled and diverse workforce, supporting coastal resilience, and strengthening ocean science and innovation. A key tool for developing a sustainable ocean economy is marine spatial planning (MSP), a multi-stakeholder process for allocating and deconflicting sustainable uses of a country's ocean and coastal waters while promoting community resilience. The United States launched

a \$6M marine spatial planning program in September 2022 to support a three-year MSP process in Palau and supports MSP initiatives through the Partnership for Atlantic Cooperation, a multilateral forum that specifically recognizes the Atlantic Ocean as a convening space of like-minded nations coming together to address the interconnected goals of advancing a peaceful, stable, prosperous, open, safe, and cooperative Atlantic region and to conserving the Atlantic Ocean as a healthy, sustainable, and resilient resource for generations to come.

Sustainable maritime transport is a key element of sustainable ocean-based economies. In 2022, the United States and Norway launched the Green Shipping Challenge, which encourages countries, ports, companies, and other actors in the shipping value chain to make concrete announcements that support that goal. The United States also launched the U.S. Green Shipping Corridor Initiative Project that supports the undertaking of feasibility studies for green shipping corridors involving developing countries. In 2024, the United States announced a \$3 billion investment to improve and electrify port infrastructure, support an estimated 40,000 jobs, reduce pollution, and combat the climate crisis.

Coastal community resilience could also feature in the panel with a focus on protection of ocean and coastal ecosystems and marine resources that communities rely on to support sustainable economic growth and good jobs. USAID's humanitarian assistance programming strengthens the capacity of coastal communities and countries to reduce risks induced by coastal hazards such as cyclones, storm surge, and high tides. Well-managed marine protected areas support community resilience by providing invaluable ecosystem services such as carbon sequestration and coastal protection, and are also economic engines that support fishing, tourism, and recreation. A thriving ocean economy supports equitable and inclusive economic growth, improves livelihoods, and fosters vibrant community and workforce development that leaves no one behind.

- How can we collaborate to scale up ocean-based renewable energy—including offshore wind and solar as well as other ocean energy such as tidal, wave, and thermal—to create jobs and address the climate crisis?
- How can we collaborate to decarbonize shipping and port operations to minimize environmental impacts, reduce greenhouse gas pollution, and create sustainable ocean economies?
- How can we ensure equitable and inclusive development of the ocean-based economy, including through non-market incentives like knowledge sharing and technical assistance?

# Theme g. Promoting the role of sustainable food from the ocean for poverty eradication and food security

#### Introduction

Blue, or aquatic, foods include thousands of species of fish, shellfish, plants, and algae captured or cultivated in freshwater or marine ecosystems. Blue foods play a significant role in food security for billions of people and are critical to livelihoods and culture in coastal and inland communities. Sustainably harvested and farmed blue foods can greatly improve food systems by: (1) advancing global food security and nutrition; (2) lowering environmental impacts and carbon emissions from food production; and (3) supporting economic development and poverty alleviation, especially in developing countries. Additionally, blue foods can play a significant role in tackling hunger and diet-related diseases. Micronutrients from blue foods can help prevent malnutrition, improve maternal health, and support cognitive and physical health at critical stages during early childhood. Blue foods have higher nutrient densities per serving and a lower carbon footprint compared to many terrestrial animal-based products.

Despite the economic and nutritional significance of blue foods, they are often overlooked in efforts to address food security. Blue foods, particularly those sourced from the marine ecosystem, face unique challenges that require policy solutions not readily addressed through agriculture-based approaches. In order to achieve resilient food systems that support global food security, it is necessary to ensure blue foods are included in the food security dialogue. International coordination is essential to ensure harvesting and farming blue foods balances environmental sustainability, food security, economic interests, and equitable development.

#### Status and trends

Blue foods are one of the most traded food commodities, worth over \$150 billion according to the Food and Agriculture Organization (FAO). Over 3.3 billion people rely on blue foods as a significant source of animal protein, and globally we get as much protein from blue foods as we do from chicken – each representing about 17% of global average daily protein intake – more than from pig or bovine sources. The global demand for aquatic foods has surged in recent decades due to factors like population growth, rising incomes, and an increasing recognition of the health benefits associated with seafood consumption. The FAO projects that by 2030, global fish consumption will reach 180 million metric tons, up from around 156 million metric tons in 2020.

