Developing an Action Plan for the Ocean

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Ocean sustainability - the urgent need for an Action Plan for the Ocean for the ocean we want

- The scale and rapidity of ocean change is now clear. Major ocean and ecosystem changes are expected in the coming decades (SROCC, 2019; Armstrong McKay et al. 2022).
- Planning and preparing for those changes is an urgent priority and will require coordinated action across multiple scales.
- A systematic approach is needed to develop strategies for mitigation and adaption and coordinate activity from local to global scales.
- This proposed effort will complement existing efforts under UN Decade of the Ocean, and the High Level Panel.
- That also requires an inclusive approach involving diverse perspectives from scientific disciplines and societies across the world.

An Action Plan for the Ocean

Alongside increased awareness and focus on threats to the ocean, an **Action Plan** is needed.

- The challenge: bring our understanding of the oceans and the impacts of change together and prepare and plan for inevitable change.
- Existing efforts to restore marine ecosystems need to include the potential impacts of future change.

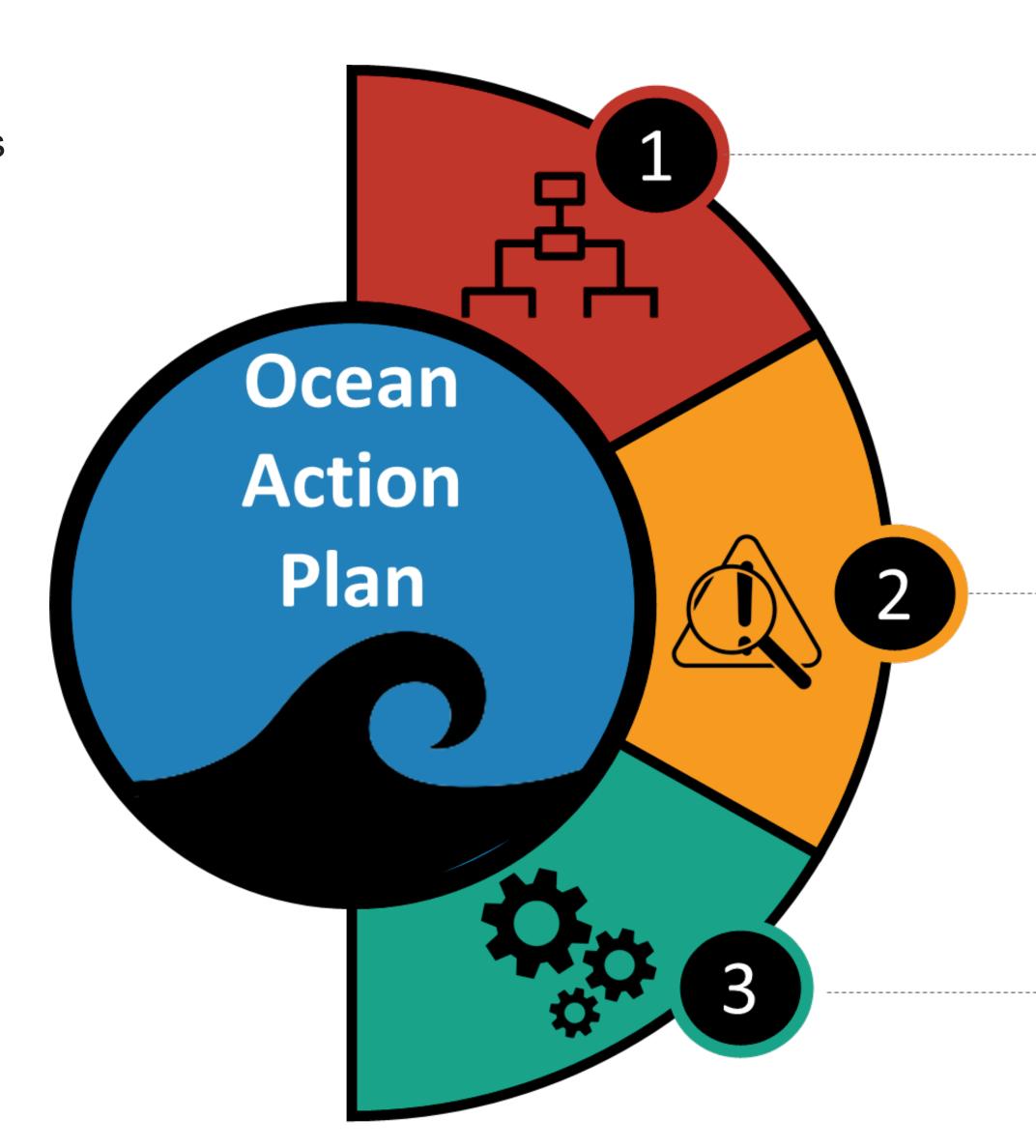
Scientific advice is needed to help policy makers plan for change.

- Policy makers need clear presentations of the potential changes and associated uncertainties and policy options.
- Risk-based planning encompassing local, regional and global is required.

IMBeR scientists have proposed a three-component process to develop an Action Plan for the Ocean – *see figure* -

- i. assess and rank risks
- ii. identify options for action, and
- iii. develop action plans for adaptation at local, regional and global scales to respond to future change.

The process will be continuously updated as new information becomes available and understanding improves (Murphy et al. 2021, 2022).



RANK RISKS

Develop a coherent framework to assess and rank risk related to a changing ocean.

IDENTIFY ACTIONS

Use science to identify possible actions in response to risks, taking account of uncertainties.

DEFINE PLAN

Define a set of actions & plans, of which some will need to be adaptive.

Schematic illustration of the major components of the proposed risk-based Action Plan for the Ocean (from Murphy et al. 2021).

Get Involved

An IMBeR-led Action Plan for the Ocean

We seek to assemble an integrated interdisciplinary ocean community to develop and implement an Action Plan for the Ocean. This activity will:

- Develop international capacity in integrated analyses and risk-based development of ocean actions.
- Build on current activities, drawing on expertise and inputs from established programmes and bodies.
- Provide a forum for the global ocean community to engage in the development of an Action Plan.
- Our first action is to gain community input and hold a workshop to develop the Action Plan.
- To get involved see www https://imber.info/action-plan-for-the-ocean/



References: Murphy et al. 2021. The Global Pandemic Has Shown We Need an Action Plan for the Ocean. Front. Mar. Sci. doi: 8, 760731, 10.3389/fmars.2021.760731. Murphy et al. 2022. Ocean sustainability: act before it's too late. Nature 609, 676. doi: 10.1038/d41586-022-02981-5. Additional references on need for, and development of, a risk-based approach in Murphy et al. 2021. Maltby et al. 2022. Marine climate change risks to biodiversity and society in the ROPME Sea Area. Climate Risk Management, 35, 100411. doi:https://doi.org/10.1016/j.crm.2022.100411; Laffoley and Baxter 2018. Ocean connections. An introduction to rising risks from a warming, changing ocean. Gland, Switzerland: IUCN. vi+38 pp. Photo credits: John Pinnegar.





