

IMPAC Bulletin

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Fifth International Marine Protected Areas Congress - IMPAC5; 3-9 February 2023

With the Ocean representing over 90 percent of the living space for species on the planet, protecting the Ocean is a global priority. A stable and healthy Ocean is critical to the lives of billions of people around the world, as it: generates oxygen; provides food security, climate resilience and storm protection; preserves biodiversity; and creates cultural and economic opportunities for humanity.

Marine protected areas (MPAs) and other designations, such as Other Effective Area-based Conservation Measures (OECMs), Indigenous Protected and Conserved Areas, are some of the most effective tools for protecting and restoring Ocean health. They create many ecological, social, and economic benefits, including: protecting and restoring biodiversity; building resilience to climate change threats and other environmental impacts; supporting the ecological sustainability of fisheries and increasing fish biomass; protecting other critical habitats; improving livelihoods, security and local economies of coastal communities; and helping to maintain local culture and heritage.

MPAs, as defined by the International Union for Conservation of Nature (IUCN), are “any area of intertidal or sub-tidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment.”

The benefits of MPAs have been widely recognized. The world’s first MPA was proclaimed in 1935 and the concept gained greater support, increasing in momentum. In 1985, approximately 430 MPAs had been proclaimed and a decade later nearly 1300, while today over 13,000 designated MPAs cover an estimated 7.65 percent of the world’s Ocean. To date, 52 countries and territories have protected at least 10 percent of their marine areas.

However, despite this, more needs to be done to advance progress on Ocean conservation, and protect and restore Ocean health. The fifth International Marine Protected Areas Congress (IMPAC5) provided an opportunity for the global community to come together to discuss these issues and a way forward to achieve Ocean conservation targets, including to protect at least 30 percent of the world’s land and Ocean by 2030 (30 by 30).

IMPAC5 brought together Ocean conservation professionals, high-level government officials, Indigenous leaders, youth



Syexwáliya Ann Whonnock, Squamish Nation elected Councillor

representatives, and others, who participated in a multitude of events that included keynote addresses, interactive in-person and virtual sessions, and arts and cultural elements. Presentations explored how to advance Ocean protection, through support for MPAs, OECMs and marine spatial planning, Indigenous-led Ocean conservation and knowledge, sustainable finance solutions, and technological innovations.

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IMPAC5 was informed by five themes:

- building a global MPA network;
- advancing conservation in the blue economy;
- actively managing MPAs and human activity;
- conserving biodiversity and addressing the climate crisis; and
- connecting Ocean culture and human well-being.

In addition, three streams were weaved into the discussions:

- Indigenous Peoples leadership;
- the voice of young professionals; and
- innovation and transformational change.

A Leadership Forum also convened, during which leaders from many countries, as well as Indigenous, philanthropic, and industry leaders, representatives of environmental NGOs, and Young Professionals, reflected on new approaches and best practices in marine conservation and discussed next steps toward achieving marine conservation targets, including the 30 by 30 goal. The role of Indigenous Peoples in Ocean conservation was reiterated, with Steven Guilbeault, Minister of Environment and Climate Change, Canada, stating achieving marine conservation targets will not be possible without full Indigenous participation.

IMPAC5 took place in Vancouver, Canada, from 3-9 February 2023. It was jointly hosted by the Host First Nations — x^wməθk^wəyəm (Musqueam), Skwxwú7mesh (Squamish), and səliwətał (Tsleil-Waututh) — together with the Government of Canada, Province of British Columbia, Canadian Parks and Wilderness Society (CPAWS) and International Union for Conservation of Nature (IUCN).

Brief History of IMPAC

In 2005, in response to the growing number of MPAs, the global community came together to establish the International Marine Protected Areas Congress (IMPAC), under the auspices of IUCN. Meeting every four years, the Congress is a platform that allows for managers and practitioners of marine conservation through MPAs to share knowledge and experiences, as well as join efforts to strengthen best practices on MPA application and management to ensure the effective conservation of marine biodiversity, and the natural and cultural heritage of the Ocean. The vision and core principle of the IMPAC series includes “a high quality and professionally coordinated international congress” with the primary goal of providing the space for MPA managers and practitioners to exchange ideas and learn from others, so they can assist in the establishment and ongoing



Joyce Murray, Minister of Fisheries, Oceans, and the Canadian Coast Guard

implementation of “a global, ecologically representative system of effectively managed and lasting network of MPAs.”

IMPAC1: The first Congress, which took place from 23-28 October 2005, in Geelong, Australia, addressed, among others: sustainability and maximizing resilience; developing MPA networks; ecosystem structures and processes; high seas; and fisheries. To address the major threats posed to the marine environment, IMPAC1 called for: responsible fishing practices; international cooperation to improve Ocean governance; and greater investment in scientific research.

IMPAC2: Convening as part of the International Marine Conservation Congress, which was held from 20-24 May 2009, in Washington, DC, US, IMPAC2 themes included: global climate change; land-sea interface; ecosystem-based management; and poverty and globalization. Messages emerging from the Congress included that: technology can provide useful opportunities to improve community-based MPA enforcement; larger MPAs are potentially more effective for fisheries management; and the Ocean can play a key role in reducing carbon emissions.

IMPAC3: Held in Marseille, France, from 21-25 October 2013, and Ajaccio, France, on 26 October 2013, IMPAC3 culminated in the Ajaccio High-Level Policy Meeting. Six general recommendations emerged, namely:

- mobilizing local and national networks and bringing them into a global MPA network, so that local approaches and global strategies converge;
- opening up to the private sector, through partnerships that will improve governance and support spatial planning processes;
- urgently entering into negotiations to reach an implementing agreement of the UN Convention on the Law of the Sea (UNCLOS) geared towards the conservation of the high seas;
- entering regional approaches as a necessity, particularly on governance issues;
- devising innovative, sustainable financing solutions and optimizing synergies between financing programmes as existing financial mechanisms are inadequate; and
- considering the cultural, philosophical, and spiritual value of the sea when engaging society as a whole in Ocean conversation.

IMPAC4: Held in La Serena, Coquimbo Region, Chile, from 5-8 September 2017, IMPAC4 discussed: MPAs and global change, including climate change and Ocean acidification; MPAs and coastal communities, including empowerment of women, and development and economic growth; effective, successful management of MPAs, including sustainable development initiatives and finance for MPAs; and MPAs and shared future visions, including marine spatial planning and youth-led collaborative action. IMPAC4 concluded with a high-level meeting, where a Call to Action was approved that urged participants to: ensure appropriate financial mechanisms for MPAs; integrate climate change considerations into MPAs; and, engage with women, youth, and local communities to enhance MPA creation and management.

IMPAC5 Report

This report provides a summary of IMPAC5 and the Leadership Forum. Each day included keynote speakers addressing one of the five themes, while more than 100 events



Charlene Aleck, Tsleil-Waututh Nation elected Councillor

took place throughout the week, addressing the themes and streams. For more detailed coverage of selected events, click on the specific day.

Opening of IMPAC5

On [Friday 3 February](#), representatives from the host First Nations expressed a warm welcome to participants, especially Indigenous leaders who traveled far and wide to attend the meeting. On behalf of the Musqueam Nation, elected chief *yəχʷyaχʷələq* Wayne Sparrow reminded participants that his is a fishing Nation, and highlighted the importance of marine protection for the very survival of his people. Extending a special thanks to the singers and dancers who performed a traditional welcome ceremony, he stressed the crucial continued collaboration among First Nations peoples.

Syexwáliya Ann Whonnock, elected Councillor for the Squamish Nation, told participants how heartened and encouraged she felt by so many attending a conference for such important discussions.

Sxwíxwtn Wilson Williams, elected Councillor for the Squamish Nation, recalled how his Nation's people broke through barriers for survival, holding up each other for future generations. Stressing the importance of these gatherings, he said that "our times today will define what unity means, how we will come together."

Charlene Aleck, elected Councilor for the Tsleil-Waututh Nation, recalled the responsibility of her people as caretakers of the waters and lands shared among the First Nations hosts.

Joyce Murray, Minister of Fisheries, Oceans, and the Canadian Coast Guard, emphasized the vital role of the Ocean in people's lives, serving as a source of food, protection, transportation, renewable energy, and solace, as well as acting as a natural carbon sink in the fight against climate change.