Where wild fish stocks have experienced overfishing and environmental degradation, aquaculture has filled the gap, with global aquaculture production growing approximately 6-8% annually over the past few decades. Aquaculture is the fastest-growing food production sector worldwide and has surpassed wild-capture fisheries in terms of volume. This sector can help alleviate food insecurity by providing a stable, year-round source of protein and essential nutrients, especially in regions where traditional food sources are limited or seasonal. However, the rapid increase in industrialized aquaculture has raised concerns about sustainability, particularly in regions where fish farms impact natural ecosystems. Concerns about aquaculture include water pollution from nutrient runoff, the spread of diseases, and the use of fishmeal derived from wild fish stocks. Furthermore, countries have varying standards for aquaculture, complicating efforts to create globally accepted sustainability certifications.

#### **Challenges and opportunities**

Blue foods can play a pivotal role in poverty eradication and addressing food insecurity; however, challenges arise related to aquatic food production, the migratory nature of fish stocks, transboundary ecosystems, and environmental degradation. Wild-capture fisheries face challenges with sustainable fisheries management, enforcement, overfishing, and illegal, unreported, and unregulated (IUU) fishing. While small-scale fisheries play a crucial role in local food security, they often lack the same access to resources and support as large-scale operations. International frameworks, like the FAO's Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries, aim to support small-scale fishers, but implementation often lacks necessary funding. Further, as climate change compounds stressors on the marine ecosystem, this can create conditions that lower species abundance and exacerbate food insecurity and economic vulnerability. In developing coastal or island regions, where other sources of income and nutrition are limited, the impacts can be severe.

Conserving marine ecosystems, and sustainable fisheries and aquaculture management, are key elements to mitigating the effects of climate change and ensuring reliable access to blue foods. Promoting fair, legal, sustainable fishing, while reducing illegal, unreported and unregulated (IUU) fishing is also important. For some nations, governments may require assistance with their fisheries policy and decision-making, regulation and enforcement, or development/enhancement of legal frameworks to support these tools. For others, sustainable fishing will mean reducing overfishing by taking steps to align the fishing capacity with the ecological carrying capacity. Developing coastal and island nations benefit from improved fisheries science, research and management techniques and capacity building efforts related to these topics.

To address the complex set of policy challenges related to blue food, the United States advocates for sustainable fisheries management practices and the inclusion of blue foods in food security and food system dialogues and policies in international venues such as the FAO, regional fora such as Asia-Pacific Economic Cooperation (APEC) and the African Union (AU), and major gatherings like the UN Food Systems Summit. Integrating blue foods in this way can address challenges such as overfishing and climate change impacts, while also contributing to the FAO guidelines for Sustainable Aquaculture and the UN Sustainable Development Goals including: Zero Hunger (SDG 2); Gender Equality (SDG 5); Climate Action (SDG 13); and Life Below Water (SDG 14).

In 2022, the United States highlighted the importance of blue foods in the new U.S. Government Global Food Security Strategy for 2022-2026 and endorsed the Aquatic Blue Food Coalition, elevating the role of blue foods as a priority in food security conversations. In 2023, the United States hosted a Ministerial to launch the Partnership for Atlantic Cooperation. This multilateral forum specifically recognizes the Atlantic Ocean as a convening space of like-minded nations coming together to address the interconnected goals of advancing a peaceful, stable, prosperous, open, safe, and cooperative Atlantic region. The Atlantic Partnership seeks to conserve the Atlantic Ocean as a healthy, sustainable, and resilient resource for generations to come, and in 2025 will hold a Sustainable Aquaculture Solutions Exchange highlighting the role of the Atlantic Ocean as a food security solution.

Additionally, USAID has had a successful track record of support for wild fisheries management and strengthening value chains through its Feed the Future and biodiversity conservation programming. USAID's investments in marine conservation and sustainable fisheries focus on increasing co-benefits for people by improving the contributions of fisheries to local livelihoods and food security in over 25 countries. Tailoring to the local context, USAID aims to strengthen resource governance, support participatory decision-making, recover degraded fish stocks through ecosystem-based management, empower women and other marginalized and underrepresented groups, combat IUU fishing and forced

labor in fisheries, and promote transparency in fisheries licensing, agreements, and value chains. These projects can serve as valuable case studies for governments looking to invest in the development of blue food systems for food security.

