

IMBeR Synthesis Activity

Action Plan for the Ocean

Background

Ensuring a healthy and sustainable ocean requires urgent action, including planning for and responding to ongoing change. The scale of the challenge is global and requires engagement from experts in multiple disciplines and with diverse perspectives from societies and communities across the world and uptake of expert-based options for action by decision makers. To generate the required options for action, IMBeR scientists are developing a risk-based framework for an *Action Plan for the Ocean* (Murphy *et al.* 2021, 2022). We plan to generate an internationally supported scientific programme to develop and implement an *Action Plan for the Ocean*.

The challenge is to bring understanding of the oceans and the impacts of change together into a scientific framework that can be implemented by national and international decision makers to prepare for and respond to inevitable change at scales of relevance. With the high degree of uncertainty in predicting future ocean change it is crucial that policy makers are provided with scientifically-based practical and feasible options for developing responses.

The major theme of the UN Ocean Conference held in Nice, France, in early June 2025 was: *Accelerating action and mobilizing all actors to conserve and sustainably use the ocean*. The meeting highlighted a wide range of projects and political initiatives addressing this theme.

The IMBeR Action Plan for the Ocean is a science-based programme that will draw on scientific knowledge and activities from across the ocean science community, building on over two decades of IMBeR scientific activities, to develop a risk-based framework for responding to observed and predicted ocean change. The activity is being driven by the ocean science community and aims to develop the knowledge and tools required to inform decision making for future conservation and sustainable ocean use at local, regional and global scales.

Summary of activity 2023-2024

We held a series of discussions and meetings during 2023 to discuss the development of the Action Plan. We clarified the goal and steps required.

Goal: to progress the development of a risk-based action plan for responding to observed and predicted ocean change, including building capacity for applying such a plan at multiple scales.

The first stage of the activity is to *assemble an integrated interdisciplinary ocean community* that can set out a roadmap for the development of a risk-based *Action Plan for the Ocean*, including a *blueprint for implementation* and identification of *a sustained set of actions* that will assist decision makers in responding to ocean change.

Following the 2023 SSC meeting we held two IMBeR SSC/IMECaN online workshops in the second half of last year to develop plans for the next stage of the development of the Action Plan.

- *Action Plan Discussion IMBeR SSC-IMECaN workshops held on the 25th and 26th October 2023*
 - A series of presentations which highlighted aspects of ocean assessment, global challenges and risk-based assessments, followed by breakout sessions.
 - Valuable discussions on key stakeholders and groups and next steps.
 - The IMBeR SSC, IMECaN and all those involved were thanked for their input and support.
 - The meetings were positive and successful, and we presented the main outcomes of that activity at the virtual SSC meeting towards the end of last year (2023).
 - In follow-up discussions we focussed on identifying practical, achievable next steps that build on IMBeR/IMECaN expertise in a collaborative effort in a series of stages.

A key outcome from the meetings and follow-up discussions was the recognition of the importance of building a broad, representative and diverse team to lead and undertake the next stage of the Action Plan development. This led to the aim to develop a diverse team of representatives from 100 countries (or more) – termed the “OCEAN 100 Team”

The OCEAN 100 Team will draw on available assessments and local and regional knowledge to identify risks in ocean systems throughout the global ocean and develop the scientific methodology and processes for ranking risks in different systems. During 2023/2024 we asked IMBeR SSC and IMECaN to help identify members to be part of the OCEAN 100 Team and for assistance with the survey operation, and we are grateful for the input received. We are also grateful to John Claydon and Lisa Maddison from the Canada IPO office for the support they provided in the operation of the IMBeR SSC/IMECaN workshops and in the development of this activity.

Update 2024 – 2025

Ella Burgun, a postgraduate student at the Institute of Marine and Antarctic Studies (University of Tasmania, Australia), has joined the Action Plan for the Ocean initiative. Ella is coordinating the expansion and engagement strategy for the OCEAN100+ Team, reflecting our aim to include a diverse, global network of participants from 100 or more countries. The “+” term has been added to emphasize our aim of building a network involving participants from as many countries as possible.

The OCEAN100+ Team is central to co-developing the Action Plan, and includes early-career ocean professionals, regional experts, and diverse stakeholders. We have initiated outreach and referral efforts across regions and are continuing to build partnerships. Key activities underway include:

- Development of the OCEAN100+ Network: Contacts have been made in over 30 countries, with outreach continuing through surveys, referrals, and conference engagement.
- Team Objectives: Support co-design of a global risk assessment methodology, guide participatory planning for ocean action, and enable inclusive contributions to mitigation and adaptation strategies.
- Scientific Committee call for members: We will soon open applications for a new Scientific Committee made up of regional representatives and thematic experts to guide methodology design and engagement.
- Communication: A new regular newsletter has been launched to keep participants informed of progress, calls to action, and upcoming events.
- Planning Group Meetings: The core working group includes Eugene Murphy, Carol Robinson, Alistair Hobday, and Ella Burgun. We meet regularly to coordinate across partners and advance the work plan. The wider planning group includes Steph Brodie, Mark Dickey-Collas, Karen Evans, Laura Kaikkonen, Rebecca Shellock and John Claydon.

- Our network now spans ~37 countries and is expanding, with participants from universities, NGOs, government agencies, and other institutions. Currently activity is aimed at:
 - Increasing geographic coverage and representation
 - Developing a preliminary survey of participants interests and expertise
 - Scientific Committee development

We submitted a proposal for UN Ocean Decade endorsement of the project in February 2025. This has been reviewed, and we have been notified that this has been successfully endorsed by No. *UN37 - Ocean Decade Programme Sustainable Ocean Planning (SOP Programme)*. SOP has been co-designed and developed to respond to the recommendations of the Ocean Panel's agenda with regards to achieving 100% of sustainable ocean planning. It also aims to leverage the ecosystem of the Ocean Decade, particularly in relation to Challenge 4 (Develop a sustainable and equitable ocean economy), and fast-track SOP implementation in coastal nations through technical and scientific support. The OCEAN100+ activity is developing capacity, capability, and tools that countries will require to achieve the goals of multi-lateral agreements and commitments being made at international levels, and we look forward to working with the UN Ocean Decade and the SOP Programme to do this.

- We are aiming to hold our first online discussions for the OCEAN 100+ Team in the coming months.
- We presented a poster on the Action Plan and the OCEAN100+ Team activity at ICES Annual Science Conference in Newcastle, UK in September 2024 meeting.
- We contributed to IMBeR FO3 meeting, with a presentation and participated in sessions and SSC meeting.

We continue to welcome input in this activity from IMBeR SSC and IMECAN colleagues and the wider community. Please contact us if you are interested in being involved in this activity.

We are grateful for the continuing support of IMBeR in this activity and are keen that the Action Plan activity continues to be associated with IMBeR. We are also exploring other options for gaining funding and support for the initiative.

Eugene Murphy, Carol Robinson, Alistair Hobday and Ella Burgun
18th June 2025

References

- Murphy, E. J., Robinson, C., Hobday, A. J., Newton, A., Glaser, M., Evans, K., et al. (2021). The Global Pandemic Has Shown We Need an Action Plan for the Ocean. *Frontiers in Marine Science, Volume 8 - 2021*. Opinion. 10.3389/fmars.2021.760731
- Murphy, E. J. Robinson, C., Hobday, A. Newton, A., Glaser, M., Evans, K., A. Dickey-Collas, M. Brodie, S. and Gehlen, M. (2022). Ocean sustainability: act before it's too late. *Correspondence. Nature, 609*(7928), 676-676. 10.1038/d41586-022-02981-5