Singer Andrea Menard of the Métis Nation shared her commitment to promoting the protection of water through her music, recognizing the responsibility she has as a woman and lifegiver to sing "giveaway songs" that others can use to help protect water.

Olivia Livingstone, representing the Young Professionals Committee of IMPAC5, welcomed the growing number of young participants and urged support from Ocean advocates, elders,

scientists, and politicians to reach the goal of protecting 30% of the Ocean by 2030.

Amandeep Singh, British Columbia Parliamentary Secretary for Environment, highlighted the deep ties of his province's people to the Ocean, integrated into the culture and economy.

Vladimir Ryabinin, Intergovernmental Oceanographic Commission of the UN Educational Scientific and Cultural Organization, stressed the need to continue protecting the Ocean with the active participation of Indigenous Peoples and local communities and using tools such as marine spatial planning.

Sandra Schwartz, CPAWS, highlighted the need for urgent action and better protection of the Ocean, underscoring that "we are only eight years away" from the target of protecting 30% of the Ocean.

Madhu Rao, IUCN World Commission on Protected Areas, stressed that the Ocean is facing unprecedented challenges due to overfishing, plastic pollution, and climate change. She said MPAs can be the critical piece to address these challenges while drawing on traditional knowledge to advance solutions.

Mary Simon, Canada's First Indigenous Governor General, closed the session by describing the Inuit's relationship to the Ocean. She conveyed that the "Ocean is a transformative power" and invited everyone to work on "healing the waters."

Building a Global Marine Protected Area Network

On [Saturday 4 February](#), Alexandra Dostal, Assistant Deputy Minister, Aquatic Ecosystem Sector, Fisheries and Oceans Canada, provided opening remarks.

Minna Epps, IUCN Ocean team, introduced the keynote presentations under the day's theme, and stressed the importance of protecting coasts as well as the high seas.

Ruth Mthembu, Ocean Youth Advocate, spoke of her drive for protecting the Ocean, the "world's greatest unifier," and reminded participants that protecting human well-being means protecting the Ocean.

Aulani Wilhelm, Conservation International, presented positive conservation examples of building MPAs globally, particularly through the recognition of tenure rights of Indigenous Peoples and local communities.

Cristina Mittermeier, Sea Legacy, emphasized that the right story changes everything "because, without stories, the Ocean dies in silence." She underscored that 30 by 30 is not a magical



Alexandra Dostal, Assistant Deputy Minister, Aquatic Ecosystems Fisheries and Oceans, Canada

number, but rather just a target, and called on Canada to create fully protected MPAs.

Working Together to Protect MPAs: On [Saturday 4 February](#), Kevin McNamee and Jenna Boom, Parks Canada, shared lessons learned in achieving an Inuit boundary in Canada through negotiations with the government to remove leases given to Shell. Francheska Krysiak, Parks Canada, spoke about the approval process for certain activities in Canadian MPAs. Siyabonga Dzulisa, Department of Forestry, Fisheries and the Environment, South Africa, shared how a network of 20 MPAs in his country contributed to a global network. Alejandra Villalobos, Friends Cocos Island, shared lessons around the five-year expansion process of MPAs on Cocos Island in Costa Rica.

Making 30x30 a Reality: Lessons Learned from Scaling Up to MPA Networks Across a Global Marine Portfolio: On [Saturday 4 February](#), Zau Lunn, Flora and Fauna International (FFI), shared Myanmar's experience and benefits of empowering communities through participation and collaboration to conserve resources and livelihoods by designating "locally managed marine areas." Tanguy Nicolas, Mwambao Coastal Community Network Tanzania, presented on community-based MPAs in Tanzania, highlighting how the approach provides a major opportunity for increasing the sustainable management of all MPAs.

Luisa Madruga, FFI, presented on the first MPA network in the Gulf of Guinea. Henry Duffy, FFI, discussed the establishment of MPAs in Cambodia, emphasizing ecological harm caused by plastic pollution and trawling, and lessons learned.

Putting Plans into Action: How the Marine Plan Partnership First Nations and British Columbia Provincial Partners Are Implementing Four Marine Spatial Plans: On [Saturday 4 February](#), Charlie Short, Ministry of Land, Water and Resource Stewardship, British Columbia, Canada, provided an overview of the development of four marine spatial plans. Rich Chapple, Central Coast Indigenous Resource Alliance (CCIRA), underlined the "Guardian Watchmen" as one of the highlights of the Marine Plan Partnership's implementation of the marine spatial plans.

Kyle Clifton, Gitga'at First Nation, underscored that the plans offer the opportunity to integrate Indigenous coastal knowledge into management and contribute to the recovery of abalone fisheries. Taylor Mason, CCIRA, noted that the work done under this partnership has provided a solid foundation for other work in



Kyle Clifton, Coordinator, Gitga'at First Nation

the region. Julien Braun, Haida Gwaii Marine Plan, highlighted capacity building as one of the successes of the Partnership.

Several panelists addressed the evolving relationship with economic and conservation stakeholders. Chapple highlighted the need for recognizing Indigenous stewardship principles.

Advances in Identifying and Recognizing Marine Other Effective Conservation Measures (OECMs) –Initial Lessons Learned on Their Contribution to the Global Area-Based Conservation Target: On [Saturday 4 February](#), Jannica Haldin, Baltic Marine Environment Protection Commission (Helsinki Commission or HELCOM), presented on OECMs and the role of the Regional Sea Conventions, with the Baltic Sea as a case study.

Souha El Asmi, UN Environment Programme Mediterranean Action Plan, shared the experience of OECMs in the Post-2020 Regional Strategy for protecting and conserving the Mediterranean through well connected and effective systems of marine and coastal protected areas and OECMs. Johnny Briggs, Pew Bertarelli Ocean Legacy Project, noted the role of NGOs in facilitating the identification of OECMs. Chloe Ready, Fisheries and Oceans Canada, presented on re-assessing Canada's marine OECMs against revised guidelines. Felipe Paredes, Ministry of the Environment, Chile, stressed the need for more understanding of the whole process in identifying and reporting on OECMs.

During the ensuing discussion, participants recognized that OECMs present a unique opportunity for stakeholders to get involved in conservation measures.

Coming Together to Conserve MPAs: On [Saturday 4 February](#), Tamlin Jefferson, University of Auckland, presented his research which assesses zoning methodologies for assisting decision making in conserving the Ocean while maintaining healthy fisheries.

Sarah Enright, University College Cork, introduced her work on transboundary protected areas in the Eastern Tropical Pacific, touching on the importance of tackling challenges and efforts for harmonizing different legal, political, and cultural systems.

Purificacio Canals, Mediterranean Network of MPA Managers, told the audience about her Network's efforts to strengthen connections between MPA managers.

Marce Gutiérrez-Graudiņš, Azul, spoke on the importance of elevating Latinx voices within marine conservation for achieving environmental justice.

Geopolitics and Transboundary MPAs: On [Saturday 4 February](#), Catherine Dognac, Wildlife Conservation Society, spoke about the initiative of a civil society network for the conservation of the sea surrounding Patagonia. She said it is focused on the representativity of protected areas in Chile, Argentina, and Brazil, and highlighted challenges of achieving effective protection.

Alain Pibot, French Biodiversity Agency, shared the results of a study and of a European seminar that sought to understand how the sociological, historical, and geopolitical contexts influence the effectiveness of protections in 22 European countries with coastal access.

Alvaro Alonso, Ministry for the Ecological Transition, Spain, presented on marine biodiversity and MPAs in Spain, noting an



Sylvia Earle, National Geographic Explorer

increase from 1% to 12% of protected areas over the past decade. Victoria Gonzáles, LIFE IP INTEMARES Project, spoke about the transboundary nature of this project, which aims to achieve the effective management of the marine spaces of the Natura 2000 Network.

Spotlight on Migratory Species: On [Saturday February 4](#), Jacqueline Montecinos, WWF Chile, presented on the Protecting Blue Corridors for whales initiative. She stressed the ecological role of whales in reinserting iron in the water columns supporting phytoplankton carbon sequestration and oxygen production.

Raphael Leprince, French Biodiversity Agency, underscored that the involvement of local stakeholders, in addition to scientific evidence to propose management measures, leads to more effective results.

The Forgotten Half of Our Planet: On [Tuesday 7 February](#), Sylvia Earle, National Geographic Explorer, reflected on all the things we still do not know about the high seas and deep seas. Noting the “depths” of our ignorance, she stated, “the deeper we go, the less we know.”