- How can we work together to promote sustainable sources of blue foods in national and regional food security and nutrition strategies?
- How can we promote recognition of the nutritional value of blue foods?
- What are the impacts of climate change on aquaculture, and how should the fishing and aquaculture industries adapt to challenges like warming ocean waters, ocean acidification, and extreme weather events?
- What policies could help ensure equitable distribution of fish resources to support food security in low-income and food-insecure areas?
- What role could climate-adaptive management practices play in supporting the resilience of fish stocks and food security in vulnerable coastal regions?
- To what extent and at what spatial and temporal scales can seaweed and shellfish play in providing essential nutrients to populations facing food and nutrition insecurity?
- What actions can governments, NGOs, and private sector actors undertake together to strengthen local supply chains, reduce post-harvest loss, and improve market access for smallscale fishers?
- What role can seaweed aquaculture play in mitigating climate change through carbon sequestration, and what are the limitations and opportunities of this approach?

Theme h. Increasing ocean-related scientific cooperation, knowledge, capacity building, marine technology and education to strengthen the science-policy interface for ocean health

#### Introduction

Increasing scientific knowledge, ocean observations, and research capacity is critical for improving our understanding of the ocean's role in weather, climate, and extreme events as well as changes in marine ecosystems and living resources. This also informs the development of products and services that can help communities prepare and adapt to changes. This dialogue should foster discussions on opportunities to improve and sustain the global ocean observing system, including its U.S. component, the Integrated Ocean Observing System (IOOS); increase ocean mapping efforts; support capacity building to ensure global collection and access to actionable information to fill critical monitoring gaps, along with complementary physical and biogeochemical observations, towards sustainable use and development of living coastal and marine resources; and provide ways to incorporate Indigenous and local knowledge into the body of knowledge that is accessed and used by the international community.

#### Status and trends

Ocean observation is on the cusp of a major transition to more advanced observing technologies, including: "Omics," acoustics, electronic monitoring, new sensor technologies, autonomous systems, and various forecast models. Additionally, advances in technology, including computer vision, machine learning, and robotics, are increasingly being used to automate and scale up our observations. Some countries are already beginning to implement these technologies in augmentation of their existing management paradigm. This dialogue could highlight advancing use of new technologies for biology and ecosystem observing, including environmental DNA, artificial intelligence/machine learning, optical and acoustic technologies, and robotics, while also pursuing opportunities for increased capacity development and partnerships needed to implement them at scale. As technologies continue to develop and advance, so too do their data standards. It is important to emphasize the need for global-level cooperation and coordination in these standards, e.g., through the Ocean Biodiversity Information System (OBIS) and sustained resourcing of data management, to ensure data interoperability and increase accessibility to developing countries.

# **Challenges and opportunities**

Strengthening ocean observing and mapping capabilities, coverage, and technologies is critical for meeting increasing demands for fit-for-purpose oceanographic data. This is especially true for observations of the ocean's diverse life, which is more challenging and therefore well behind advances in climate and environmental monitoring.

On observations, the Mesophotic and Deep Benthic Communities (MDBC) Partnership was formed to restore and conserve habitats in deep waters of the Gulf of Mexico. The MDBC portfolio, led by the National Oceanic and Atmospheric Administration (NOAA) and Department of the Interior (DOI), consists of four projects working to restore Gulf of Mexico ocean floor ecosystems impacted by the Deepwater Horizon oil spill. Objectives of these MDBC projects include seafloor mapping, coral propagation, and habitat assessment to improve our understanding, inform management, and ensure resiliency of mesophotic and deep benthic communities. The Smithsonian's National Museum of Natural History (NMNH) partners closely with the MDBC to help characterize Gulf of Mexico biodiversity, since understanding what, where, when, and how marine life is distributed across space and time is fundamental to successful conservation and ecosystem restoration. NMNH-MDBC personnel will help

map and characterize Gulf of Mexico mesophotic and deep benthic life through collections, protocol development, and the use of Autonomous Reef Monitoring Structures and environmental DNA.

On mapping, the U.S. National Strategy for Mapping, Exploring, and Characterizing the United States Exclusive Economic Zone, or NOMEC, sets goals to acquire bathymetric and other mapping and characterization data throughout the U.S. exclusive economic zone, promoting and advancing new technologies to make ocean mapping, exploration, and characterization more efficient and effective, including enabling technologies in uncrewed systems, high bandwidth communications, machine learning and artificial intelligence. These new technologies are examples of observing advancements that will allow for more efficient data collection and enable access to remote regions (and depths) where information is limited. Outfitting such vehicles with compact, cutting-edge instruments for automated collection and in situ processing of environmental DNA and with sensor array platforms presents a potential revolution in ocean biological knowledge that is now well within reach.

