

The background of the cover is a photograph of a coastal scene at sunset or sunrise. The sky is a mix of blue, orange, and pink. In the middle ground, several wind turbines are silhouetted against the sky. In the foreground, a sailboat is on the water, its reflection visible in the calm surface.

monaco

BLUE INITIATIVE

9th
edition

April
8th & 9th
2018

EDINBURGH

Old College,
University of Edinburgh

EXECUTIVE SUMMARY
RECOMMENDATIONS



Participants of the Monaco Blue Initiative 2018 - Edinburgh

© Douglas Robertson

Launched in 2010 upon the initiative of HSH Prince Albert II of Monaco, the Monaco Blue Initiative is a platform for discussion co-organized by the Oceanographic Institute, Prince Albert I of Monaco Foundation and the Prince Albert II of Monaco Foundation. Its members meet annually to discuss the current and anticipate the future global challenges of ocean management and conservation. This event provides a valuable framework for fostering discussions between business, scientific representatives and policy makers, and for analysing and highlighting the possible synergies between the protection of the marine environment and socio-economic development.

EXECUTIVE SUMMARY RECOMMENDATIONS

The 9th edition of the Monaco Blue Initiative was held in Edinburgh (Scotland) from April 8th to 9th, 2018 in partnership with the University of Edinburgh under the patronage of HSH Prince Albert II of Monaco and HRH The Princess Royal, Chancellor of the University.

Some 100 participants from around the world, from government and policy circles, international organisations, civil society, science and the private sector exchanged views and experiences around three themes: Blue Growth; Marine Protected Areas and Climate Change; and MPAs and Aquaculture.

The Scottish venue provided the opportunity to look more closely at the North Sea and Arctic regions, which present specific challenges and opportunities in the context of climate change and growing food and energy needs. The day opened and closed with addresses by HSH Prince Albert II of Monaco and HRH The Princess Royal respectively, and featured keynote speeches by UN Special Oceans Envoy Mr. Peter Thomson and Canada's Minister of Fisheries and Oceans, Honorable Dominic LeBlanc.

SESSION 1

Blue Growth

in our changing Northern seas: achieving synergies

The first session was on **Blue Growth in the Northern Seas**, referring to development of emerging maritime activities including aquaculture, biotechnology, seabed mining and ocean energy, alongside fisheries, oil and gas. The ocean sector is growing faster than the general economy today, making oceans the world's 7th largest economy. The panel examined the challenges of ensuring that North Sea and Arctic Blue Growth is conducted responsibly, and ways to assist with this process.

Panellists mostly agreed conservation could be compatible with economic development, while diverging at times on where and how. Some advised against rushing into new forms of ocean exploitation when the seas were already experiencing an acute ecological crisis.

The Arctic requires particular caution, as its ecosystem is of critical importance to global chemical, physical and biological processes. Climate change is already disrupting these processes; opening the region to extractive industries would accelerate the release of greenhouse gases and greatly exacerbate global warming. Native peoples there merit particular consideration as their culture, way of life and livelihoods depend on the health and biodiversity of the Arctic ecosystem.

The cultural, socioeconomic, environmental and food contributions of responsible small-scale fisheries should also be recognised and must not be sacrificed to Blue Growth, it was noted.

Emphasis was placed on habitat restoration alongside or before developing new activities, as restoring habitats restores livelihoods and biodiversity, while increasing carbon storage potential. Involving local communities in coastal habitat restoration is part of the European Union's fisheries policy. The EU's North Seas fishing fleet is increasingly profitable, while fishing within sustainable limits, suggesting that appropriate conservation policies make economic sense.

The EU but also regional conventions such as OSPAR have a role to play in sharing data, science and best practices while pushing members to adopt marine spatial planning and an ecosystem approach to reconcile economic and environmental interests. The IEA's Ocean Energy Systems group fulfils that function with regard to ocean energy, which has the potential to reduce carbon emissions and pollution while providing energy security, jobs and a return on investment.