Sheena Talma, National Geographic Explorer, spoke about her research surrounding the Seychelles and Mauritius Joint Management Area.

Cassandra Brooks, University of Colorado Boulder, presented the path to establishing the Ross Sea MPA, the world’s largest MPA. Nichola Clark, Pew Charitable Trusts, reflected on the need for a high seas treaty.

Samuel Georgian, Marine Conservation Institute, shared information on two priority conservation areas on the high seas, the Salas y Gómez and Nazca ridges and the Emperor Seamounts, and why they matter.

Creating an Ocean Echo – Mobilizing a Youth-Led Movement to Support 30x30: On [Wednesday 8 February](#), Maanit Goes, EarthEcho, presented an overview of his organization’s work, including: its Youth Leadership Council, which provides a forum for discussion, community building, and networking across geographies; and its policy advocacy work in the US Congress.

Bruna Valença, EarthEcho, spoke about the youth-led movement and effort to build support for achieving the 30 by 30



Alain Pibot, Project Manager, Life Integrated Project Marha

target in Brazil, including challenges faced during unfavorable political situations. Amy Kenney, National Ocean Protection Coalition, which works to create and enhance equitable and effective MPAs in the US, reminded participants of the saying that “if you want to go fast, go alone; if you want to go farther, go together,” in reference to their efforts on coalition building work creating youth power within Ocean conservation.

Amelia Fortgang, EarthEcho, presented on their Connect to Protect project, which is building a digital community for youth-driven Ocean action, and encouraging youth leaders to join their GenSea network for connecting and collaborating with their growing community of fellow Ocean advocates.

Actively Managing Marine Protected Areas and Human Activity

On [Sunday February 5](#), Darlene Upton, Parks Canada introduced the keynote addresses under the theme.

Daniel Pauly, Sea Around Us, stated that if high seas MPAs are not established, the 30 by 30 target will be very difficult to achieve.

Q̄añístisla Michael Vegh, Heiltsuk Nation, called out discriminatory regulations against his ancestors that are still in place, and advocated for a journey of reconciliation between Indigenous Nations and governments, focusing on infrastructure and housing, employment, education, health, environment, self-government, and fisheries.

Sylvia Earle, National Geographic Explorer, called on people to carefully consider the interconnectivity of the planet, sharing photos and stories of the Ocean. She invited the audience to reflect on the relationship with the planet’s life support system, the Ocean, and rethink utilitarian and over-consumptive philosophies.

Community-based Management of Coral Reefs and Conservation Areas: On [Saturday 4 February](#), Juan Pablo Caldas, Conservation International, presented on community coral conservation efforts in San Andrés, Colombia, including large-scale coral nurseries and out-planting activities, coupled with capacity building and the certification of community coral gardeners. Gabriela Nava, Oceanus, began by reminding the audience that corals support approximately 25% of Ocean

inhabitants by providing food and shelter, with 30% having been lost over the past 50 years.

Neha Acharya-Patel, University of Victoria, presented on her research exploring alternatives to traditional bio-monitoring methods for assessing the health and abundance of rockfish species in the coastal waters of British Columbia. Rohmani Sulisyati, Karimunjawa National Park, Indonesia, spoke of efforts to limit the negative impacts of diving tourism in the Java Sea.

Other Effective Area-based Conservation Measures (OECMs): On [Sunday 5 February](#), Amber Himes-Cornell, Fishery Officer, Food and Agriculture Organization of the UN (FAO), spoke about FAO's handbook for identifying, evaluating, and reporting OECMs in marine fisheries.

Bani Maini, CPAWS, presented some lessons learned from using the MPAs guide to assess "Marine Refuges" in Canada, including the need for stronger protection standards and setting standards for the rest of the world as it sets up OECMs. Jessica Mitchell, Fisheries and Oceans Canada, presented Canada's 2022 Guidance for recognizing marine OECMs.

Conservation of Biodiversity: On [Sunday 5 February](#), Geneviève Faille, Fisheries and Oceans Canada, presented on her work assessing monitoring and sampling protocols in the Banc-des-Américains, Quebec.

Wayan Vega Santiago, WWF, introduced different coral and mangrove restoration methods in sites across the Sulu Sulawesi seascape, located between Indonesia, Malaysia, and the Philippines.

Kirsten Carter, Royal Society for the Protection of Birds, presented on her work for assessing carbon storage and sequestration of the English North Sea, stressing the importance of protecting existing carbon stocks, as well as highlighting the potential for future investment in restoring important carbon-storing ecosystems. Louise Forsblom, Finnish Environment Institute, spoke about her work mapping marine biodiversity across Finland's coast, and how the increase in such spatial knowledge has been helpful for informing MPA expansion.

Managing Human Impacts in MPAs: On [Sunday 5 February](#), Jacinthe Beauchamp, Fisheries and Oceans Canada, talked about developing coherent, inclusive, and successful initiatives that have positive results in managing human impact

in MPAs, such as adopting voluntary speed limits for ships, thus reducing noise pollution, and the risk of collision with whales and other vessels. Darren Cameron, Great Barrier Reef Marine Park Authority, spoke about partially protected areas, which support greater biomass target species compared to less regulated habitat protection zones, and generally create positive conservation outcomes for targeted fishes. Alice Chamberlain, Zoological Society of London, presented on tackling plastic pollution in the Chagos Archipelago in the Indian Ocean.

Mangroves and MPAs: On [Sunday 5 February](#), Valerie Vakhitova, East Carolina University, presented on the importance of protecting mangrove ecosystems for ensuring greater flood risk reduction benefits, highlighting the growing number of people and property at risk. Siddhartha Narayan, East Carolina University, presented on his work exploring methodologies for quantifying the benefits of flood risk reduction from mangrove conservation.

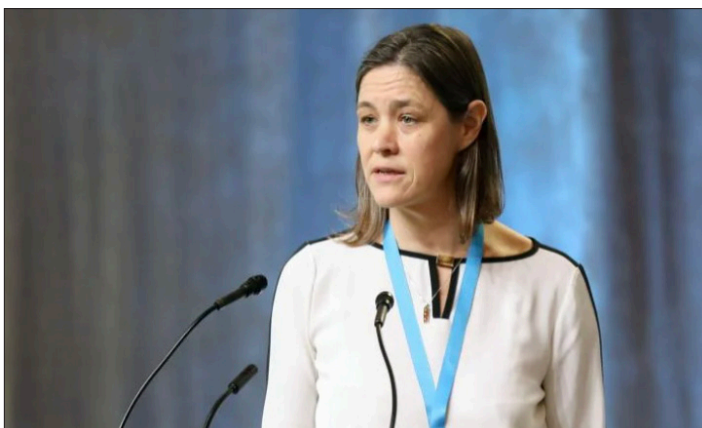
Samia Selim, University of Bangladesh, discussed the importance of the Sundarbans mangrove for providing ecosystem services as well as the local, cultural, and economic relevance of the area, including through shrimp fisheries.

Stefanie Simpson, The Nature Conservancy, highlighted mangroves as one of the blue carbon ecosystems that can be effectively managed.

Liza Goldberg, National Aeronautics and Space Administration, US, presented on her work to address a lack of accountability within mangrove MPAs governance by mapping and quantifying anthropogenic stress factors, including the identification of trends for successful MPA governing structures.

Community-Based Governance and Conservation of Coral Reefs: On [Sunday 5 February](#), Monique Ladds, New Zealand Department of Conservation, presented a monitoring and reporting framework for Aotearoa New Zealand marine reserve, developed in close cooperation with the local Indigenous Peoples.

Robert Sluka, A Rocha International, explained a governance baseline approach for an MPAs project in Ghana, Kenya, and Madagascar. Enrique Higuera, Municipality of Las Guaitecas, Chile, shared the ongoing process to develop a community-based MPA in a southern Chilean archipelago.



Amber Himes-Cornell, FAO



Bani Maini, CPAWS



Emilie Reuchlin-Hugenholtz, Doggerland Foundation

Flippin Paper Parks: On [Monday 6 February](#), this panel discussed how to turn paper parks into effectively managed MPAs. Emilie Reuchlin-Hugenholtz, Doggerland Foundation, stressed the need for more effective MPAs. Alexandra Barron, CPAWS, highlighted the value of co-management and Indigenous leadership. Lance Morgan, Marine Conservation Institute, presented on the California MPAs network.