However, DNA reference libraries can currently identify often less than half of the of animal species in environmental profiles. It is therefore essential to build out the digital library of ocean biodiversity via a strategic program of field sampling that links expert-identified voucher specimens with DNA sequences and images. The Smithsonian's Ocean DNA Program aims to create a global, digital library of marine species (the U.S. Ocean Biocode) that links DNA sequences to species names, knowledge of organisms, and their ecologically important traits. This critical link to natural history knowledge can scale automated biodiversity censusing across all stakeholder communities, from local to national and from citizen science activities to industrial applications, to provide an unprecedented map of ocean life across all domains. As laid out in two newly released National Strategy documents, standards, coordination and partnerships will be essential to realizing the full potential of these emerging technologies. The Marine Biodiversity Observation Network and Smithsonian's MarineGEO program are two key partners. Such U.S. programs in global ocean science, as well as coordination with complementary global efforts, stimulate an international ocean research enterprise in support of the Intergovernmental Oceanographic Commission and the UN Decade of Ocean Science.

An example of a targeted effort directed at the ocean science-policy interface, the Partnership for Atlantic Cooperation is a multilateral forum that specifically recognizes the Atlantic Ocean as a convening space of like-minded nations coming together to address the interconnected goals of advancing a peaceful, stable, prosperous, open, safe, and cooperative Atlantic region and to conserving the Atlantic Ocean as a healthy, sustainable, and resilient resource for generations to come. Launched in 2023, the Partnership now has 42 coastal Atlantic states from Africa, the Americas, Europe, and the Caribbean, representing more than 75 percent of the Atlantic coastline. The Atlantic Partnership and its Platform for Science Capacity Building and Exchange (co-chaired by Brazil, Portugal, and the United States) aim to facilitate collaboration to increase and support science capacity building and exchange, including on sustained ocean observations.

- How can we best develop collaborations and dialogue between providers of marine scientific knowledge and stakeholders, particularly in the developing world and Indigenous communities, who need that knowledge?
- What changes are needed to existing frameworks for knowledge exchange and capacity-building approaches to make these activities more useful to information users?
- How can the international community realize a robust, sustained global ocean observing system?
- What are concrete opportunities for public-private partnerships?

# Theme i: Enhancing the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the UNCLOS

With 2024 marking the 30<sup>th</sup> anniversary of the Convention's entry into force, the plenary discussion for *Theme i. Enhancing the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the UNCLOS* should focus on:

- Emphasizing the universal and unified character of the Convention, which reflects customary international law;
- Reaffirming that the Convention sets out the legal framework within which all activities in the ocean and seas must be carried out, including those related to the marine environment; and
- Highlighting progress made in the last three decades with the adoption of three implementing
  agreements, all of which are directly relevant to the conservation and sustainable use of marine
  resources, and exploring further integration of science and data in ocean governance.

The United Nations Convention on the Law of the Sea and the 1994 Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 established the International Seabed Authority (ISA) as the organization through which States Parties to the Convention organize and control exploration for and exploitation of mineral resources in the Area. Since its establishment, the ISA has approved regulations on exploration for cobalt-rich ferromanganese crusts, polymetallic sulphides, and polymetallic nodules and approved a regional environmental management plan (REMP) for the Clarion-Clipperton Zone. The ISA is now focused on the development of exploitation regulations and additional REMPs, providing a critical opportunity in the next few years for the further integration of science and data into these important processes.

The United Nations Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, which was adopted in 1995 and entered into force in 2001, aims to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks. It also sets out a framework for the establishment of regional fisheries management organization (RFMOs), treaty-based multilateral bodies that oversee the cooperative sustainable management of shared fish stocks and other living marine resources. The United States has worked with countries around the world over decades to establish a network of RFMOs, through which countries coordinate scientific study of shared resources, establish common management measures to be implemented by member governments including the allocation of fishing rights, and undertake cooperative fisheries monitoring and enforcement.

The Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction, was adopted on June 19, 2023, and is a landmark achievement for conserving and sustainably using high seas biodiversity. It creates a global and cross-sectoral mechanism to establish high seas area-based management tools including marine protected areas, establishes a system for the fair and equitable sharing of benefits arising from activities with respect to marine genetic resources of the high seas, sets up a process for Parties to conduct environmental impact assessments for their activities in the high seas, and includes provisions on capacity-building and the transfer of marine technology related to the conservation and sustainable use of high seas marine biodiversity. The agreement will enter into force after 60 ratifications, and a Preparatory Commission has been established to prepare for the first BBNJ Conference of Parties.

