

UNOC3 Conference Side Event

Democratizing climate risks to marine ecosystems, fisheries, and conservation – from data to decision-making

June 12 2025, 8:00 AM, Le Saint Paul Hôtel Salon Cézanne (29 boulevard Franck Pilatte 06300 Nice)

Organized by:

Dalhousie University, Future of Marine Ecosystems Research Group Oceans North MigraMar

Background on the event:

This event highlighted the numerous tools and perspectives that exist for the marine realm in assessing climate change impacts and risks for communities and ecosystems. Some tools that were discussed broadly include the Coastal Risk Index created by the Ocean Risk and Resilience Action Alliance (ORRAA), the Global Mangrove Watch tool created by Wetlands International, the 30x30 Progress Tracker by SkyTruth, Ocean Futures by WWF-US, and the Climate Risk Index for Biodiversity that is under co-development by the Future of Marine Ecosystems Research Group, Oceans North, AquaMaps 2.0, and Vizzuality. This event also highlighted ongoing research occurring in Ecuador on integrating climate change shifts in species populations into policy decisions. In attendance was the United Nations Environmental Programme - World Conservation Monitoring Centre, Vizzuality, ORRAA, Wetlands International, Global Ocean Trust, Sustainable Fisheries Partnership, Marine Conservation Institute, the University of British Columbia, the University of Queensland, SkyTruth, WWF-US, and the Zoological Society of London.

Key Issues discussed (5-8 bullet points)

- Creating virtual tools that assess climate change impacts on marine ecosystems requires an inclusive and user-centred approach.
- Sharing practical experiences from diverse perspectives helped highlight ways to reduce impacts of climate change risks for marine managers and communities through using these tools.
- Building risk directly into these tools can help incentivize their financing from insurance providers who would use them when assessing risk prior to funding clients.
- Three challenges to tool creation including the difficulties in bridging the scales from regional to local, the use of AI and the possibility of undermining user trust, and catering to what matters most to users.
- Developing these tools collaboratively alongside stakeholders and other tool developers is important for ensuring uptake, efficiency, and complementarity across ocean platforms.

Key recommendations for action / voluntary commitments (5-6 bullet points)

- Many tools exist for assessing climate change risks and impacts on the marine
 ecosystems, but there is a need for those building these platforms to collaborate or
 communicate. Coordination across complementary platforms would help tool users
 understand the diversity of environmental impacts from climate change and fill gaps in
 knowledge a single tool or platform does not have the capacity for.
- When creating online tools to aid marine and coastal management, workshops that
 engage with stakeholders are required to ensure their development is aligned with user
 needs. Sharing this feedback alongside a tool's progress is equally important for
 understanding its success, as the tool is only as successful as it is in addressing user
 concerns.