Rili Djohani, Coral Triangle Center, presented the Atauro Island MPA case study in Timor-Leste, highlighting the key elements in enabling the flip from paper park to effective MPA, namely to build governance resilience, local ownership, resource-based partnerships, and alliances.

The ensuing discussion addressed some governance, regulatory, and biodiversity issues, including difficulties of enforcing the paper park boundaries, review and update of legislation, and capacity for stakeholder engagement.

The Impact of an IMPAC Congress: The Case of Chile with IMPAC4 in 2017: On [Wednesday 8 February](#), Diego Flores, Ministry of Environment, Chile, stressed that IMPAC4 was the first IMPAC held in Latin America and highlighted the challenges for a developing country to organize such a relevant global marine conservation event.

Carolina Jarpa, The Pew Charitable Trust, highlighting the professional roles of people involved in the organization of IMPAC4, talked about efforts to show respect for the identity of local communities and hear their voices, as well as actions to reduce the environmental footprint of the meeting.

Yacquelina Montecinos, WWF Chile, presented on the opportunity IMPAC4 provided to showcase the leadership of NGOs in marine conservation.

The ensuing discussion addressed, among other topics, the obstacles of full participation due to the lack of funding, visa issues, maintenance expenses, and language constraints.

Conserving Biodiversity and Addressing the Climate Crisis

On [Monday, 6 February](#), Cécile Tang, IMPAC5 Young Professional Committee, expressed the Committee's goal of representing youth voices at IMPAC5 and beyond. Britt Wray, Stanford University, referred to eco-anxiety as the chronic fear



Dalee Sambo Dorough, University of Alaska Anchorage

of ecological doom, but also as the trigger for harnessing eco-distress for a deeper sense of purpose.

Dalee Sambo Dorough, University of Alaska Anchorage, provided a historical overview of the Inuit Circumpolar Council, and spoke of the inherent right of Inuit people to their territories. She also spoke about their rights to manage their territories in accordance with their values, knowledge, and traditions. She stressed that marine conservation is an act of securing food sovereignty and fulfilling Inuit rights to self-determination.

In her presentation, Asha de Vos, Oceanswell, called out the colonial systems surrounding Ocean conservation. She referenced her experience of researchers from the Global North “parachuting” to countries of the Global South and presenting their research without equitable inclusion and leaving no long-term knowledge or investment. She pointed to financial and visa restrictions as significant hurdles for qualified researchers from the Global South, noting many colleagues had to miss this conference because of the places they come from.

Biodiversity Conservation – Diverse Strategies: On [Sunday 5 February](#), Jérôme Couvat, Sanctuaire Agoa, presented on the ongoing project of implementing a network of acoustic monitoring systems in the Caribbean Sea. Rebeca Melendez, Wildcoast-Costa Salvaje, presented a project that supports the MPA management through standardized protocols on the Mexican coast, as well as providing data on coral ecosystems.

Hélène Labach, Miraceti, spoke about the harmonization and centralization of cetacean data collection within MPAs in the Mediterranean. Katy Walker, FFI, presented the results of a project using baited remote underwater videos in the archipelago of São Tomé and Príncipe.

Global Exchange for Global Action: MPAs as Key Tools in Stemming Biodiversity Loss and Tackling Climate Change: On [Sunday 5 February](#), Anne Nicolas, French Biodiversity Agency, explained that the international partnership was launched in 2019 to highlight the role of MPAs in tackling climate change.

Maria Brown, National Marine Sanctuary, spoke about MPAs as nature-based solutions (NbS) to climate change while conserving nature. Hannah Cook, Joint Nature Conservation Committee, shared some evidence on MPAs as NbS, detailing a recent literature review which demonstrated that — linked to high levels of protection and the “MPA age” — they can significantly

enhance the carbon sequestration, coastal protection, reproductive capacity of marine organisms, fisheries catch, and income.

The presentations were followed by an interactive discussion that addressed topics such as the potential quantification of carbon sequestration to get carbon credits to fund MPAs, the creation of governance and data management structures to make carbon sequestration available for decision making, and ideas to develop metrics for evaluating MPA management that includes carbon sequestration's contribution to tackling climate change.

Engaging MPAs to Protect Whales for Biodiversity Conservation and Climate Change Solutions: On [Sunday 5 February](#). Rebecca Lent, International Whaling Commission, spoke about the importance of global whale conservation and showed the impact of whale sanctuaries, where no commercial whaling is allowed.

Heidi Pearson, University of Alaska Southeast, showed how whale recovery can help sequester and restore carbon. Pierre Beaufils, Whale Protection Policy, spoke about the North Atlantic right whale protection policy through protection measures, whale observations, vessel management measures, and the creation of zones with speed restrictions. John Armor, Office of National Marine Sanctuaries, National Oceanic and Atmospheric Administration (NOAA), US, spoke about strategies used in the US to protect whales and the links to climate change adaptation and mitigation.

Impact of Climate Change on MPAs: On [Monday 6 February](#), Steven Mana'oakamai Johnson, Oregon State University, presented his work on capturing multi-varied climate change effects on marine ecosystems. Lee Hannah, University of Queensland, introduced her university's work studying climate change speed rate to assist climate-smart planning by accounting for changing climate effects across the water column. Vincenzo Corelli, National Institute of Scientific Research, Canada, presented his work on creating a framework for what action would look like for climate-responsive MPA management.

Resistance to Deep-Sea Mining – Voices from Indigenous Peoples and Local Communities Across the Pacific: On [Monday 6 February](#), the session opened with a call to the ancestors by Solomon Kaho'ohalahala. Jessica Battle, WWF, noted that we are told that deep-sea mining is essential to extract minerals to help combat climate change, which is not true. Jonathan Mesulam, Alliance of Solwara Warriors, talked about an advocacy project to combat deep-sea mining licensing in Papua New Guinea. Judith Sayers, Nuu-chah-nulth Tribal Council, reflected on the difficulties of getting governments to acknowledge that they have territories in the Ocean.

Alejandro Olivera, Interamerican Association for Environmental Defense, spoke about a case related to granting concessions and permits to sea mining projects in Baja California Sur, that involved corruption and intimidation tactics from the soliciting company. Zeid Ra'ad Al Hussein, International Peace Institute, observed that, in reference to the International Seabed Authority, the guarantor of rights is the one posing the very threats in the seabed.

The discussion included interventions by attendees on: corruption and intimidation practices by companies in the Cook Islands regarding mining permits; litigation against the Canadian government using the UN Declaration on the Rights of Indigenous Peoples; and considering rights of nature.

Working Towards 30x30: On [Monday 6 February](#), Benne Wölfing, German Federal Agency for Nature Conservation, discussed the efficacy of a 30 percent area target using MPAs on the German North Sea as a case study. Jessica Couture, Conservation International, called for the use of an adaptive management approach in MPA management plan development and implementation.

Adele Pedder, Australian Marine Conservation Society, called for: political leadership, First Nations leadership, and bipartisan support; acting on science; and collaboration across jurisdictions to achieve the 30 by 30 target in Australia.

Tech-Based Conservation Solutions: On [Monday 6 February](#), Frederick Whoriskey, Ocean Tracking Network, presented on acoustic tracking for monitoring MPAs in the Maritimes, Canada. Amos Barkai, OLSPS Group, spoke of a novel, practical, and operational approach to the holistic management of fisheries.

Roanan DeMeyer, University of Victoria, presented some results of his ongoing research to contribute to the cetaceans and vessel presence baseline in the Gwaii Haanas National Marine Conservation Areas Reserve in Canada using manual analysis of passive acoustic monitoring.

The Role of MPAs in Climate Change Mitigation: On [Tuesday 7 February](#), Inti Kith, Charles Darwin Foundation, described the threats posed by invasive alien species in the Galapagos MPA and the use of settlement plates to assess the extent of marine bio-invasions.

Shona Murray, University of Western Australia, discussed her findings on how MPAs can be improved for oceanic sharks. Joachim Claudet, National Center for Scientific Research, Canada, explored ecological and social pathways for ecosystem resilience to climate change.

Connecting Ocean, Culture and Human Well-Being

On [Tuesday 7 February](#), Sean Russell, IMPAC5 Young Professionals Committee, welcomed participants, introducing the



Roanan DeMeyer, University of Victoria

day's theme, inviting participants to sign the IMPAC5 Youth Call to Action, a pledge to enact change for Ocean health and the good of the planet.