The panel agreed that increased transparency, international cooperation, research, investment and accountability were necessary to achieve sustainable Blue Growth. The main policy tools identified for doing this were marine spatial planning and ecosystem-based management, supported by strong science and environmental impact assessments. Conservation goals may also be advanced by taking more of a business approach to ensure measures are applied more rigorously and with greater cost efficiency.

SESSION 2

Marine Protected Areas and Climate Change

The second session concerned **Marine Protected Areas and Climate Change**, examining how to help MPAs better fulfil their potential in climate change mitigation and adaptation. By relieving other human pressures on ecosystems, MPAs could improve their chances of surviving the impacts of global warming. Connectivity among MPAs and managing them as networks increase their effectiveness. More research needs to be done on how MPA networks can help organisms survive.

Well-managed MPAs can also play an important role as sentinel sites to isolate, track and understand the specific effects of climate change. Their potential role as carbon sinks merits that future MPAs be identified and implemented specifically for that capacity, and not only for biodiversity. Scotland's National Heritage is working actively on how its MPAs can help capture and store carbon following an audit of all the blue carbon stored there.

When planning MPAs as climate change refuges, Islands merit particular attention, as they combine vulnerability, opportunity and valuable traditional knowledge. Their customary systems for managing resources can be very effective. Small locally managed marine areas need to be better integrated within networks of larger sites to allow MPAs to be ecologically resilient while remaining socially relevant.

The UNESCO World Heritage Convention is a useful tool for advancing marine protection. There are 49 marine World Heritage sites in 37 countries. UNESCO has had many successes in cases where it combined investment with cooperation among NGOs, local authorities and governments. However, despite the universal legal obligation to protect these areas, destructive activities continue in many of them. Greater accountability and a business approach are needed to achieve and accelerate effective protection.

Transparency, big data and knowledge sharing are key. Tools for that include the IUCN's World Database on Protected Areas and its future list of MPAs according to their progress towards implementation, and what level of activity they allow. The IUCN has also produced a synthesis of global conservation standards to help MPA planners and managers.

Ambition behind larger sites and better cross-site collaboration is needed, in order to cover as much area as species may need, especially migratory ones. Anticipation is also important, using technology to model what might occur in the near future and protect areas for which the traditional rationale might not yet exist.

In light of ongoing threats, even to areas that have already been designated, more needs to be done, both better and faster, particularly in the High Seas, to ensure that Marine Protected Areas can fully deliver on their potential to make oceans and communities more resilient to climate change.

SESSION 3

Marine Protected Areas and Aquaculture

The third session addressed **Marine Protected Areas and Aquaculture**. It explored the current relationship between the two, the potential role of farmed seaweeds and invertebrates, and how to ensure aquaculture is sustainable. As aquaculture is one of the fastest-growing marine activities, an integrated approach is necessary to define sustainable aquaculture and how it might work effectively with MPAs.

Finfish and particularly salmon farming as conducted today is problematic. Whether in Scotland, Norway, or Chile, it appears to have harmed wild salmon stocks through sea lice, genetic and antibiotic contamination. In Chile in particular, it has destroyed precious fjords to such an extent some can no longer even support aquaculture.

In Scotland, salmon farming is the main form of aquaculture and growing rapidly. The Scottish Parliament's environment committee recently concluded that irreversible damage to the marine environment could result if the industry followed through on planned growth. Finding more sustainable feed sources than fishmeal is one priority.

The Aquaculture Stewardship Council helps to ensure greater transparency, accountability and sustainability through its certification standards, ongoing site audits, and work to raise consumer demand for responsibly farmed seafood. It is also working on a new feed standard. ASC-certified farms ought to be compatible with MPAs, it was suggested.

The development of insect-based protein holds promise both as a more sustainable feed source for aquaculture than fishmeal, but also to partially replace farmed fish with other protein sources.