## Theme j: Mobilizing finance for ocean actions in the support of SDG14

#### Introduction

There is a critical need to scale up finance around the world from all sources in order to achieve Sustainable Development Goal 14. Key topics for discussion under *Theme j. Mobilizing finance for ocean actions in the support of SGD14* could include:

- Leveraging blue finance from multiple sources, including multilateral development banks and financial institutions to support ocean sustainability;
- Blended finance models to support blue economy projects;
- Debt-for-nature swaps, blue bonds, and political risk insurance to support marine conservation and reduce debt burdens on SIDS and developing coastal countries;
- Disaster risk and coastal resilience financing schemes; and
- Direct investment by the private sector in sustainable ocean industries, maritime infrastructure, and new technologies.

#### Status and trends

According to the High Level Panel for a Sustainable Ocean Economy, the ocean economy contributes \$1.5 trillion to the global economy. However, current investments in ocean action fall well below what is needed to transition to a sustainable ocean economy. In the last 10 years, less than 1 percent (\$13 billion) of the total value of the ocean has been invested in sustainable projects through philanthropies and official development assistance.

However, despite this low level of investment, there is currently growing investor appetite for appropriately structured investments with the proper incentives, tools, and standards to unlock greater blue investment opportunities. The international community announced \$140 billion dollars in actions to advance marine conservation and the sustainable blue economy, combat plastic pollution, strengthen maritime security, and support ocean-based climate solutions at the last two Our Ocean Conferences.

# **Challenges and opportunities**

The global community faces a number of challenges to accelerating sustainable finance, including distorted market dynamics, subsidies for negative externalities from extractive industries, weak financial pipelines, differentiated contexts in local areas with regards to risk and approach, small project sizes and risk-return ratios not matching capital requirements, and higher risk from climate impacts for ocean investments.

Despite those challenges, we are starting to see major commitments to blue finance, such as the \$100 million pledged by the Bezos Earth Fund supporting the Unlocking Blue Pacific Prosperity initiative, a bold plan by Pacific leaders to establish sustainable management across 100 percent of the Blue Pacific Continent and protect 30 percent of it.

The United States announced nearly six and a half billion dollars in actions at the last two Our Ocean Conferences. Among those commitments was a \$6 million U.S. program to build marine spatial planning capacity in Palau, implemented by SPC, that is aligned with the objectives of the Unlocking Blue Pacific Prosperity initiative.

The United States has made other significant investments. The United States, Indonesia, and four NGOs signed a \$35 million debt-for-nature swap in July 2024 to conserve coral reefs in eastern Indonesia, home to some of the most biologically diverse coral reef ecosystems. Through this program and others that have been supported by the U.S. International Development Finance Corporation, the United States has helped countries restructure over \$2 billion in debt and unlock hundreds of millions of dollars in new financing for nature and climate. Climate finance is also addressing needs in the ocean – such as ocean-based climate solutions, including coastal resilience projects to protect blue carbon ecosystems (the mangroves, seagrass beds, and salt marshes that sequester carbon and protect against storm surges), and massive investments to decarbonize the shipping sector through the Green Shipping Challenge. Moreover, USAID has launched the Coastal Resilience, Carbon, and Conservation Finance (C3F) activity which encourages the flow of private capital into coastal resilience and blue carbon projects that generate biodiversity conservation, climate mitigation, and adaptation outcomes while safeguarding local communities' benefits. And domestically the United States continues to invest in the sustainable ocean economy. On October 29, 2024, the United States announced a \$3 billion investment to improve and electrify port infrastructure in the United States.

The United States is working to build a blue finance component into ocean initiatives and events to increase familiarity with available tools and promote increased ocean investment. For example, the United States convened an event under the Partnership for Atlantic Cooperation with presentations by finance ministers, development finance institutions, and NGOs to share experiences; examine finance tools; and discuss future opportunities. All these efforts and initiatives contribute to a global ocean economy that functions more sustainably and drives further economic development.

## Key questions for the dialogue at the 2025 UN Ocean Conference

- What are the most significant barriers for investors and governments to scale up investments in the sustainable ocean-based economy and how can those barriers be overcome?
- What are the ocean economy sectors in most need of additional investment and how would that investment demonstrate impacts toward SDG-14?
- What technologies are in development that will have the biggest impact toward growing the sustainable ocean economy, in particular for developing coastal states?
- How can we drive increased investment into coastal resilience and blue carbon?
- What sort of support is needed to scale blue bonds as a coastal and marine financing strategy?