Hinano Teavai-Murphy, Tetiaroa Society, making a call that “the Ocean is not a barrier, it connects us, it is our home,” spoke about the importance of protecting the Ocean from harm for the sake of future generations.

Peter Thomson, UN Secretary-General's Special Envoy for the Ocean, stressed that the Kunming-Montreal Global Biodiversity Framework adopted in 2022 “is the most important universal agreement we have.” Emphasizing that more than half of the earth's oxygen comes from the Ocean, he underlined that there cannot be a healthy planet without a healthy Ocean, and warned that the Ocean's health is in decline.

Aminath Shauna, Minister of Environment Climate Change and Technology, Maldives, reflected on the fact that the 110 islands scattered across 19 atolls in the Indian Ocean exist because of coral reefs, which provide protection, food, and sustenance.

Indigenous Approaches to Marine and Coastal Conservation: Perspectives from Canada, Mexico and the United States: On [Sunday 5 February](#), Elder Saplek Bob Baker, from the Skwxwú7mesh Úxwumixw Squamish Nation, welcomed participants. Nang Kaa Klaagangs Ernie Glasdstone, Gwaii Haanas, Parks Canada, shared lessons learned from 30 years of collaboration and cooperative management of Gwaii Haanas, emphasizing that relationships are at the heart of success. Doug Neasloss, Kitasoo/Xai'xais Nation, shared experiences of the process for their designation of Gitdisdzu Lugyek Kitasu Bay as an MPA.

Rene Gustavo Chan Canul, Puerto Morelos Reef National Park, spoke of his experience as a part of the community brigade, providing an overview of conservation efforts, including activities taken to protect and maintain the health of important nesting sites, such as studies and ceremonies for understanding and commemorating turtles' life cycles.

Kalani Quiocho, NOAA, US, talked about his work as cultural resource coordinator within the Pacific Islands Region, including the Papahānaumokuākea Marine National Monument, and what it means to bring ancestral connections, Hawaiian language, and knowledge into marine conservation.



Peter Thomson, UN Secretary-General's Special Envoy for the Ocean



Aminath Shauna, Minister of Environment, Climate Change and Technology, Maldives

Elder Saplek Bob Baker, Squamish Nation, closed the session with a song, inviting participants to “sail on.”

Decolonizing Environmental Non-Government Organization Advocacy Work for Marine Conservation and MPAs: On [Monday 6 February](#), Kate MacMillan, CPAWS, reminded attendees that Indigenous Peoples successfully stewarded their lands in the area before it was known as Canada. Gwen Bridge, Gwen Bridge Consulting, reflected on the term “decolonization” and reminded participants about the assumption in western systems that humans have the authority to make decisions over nature, while Indigenous practices have a different understanding that focuses on conservation. Natalie Groulx, CPAWS, spoke about regulations that take rights away from Indigenous territories. Véronique Bussi eres, CPAWS, explained that they work closely with Indigenous communities and establish long-lasting partnerships.

The Voice of the Ocean Room: On [Monday 6 February](#), Frank Murphy, Tetiaroa Society, moderated the session. GwaaĠanad Diane Brown, Haida Nation, told participants that “we all come from the Ocean, it is who we are”.

L aliy  sila Frank Brown, Heiltsuk Nation, spoke in honor of those who have resisted colonial efforts of homogenizing and undoing cultures, knowledge, and languages.

Tamatoa Bambridge, National Center for Scientific Research, French Polynesia, introduced the R ahui Forum and Resource Center, promoting a range of management measures to sustainably preserve coral ecosystems by working alongside communities.

Dan Hikuroa, UNESCO Aotearoa New Zealand Culture Commissioner, emphasized that the Ocean is facing an existential crisis and that Indigenous Peoples are the ones showing the way on how to address it.

Aulani Wilhelm, Conservation International, highlighted the need for wayfinders and reconnecting to Indigenous Peoples ancestors' knowledge to help find the way to address the crises facing the Ocean.

Working Together to Conserve: On [Monday 6 February](#), Magena Warrior, LGL Limited, presented a case study on the challenges and opportunities for the Mi'kmaq Nation to play a greater role in MPA governance.



V eronique Bussi eres, CPAWS

Achare Elvis Ayamba, Environment & Food Foundation, spoke about the value of Indigenous People in MPA management, and his work in creating awareness about a significant gap in the recognition and support of Indigenous governance and advocacy systems in international policy discussions regarding conservation work.

Sarah Mynott, University of Victoria, presented a project in Brazil, where she used local students to deliver questionnaires to gather data about climate change to identify community needs and enable knowledge exchange.

Seascapes: Community and Indigenous Leadership as Core to Large-Scale Ocean Management: On [Monday 6 February](#), Kris Thebu, Raja Amat Traditional Council of Leaders, spoke about work to champion local teams and traditional owners at the Birds Head Seascape of West Papua.

Christian Lavoie, Conservation International, presented on fisheries recovery and mangrove management programmes in the Eastern Tropical Pacific Seascape, highlighting interconnectivity between the Ocean, culture, and human well-being.

Semisi Meo, Conservation International, presented on the Lau Seascape Initiative, reflecting on collaboration among chiefs, and the initiative’s attempts to improve cultural integrity, food security, and sustainable livelihoods by leveraging traditional values through a “ridge to reef” and “hook to cook” approach.

An ‘Orca’strated Approach to Supporting Recovery Efforts for Southern Resident Killer Whales in Coastal British Columbia: On [Tuesday 7 February](#), Jennifer Takimishyn, Pacific Rim National Park Reserve, spoke about collaborations with First Nations for management within the reserve to enhance the protection of the resident orca – kakawin – pods.

SUM ,t David Dick, WS NEC Leadership Council, reminded the audience of Tahlequah, the orca who carried her stillborn calf for 17 days to remind us of the harm we are bringing upon the Ocean.

Martin Wayne, Saturna Island Marine Research and Education Society, spoke of a citizen science network of shore-based sighters to monitor and report on whale and vessel movement in the area. Jessica Scott, Ocean Wise, illustrated the impact that vessels have on whale communication and lives.

Discussions touched upon the importance of 10-knot speed limits on vessels, to reduce their impact on marine life, and the importance of building international communication networks.

How World Heritage Listed Reefs Empower Communities to Adapt to a Changing Climate: On [Tuesday 7 February](#), Fanny Douv ere, UNESCO’s World Heritage Marine Programme, spoke of the incredible challenge posed by the 30 by 30 target, which implies expanding to almost triple the current MPA surface in the next seven years.

Theresa Fyffe, Great Barrier Reef Foundation, discussed the Resilient Reefs Initiative carried out in MPAs in Belize, Palau, New Caledonia, and Australia, highlighting that they are built on local priorities and contexts.

Am elie S chaud, New Caledonia Biodiversity Agency, spoke of the resilience strategy for the Lagoons of the New Caledonia World Heritage site.

Chantalle Samuels, Coastal Zone Management Authority and Institute, Belize, presented on embedding resilience-based management strategies in Belize’s World Heritage site through leveraging community engagement. He showed a flagship strategy with three key actions: enabling livelihood diversity, ecosystem protection and restoration, and improved watershed management governance.

Youth Engaging Youth: On [Tuesday 7 February](#), Frankie Marquez, Ocean Wise, spoke on youth empowerment in organizations, describing her organization’s way of creating opportunities, such as enabling representation on the board of the organization. On hiring youth, Jason Barron, Nature Canada, explained that no specific skillset would be necessary when applying as a young person and focused on creating opportunities for youth.

Jenn Stevens, Learning for Sustainable Futures, underscored the importance of creating opportunities in the school system. Joshua Komangapik, Students on Ice, described the importance of facilitating ways youth can contribute in culturally relevant ways. Carter McNelly, Canadian Network for Ocean Education, underscored the importance of a work relationship that does not feel transactional.

Gender and Marine Conservation: On [Tuesday 7 February](#), Mez Baker-Medard, Middlebury College, presented on her work



Jenn Stevens, Learning for a Sustainable Future

studying the participation of women in Madagascar’s small-scale fisheries.

Vatsoa Rakotondrazafy, MIHARI Network, shared her network’s work representing and defending small-scale fishers’ rights in Madagascar, and highlighting the absence of women on its forums and in its decision-making processes. Marianne Randriamihaja, FisherWomen Leadership Programme, Madagascar, spoke of efforts taken to increase women’s presence and visibility in fisheries.