A certain consensus emerged that farming of seaweed and invertebrates had much greater potential for integration with MPAs than finfish, although they require far more ocean space to produce the same amount of food. Locally

Managed Marine Areas (LMMAs) in tropical coastal regions offer positive examples of synergies between invertebrate aquaculture and MPAs in a context of community co-management. Non-fed species like sea cucumbers, seaweeds and sponges farmed within protected waters provide alternative livelihoods while advancing conservation objectives. Responsible entrepreneurship and investment are needed to develop such models on a wider scale.

Integrated Multi-Trophic Aquaculture combining fish, seaweeds and invertebrates was broadly seen as sustainable and compatible with MPAs. Shellfish, seaweeds and invertebrates contribute to habitat restoration and health through extractive, re-use and filtration processes, while helping to mitigate the impacts of climate change. The value of these ecosystem services – and not just the biomass value of grown crops – needs to be calculated to create financial and regulatory incentives.

Marine spatial planning is necessary to accompany aquaculture's growth, especially if it begins moving out into more open water. While MSP is broadly seen as the answer, progress on its implementation is insufficient. Impacts on local communities must always be considered; if MPAs mean displacement of local populations or harm their livelihoods, they do not work. They must be part of a viable local society and economy, as in Scotland's Loch Creran, it was suggested.

Before intensively farming the oceans, it would be irresponsible not to learn the lessons from unsustainable land-based agriculture. Circular economy models such as IMTA, where waste from one farmed species feeds another, are among the most efficient, sustainable food systems and the most promising for development within MPAs.

OCEAN UPDATES – HIGH SEAS

The day's final session provided brief updates on two topical issues. The first was on the current status of UN-based discussions towards a legally binding international agreement on **Biodiversity in Areas Beyond National Jurisdiction (BBNJ)**.

Since late 2017, notable progress has been made towards this agreement, which would extend the

A person in a kayak is visible on the right side of the image, navigating a river. The background features a steep, rocky bank under a dark, overcast sky. The water is turbulent, with white foam from the kayak's wake visible.

UN Convention on the Law of the Seas to the conservation and sustainable use of biodiversity in the High Seas. The ocean community regards this as a crucial step towards enabling protection of high-seas areas critical to the global ecosystem, indigenous cultures, and the climate.

After a decade of preliminary discussions, parties agreed to officially open negotiations and changed voting rules to one of a two-thirds majority rather than unanimity. They also agreed on four themes for discussion, scheduling the first official talks for Sept. 2018.

Several powerful states remain sceptical or opposed. The mobilisation of public opinion, civil society and the private sector will be necessary to help governments to follow through and obtain the hoped-for results for conservation and sustainability.

OCEAN UPDATES IMPAC4/IMPAC5

The second update was on **IMPAC4 and IMPAC5**. The fourth International Marine Protected Areas Congress (IMPAC4) took place in Sept. 2017 in Chile, and the fifth will be held in Vancouver, Canada in 2021. IMPAC brings together MPA managers, conservationists, scientists and other stakeholders from around the world to share experiences, knowledge and best practices.

IMPAC4 emphasised youth participation and the interdisciplinary nature of marine conservation. It produced a Call for Action highlighting the importance of people in marine conservation and the sustainable use of marine resources. This was particularly appropriate in the Chilean context of recent rapid MPA growth involving remote indigenous communities.

IMPAC5 in Vancouver will continue this focus, while addressing the need to do more to reach marine protection targets and ensure MPAs are not mere «paper parks». It will also make extensive use of social media to continue to reach younger generations. During the run-up to that event, its organisers invited the marine community to help establish the conference's themes based on the latest science and technology.

monaco BLUE INITIATIVE

In partnership with



ROLEX

Hosted by



THE UNIVERSITY
of EDINBURGH

Co-organized by



PRINCE ALBERT II
OF MONACO
FOUNDATION



Oceanographic
Institute

Foundation Albert I, Prince of Monaco

Contact :

www.monacoblueinitiative.org

Secretariat of the Monaco Blue Initiative

secretariat@monacoblueinitiative.org

**The 10th Edition Monaco Blue Initiative
will be held in Monaco on
24th-25th March 2019**

For any question, please contact
the Secretariat of the MBI