Ivonne Juarez-Serna, Middlebury College, presented on work with the previous speakers, highlighting that: gender consciousness means inclusive and more visible access; work should be rooted in place-based knowledge; and the role of men as allies must be considered in strategies for resistance and resilience.

Connecting Communities to Conservation: On [Tuesday 7 February](#), Marie Hascoet, French Biodiversity Agency, spoke about work at the Iroise Natural Marine Park, in the Molène archipelago aimed at enhancing the visibility of Bronze Age fishing sites. Hannah Bregulla, Council of the Haida Nation, presented on the S’Gaan K’inghlas – Bowie Seamount Curriculum, which sought to encourage stewardship amongst Haida students by grounding activities in a place-based two-eyed approach that centers Haida values and language.

Mia Strand, Nelson Mandela University, spoke about the lack of knowledge on marine cultural heritage and local knowledge within South African MPA governance, arguing that this leads to a silence of Indigenous and local knowledges.

Ilena Zanella, Misión Tiburón, presented on their work in Golfo Dulce in the Cocos Marine Area off the coast of Costa Rica, which engages coastal communities in Ocean conservation aimed at improving the protection of wetlands used as nursery areas by the critically endangered hammerhead shark.

Frédéric Fasquel, French Biodiversity Agency, spoke about the Educational Managed Marine Area programme, which involves students aged 9 to 15 by entrusting them with the management of a section of coastline close to their school.

Addressing Challenges in MPA Management: On [Tuesday 7 February](#), Stephen Ban, British Columbia Ministry of Environment, spoke about the implementation of MPAs in the British Columbia Parks system.

Anne Cadoret, Aix-Marseille University, and Jean-Eudes Beuret, Rennes Agro Institute, shared their research on a generic MPA model based on a comparative analysis of 13 MPAs. They highlighted that many times the opposition to MPAs is not against conservation, but rather against the design and implementation model.

Veronica Relano, University of British Columbia, discussed the San Antonio MPA case study, and reflected on the social, economic, and ecological consequences underpinning the management of this MPA.

Ecological Grief: Young Professionals Using Transformative Change to Build a Better Tomorrow: On [Tuesday 7 February](#), this session served as a space to reflect

on experiences with ecological grief, ecological anxiety, and solastalgia (distress caused by the transformation and degradation of one’s home environment), by: Noemie Roy, IMPAC5 Secretariat; Carter McNelly, Parks Canada; Caleigh Delle Palme, Parks Canada; Nadia Dalili, Saguenay–St. Lawrence Marine Park; Elizabeth Melis, GREMM; and Emily Wells, Parks Canada. They also shared lessons on transformative learning and self-examination, utilizing coping strategies, such as meditation, photography, activism, and community engagement.

Social Equity and Marine Conservation: On [Wednesday 8 February](#), Nathan Bennett, IUCN, called for more attention on “how” marine conservation is carried out, followed by group discussions on existing equity issues not addressed at IMPAC5.

Danika Kleiber, NOAA, US, stressed the importance of training to incorporate diversity in languages, cultures, and knowledge, alongside natural scientific training.

Elise Huffer, Commission on Environmental, Economic and Social Policy, spoke about equity in data production and management, sharing insights into the inclusion of Indigenous knowledge in policymaking.

María José Barragán Paladines, Darwin Foundation, discussed how the stories we share about biodiversity rich areas—in her case the Galapagos—often ignore human livelihoods.

Philip Akins, Marine Plan Partnership, called for an ethic of responsibility within governance thinking and practice.

Nathalie Ban, University of Victoria, underscored the importance of qualitative and narrative approaches for incorporating local communities’ perspectives and knowledges within marine conservation.

Aulani Wilhelm, Conservation International, called attention to the power dynamics in “inclusive” dialogues, explaining that often it is not a question about empowering people, but rather about getting “out of the way” for leaders and local communities on the ground.

Gina Waaadluxan Kilguhlga: Lessons for MPA Planning and Management Learned from Gwaii Haanas: Ernie Gladstone, Parks Canada, provided an overview of the Gwaii Haanas’ history over the last 30 years. Suudahl Cindy Boyko, Council of the Haida Nation, acknowledged that reconciliation



Carter McNelly, Canadian Network for Ocean Education



Patricia Scotland, Secretary-General, Commonwealth of Nations

seems to be the new pathway, meaning working together and finding a place within themselves for understanding each other.

Lynn Lee, Parks Canada, and Gwiisihlgaa Dan McNeill, Haida Gwaii Integrated Advisory Committee, spoke of the Chiixuu Tll iinasdll kelp forest restoration project, rooted in Haida ethics and values for building trust and knowledge. Grant Dovey, Underwater Harvesters Association, presented a project on commercial fishing in Gwaii Haanas, where they developed a zoning map for commercial fisheries in collaboration with small-scale fishers and the commercial fishing industry.

Nang Jingwas Russ Jones, Council of the Haida Nation, presented a project in Gwaii Haanas focused on enhancing marine safety and environmental protection through strengthened collaboration in order to reduce impacts and conflicts in local waterways associated with commercial shipping.

Ella-Kari Muhl, University of Waterloo, presented some conclusions of her postgraduate studies on measuring the co-development of governance indicators to support implementation of a land-sea-people plan in Gwaii Haanas.

Advancing Conservation in the Blue Economy

On [Wednesday 8 February](#), introducing the day's theme, Patricia Scotland, Commonwealth Secretary-General, underscored that funds dedicated for achieving Sustainable Development Goal 14 (SDG 14) on life below water are the lowest among the 17 SDGs.

Cloy-e-iss Judith Sayers, Nuuchahnulth Tribal Council, highlighted some of the Hupacasath First Nation practices, including training young people on traditional fishing practices, the use and processing of plants, seaweed industries, and fish processing, among others, all of which are based on the term *hishuk'ish tsawalk* ("everything is one, everything is connected"). She underscored that "you can't have a blue economy unless you have the involvement and consent of Indigenous Peoples."

Titouan Bernicot, Coral Gardeners, shared how after witnessing a coral bleach event as a teenager, he began his journey to becoming a coral gardener.

Marine Conservation and Sustainable Aquaculture, for Marine Protected Areas and Coastal Communities: On [Saturday 4 February](#), Emmanuelle Cochen-Shacham, IUCN, spoke about IUCN's Global Standards for NbS. Raphaëla le Gouvello, IUCN, discussed NbS applied to aquaculture. Tiffany Walters, The Nature Conservancy, shared examples of restorative aquaculture in providing benefits to the environment, as well as for climate change mitigation.

François Simard, IUCN, moderated the discussion, which addressed, *inter alia*: outreach and education strategies; Chile's aquaculture strategy in its MPAs; developing regulations in conjunction with industry; the cultural value of aquaculture; and applying Indigenous knowledge in Hawaiian fishponds.

Sustainable Fisheries Management: On [Wednesday 8 February](#), Anthony Charles, Saint Mary's University, described the role of coastal communities and small-scale fisheries in leading the way on environmental stewardship and marine conservation.

Antonio Caló, University of Palermo, discussed the role of MPAs in providing clear ecological benefits, even in the presence of some extractive activities, such as small-scale fisheries, as long as they are sustainable. Juan Pablo Caldas, Conservation International, discussed the "EcoGourmet" business model to promote value chains between commercial partners and community-based organizations to advance sustainability in fishery resources.

Sustainable Finance for MPAs: On [Wednesday 8 February](#), Valdemar Andrade, Turneffe Atoll Sustainability Association, highlighted the case study of Turneffe Atoll Marine Reserve in Belize, where, together with [Blue Finance](#), they developed a business model based on raising revenue from sustainable tourism to support the budget of the Reserve.

Grace Gatapang, Blue Alliance Philippines, discussed her organization's work with Blue Finance in the Northern Oriental Mindoro to improve the management and financial sustainability of the MPAs by integrating science and community-based approaches, as well as tools to generate sustainable revenue through mangrove restoration and tourism projects.



François Simard, IUCN



Bruno Oberle, Director-General, IUCN

Masanori Kobayashi, Sasakawa Peace Foundation, described the mozuku seaweed farming and coral plantation in Onnason, Okinawa, as a blue finance solution. Torsten Thiele, Global Ocean Trust, highlighted the importance of sustainable finance as a tool for the high seas.

Closing of IMPAC5

During the closing of IMPAC5 on [Wednesday 8 February](#), Joyce Murray, Minister of Fisheries, Oceans, and the Canadian Coast Guard, noting that “we have momentum at IMPAC5,” urged everyone to protect the Ocean through Indigenous-led processes. Murray announced that Senegal would host IMPAC6. A “magic paddle,” made of cedar and abalone shells, by Gerry Sheena from the Interior Salish Nation, titled “The Journey,” which has engraved the names of all IMPAC hosts, was then presented.

Steven Guilbeault, Minister of Environment and Climate Change, Canada, called for everyone to advocate for Ocean protection beyond this congress.

Melissa White, IMPAC5 Youth Professionals Committee, acknowledging their inherited duties, stated that we all have one mother, Mother Earth, and that without the voices of young people and Indigenous knowledge, we will not succeed in our conservation efforts.

Sandra Schwartz, CPAWS, showing appreciation for the First Nations hosts that received all participants onto their territories, highlighted Canadian progress on MPAs announced during IMPAC5: New Federal Policy National Conservation Areas; Canada’s pathway to 25% conservation of marine and coastal areas by 2025; and new guidance to implement minimal protection standards for new federal MPAs.

Bruno Oberle, Director-General, IUCN, reflected that this is the first international gathering since the adoption of the Kunming-Montreal Global Biodiversity Framework, which provided the opportunity to address “a sea” of commitments on oceanic conservation with different stakeholders, and recognize and support the custodians of the Ocean.

Brett Sparrow, x^wməθk^wəy^əm Musqueam Nation, thanked participants for listening and learning about their Nation.

Sxwixwtn Wilson Williams, S^kwxwú7mesh Úxwumixw Squamish Nation, reminded participants that, alongside passing the paddle to Senegal, “we prepare for a stronger journey to protect 30% of the Ocean.”

Charlene Aleck, səliwətał Tsleil-Waututh Nation, sang a song calling on her ancestors to provide for participants’ safe return home. She invited everyone to “visit the water, touch the water and leave some of your good work with her and take some of her strength back home with you.” The meeting ended with a dance performance by First Nations members.

Leadership Forum

On Thursday, 9 February, Manon Larocque, Fisheries and Oceans Canada, welcomed participants to the Leadership Forum in the name of the organizers. Wayne Sparrow, x^wməθk^wəy^əm Musqueam First Nation, said that his Nation is a fishing community and always has been, and that his culture relies on the waters, the animals, and the fish. He acknowledged the Federal Government for the work done on their behalf.

Wilson Williams, S^kwxwú7mesh Squamish First Nation, said that participants are now the smoke signals that go back to their homes as a witness of the work done at this Congress. He said he is hopeful the 30 by 30 target can be met and stressed the importance of including Indigenous Peoples to revive the history of the lands and waters across the world.

Carleen Thomas, səliwətał Tsleil Waututh First Nation, talked about the importance of sharing her family tree to inform the audience that she knows who she is and where she comes from. She called on the importance of Indigenous communities to work with all levels of government.

Steven Guilbeault, Minister of Environment and Climate Change, Canada, said that the Kunming-Montreal Global Biodiversity Framework charts a course away from the relentless exploitation of our planet, with a whole-of-planet and whole-of-society approach. He noted that in moving forward participants must take into account diverse perspectives, stating that “the simple reality is that we won’t achieve our targets without full Indigenous participation.”



Carleen Thomas, Tsleil Waututh Nation



Co-Moderator **Kristian Teleki**, Head, Secretariat of the High-Level Panel for a Sustainable Ocean Economy, World Resources Institute

Joyce Murray, Minister of Fisheries and Oceans, Canada, stated that, among participants, the overwhelming consensus is that the world must work more quickly and more skillfully to meet the 30 by 30 target. She stressed that the MPA network must be located in the place that will result in the most effective protection of the Ocean, and not where it is most convenient. She also called for increasing protection of the high seas, including setting up migratory corridors for species.

Breakout Session – Protecting Biodiversity through MPA Management and Industry Contributions: Moderated by Kristian Teleki, World Resource Institute, and Judith Sayers, Nuu-chah-nulth Tribal Council, this breakout session addressed the relevance of MPAs from a broad perspective, besides protecting biodiversity, highlighting the benefits they provide for society and the blue economy. The concept that the “Ocean affects everyone” was emphasized, as was the crucial role the private sector plays both by complying with marine conservation regulations and in transforming their industries to be sustainably managed, for both climate and conservation objectives. The relevance of engaging with Indigenous Peoples, coastal communities, youth, small-scale fishermen, and all the stakeholders from the beginning was also highlighted.

Among successful experiences and good practices, speakers mentioned progress and ongoing work by industry on addressing underwater noise, and collision avoidance through effective leadership and partnerships. Participants also discussed the benefits of engaging users and partners in the development of integrated management plans for protected sites. The benefits of data sharing across private and public sources were explored, particularly with respect to how earth observation satellite data is being used to support MPA monitoring.

On ambitions beyond 2030, one participant questioned whether working with the shipping and fishing industries is a solution and underscored that prioritizing biodiversity should be the goal. Other suggestions included: finding tools beyond MPAs to address illegal unreported and unregulated fishing (IUU); communicating the potential of MPAs across contexts; linking global to local markets for harvesting; and translating the value of the Ocean into people’s lives. Others underscored that the issue is not only achieving marine conservation targets but the state of Ocean health as well when they are reached.

Breakout Session – Indigenous-led Conservation: This session was chaired by Hilu Tagoona, Oceans North, and Dallas Smith, Coast Funds, who began by asking three key questions to guide discussions: how conservation initiatives can best respect Indigenous rights and knowledge; how non-Indigenous actors can best support Indigenous ambitions; and what sequencing is needed for this process. With permission of the First Nation hosts, Solomon Kaho’ohalahala, Maui Nui Makai Network, provided an opening chant, welcoming ancestors into the session.

Panel members highlighted violent colonial pasts and presents, underlining that the paths forward must center on Indigenous knowledge, worldviews, leadership, and self-determination, and be guided by reconciliation. One participant stressed that MPAs, for them, are a proxy for social justice and protecting communities, culture, and future generations.

Many highlighted that Indigenous voices were brought to the MPA establishment tables too late, and that it is important for potential partners to: be prepared to rethink their frameworks and approaches; see their work, not as leaders, but as supporters; and align their priorities with those of First Nations. Speakers stressed that oral traditions must be acknowledged and respected, and their values must lead the work ahead.

Participants also underlined the responsibility of potential partners in educating themselves on First Nation history and culture. Some pointed out that achieving political goals on a timeline, such as 30 by 30, should not be done at the expense of establishing trusting and meaningful relationships.

Breakout Session – Conservation Financing: Participants from different sectors met to discuss and share different possibilities and options to fund sustainable Ocean management in a session co-facilitated by Torsten Thiele, Global Ocean Trust, and Kate Brown, Global Island Partnership. Many agreed that conservation funding must shift towards new ways of understanding Ocean management, with particular emphasis on community-led and owned projects and respect for Indigenous practices. Some shared possible strategies for funding that go beyond public or private sources, such as incorporating fees for use of the deep sea.

Panelists agreed that mobilizing the many millions of dollars already available for effective projects is still a challenge.



Co-Moderator **Dallas Smith**, Board of Directors Chairs, Coast Funds

Leadership Roundtable: Multilateral Cooperation to Reach Global Marine Conservation Targets: This event was moderated by David Cooper, Acting Executive Secretary, Convention on Biological Diversity, and Patricia Scotland, Commonwealth Secretary-General, United Kingdom (UK).

The event began with a recap of breakout session discussions by the co-moderators. On conservation financing, Thiele and Brown highlighted, *inter alia*: innovative financial mechanisms and how to scale them; funding for Indigenous-led marine conservation; a call to the G7 to commit to development funding; and delivering scalable and sizeable investment.

On Indigenous-led conservation, Tagoona and Smith highlighted, *inter alia*: sequencing in the design of MPAs; MPAs as a proxy for social, environmental, political, and economic justice; gaining trust; western science catching up to traditional knowledge; and the need to think about managing areas outside of MPAs.

On protecting biodiversity through MPA management and industry contributions, Teleki and Sayers highlighted, *inter alia*: engaging in education about the value of MPAs; involvement of youth; inclusive collaboration; the need to understand each other's language; access to technology; more international gatherings; and more industry involvement.

In the follow-up dialogue, Regional Chief Terry Teegee (British Columbia), Assembly of First Nations, spoke of reconciling with the "terrible" past, emphasizing there is still a long road ahead that requires hard discussions with the government in terms of recognizing First Nations' rights to sovereignty and self-determination. He underscored the cost of wealth on nature and Indigenous Peoples and the current disconnection with nature triggered by mass consumerism and capitalism.

Aminath Shauna, Minister of Environment, Maldives, stressed that the very existence of her country depends on limiting the Earth's warming to 1.5 degrees Celsius and achieving the Global Biodiversity Targets in 82 months.

Lord Richard Benyon, Minister of State for Biosecurity, Marine and Rural Affairs, UK, underscored the importance of reaching the 30 by 30 target in the UK in partnership with local fishing communities.

Heremoana Maamaatuaiahutapu, Minister of Environment and Culture, French Polynesia, asked for more respect for how "we build our house; clean our house; and manage our house" and expressed hope that the 30 by 30 goal does not become a new form of colonization.

Steven Guilbeault, Minister of Environment and Climate Change, Canada, underscored existing challenges in communicating about conservation initiatives, such as fighting climate change and plastic pollution, which often result in opposition towards them.

Joshua Thomas, Chief Executive Officer, Great Barrier Reef Marine Park Authority, Australia, emphasized the importance of Blue Carbon grassroots initiatives.

Jean Hervé Bakarizafy, Director of Development, Diana Region, Madagascar, highlighted the need to mobilize resources.



Joshua Thomas, Chief Executive Officer, Great Barrier Reef Marine Park Authority, Australia

Mamadou Sidibe, Senegal, urged tackling the problems of conservation, biodiversity loss, and climate change with a holistic view and to focus on implementing already-agreed instruments.

In the ensuing discussion, a participant called for investment in OECMs in support of local communities and Indigenous Peoples, even if these are not formalized, because the future of 30 by 30 lies in their hands. Others emphasized that 30% of marine protection should not be seen as a ceiling, but a floor, because there is still so much more to do.

Maxine Burkett, Deputy Assistant Secretary for Oceans, Fisheries and Polar Affairs, US, highlighted several important initiatives, including the Pacific Ocean's migratory corridor and the Central Arctic Ocean Agreement, which not only banned commercial fishing before it began, but also incorporates Indigenous knowledge into its science.

Jérémie Katidjo Monnier, New Caledonia, stressed the importance of banning deep sea mining, stating that, as one of the biggest exporters of nickel, they did not want to see the harm of its extraction from land brought into the seas.

Herb Nakimayak, Vice President of International Affairs, Inuit Circumpolar Council, reflected on co-managed and Inuit-led initiatives across the Arctic, stating that, in the past, Indigenous Peoples have always had to "jump through the hoops" of the federal government to realize their visions. He suggested that now the government must consider how it can meet the requirements of Indigenous Peoples.

Joyce Murray, Minister of Fisheries and Oceans, Canada, in concluding remarks, reiterated her thanks to the First Nations hosts in welcoming all participants into their territories. Reflecting on the diversity of people that have come together to tackle these pressing issues facing the planet, she identified a shared determination to protect and restore Ocean ecosystems. Highlighting that Ocean health is critical in the fight against climate change, she underpinned the importance of the congress for sharing best practices and building trust, underscoring the importance of Indigenous leadership, science, and Indigenous knowledge.

Upcoming Meetings

8th Our Ocean Conference: This Conference will highlight the importance of knowledge as the basis of actions and policies to ensure protection of the Ocean, responsible management of marine resources, and sustainable future economic growth.

dates: 2-3 March 2023 **location:** Panama City, Panama **www:** ouroceanpanama2023.gob.pa/about-the-conference/

Resumed BBNJ IGC-5.2: This resumed session of the Intergovernmental Conference will continue to negotiate, and possibly agree on, an international legally binding instrument under the UN Convention on the Law of the Sea on the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction. **dates:** 20 February – 3 March 2023 **location:** UN Headquarters, New York, US **www:** un.org/bbnj

Sharks MoU Meeting: The 4th Meeting of Signatories (MOS4) to the Memorandum of Understanding on the Conservation of Migratory Sharks will consider conservation measures, including habitat and species conservation, and threats, as well as proposals to amend the MoU and its annexes. **dates:** 28 February – 2 March 2023 **location:** Bonn, Germany **www:** cms.int/sharks/en/SharksMOS4

Plastic Pollution INC-2: The 2nd meeting of the Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, including in the marine environment, will consider a document, prepared by the Secretariat, with potential options for elements towards an international legally binding instrument. **dates:** 22-26 May 2023 **location:** Paris, France **www:** unep.org/about-un-environment/inc-plastic-pollution

Resumed Review Conference on the UN Fish Stocks Agreement 2023: This conference is mandated to assess the effectiveness of the agreement and the adequacy of its provisions and, if necessary, propose means of strengthening the substance and methods of implementation of those provisions. **dates:** 22-26 May 2023 **location:** UN Headquarters, New York **www:** un.org/Depts/los/

64th Meeting of the GEF Council: The next meeting of the GEF Council is expected to take place in June 2023. **dates:** TBC **location:** TBC **www:** thegef.org/events

CITES AC32: The thirty-second meeting of the CITES Animals Committee will meet in June. **dates:** 19-23 June 2023 **location:** Geneva, Switzerland **www:** cites.org

UN High-level Political Forum on Sustainable Development: The 2023 HLPF, under the auspices of the UN Economic and Social Council, will take place on the theme “Accelerating the recovery from the coronavirus disease (COVID-19) and the full implementation of the 2030 Agenda for Sustainable Development at all levels.” It will include in-depth reviews of SDGs 6 (clean water and sanitation), 7 (affordable and clean energy), 9 (industry, innovation and infrastructure), 11 (sustainable cities and communities), and 17 (partnerships for the Goals). **dates:** 10-19 July 2023 **location:** UN Headquarters, New York, US **www:** hlpf.un.org/2023

IPBES-10: The 10th Session of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services will be held under its mandate to assesses

the state of biodiversity and the ecosystem services it provides to society, in response to requests from decision makers. **dates:** 28 August - 2 September 2023 **location:** Bonn, Germany **www:** ipbes.net/events/ipbes-10

SDG Summit: This summit is the quadrennial meeting of the HLPF under the auspices of the UN General Assembly. The 2023 Summit will be the second since the adoption of the SDGs, and will take place at the midpoint of implementation of the 2030 Agenda for Sustainable Development. Leaders are expected to comprehensively review progress in implementing the 2030 Agenda and the SDGs, provide political guidance for the way forward, and consider new science-based solutions for accelerating the full implementation of the SDGs in the remaining years towards 2030. **dates:** 19-20 September 2023 **location:** UN Headquarters, New York, US **www:** hlpf.un.org/

CMS COP14: The 14th meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals will convene to review implementation of the Convention. CMS, also known as the Bonn Convention, recognizes that states must be the protectors of migratory species that live within or pass through their national jurisdictions and aims to conserve terrestrial, marine, and avian migratory species throughout their ranges. **dates:** 23-28 October 2023 **location:** Samarkand, Uzbekistan **www:** cms.int/en

CITES SC77: The 77th meeting of the CITES Standing Committee will meet in November. **dates:** 6-10 November 2023 **location:** Geneva, Switzerland **www:** cites.org

UN Biodiversity Conference (CBD COP 16): COP 16 will convene in 2024 in Türkiye on a date to be decided. **dates:** last quarter 2024 (TBC) **location:** Türkiye **www:** cbd.int/

6th International Marine Protected Areas Congress (IMPAC6): This Congress will bring together Ocean conservation professionals to review progress towards the 30 by 30 target. **dates:** (tbd) 2027 **location:** Senegal

For additional upcoming events, see sdg.iisd.org/

Glossary

CCIRA	Central Coast Indigenous Resource Alliance
CPAWS	Canadian Parks and Wilderness Society
FFI	Flora and Fauna International
IMPAC	International Marine Protected Areas Congress
IUCN	International Union for Conservation of Nature
MPA	Marine Protected Area
NbS	Nature-based Solutions
NOAA US	National Oceanic and Atmospheric Administration
SDG	Sustainable Development Goal