

---

## ICES responses to the Kunming–Montreal Framework & EU Nature Restoration Regulation

### 1 Purpose

---

To provide an update to MIACO on ICES work related to targets and legislation addressing the recovery of biodiversity (especially habitats, species and ecosystems) and to solicit views from MIACO on ICES priorities in this area of work.

### 2 Background

---

Recent targets and legislation have emphasised restoration and recovery of nature alongside sustainable use. The Kunming-Montreal Global Biodiversity Framework ([CBD/COP/15/L25, 2022](#)) and Nature Restoration Regulation (EU) [2024/1991](#) are especially relevant in relation to marine ecosystems. Only content relevant to the purpose of this agenda item is highlighted, as these documents also provide extensive coverage of terrestrial issues.

#### 2.1 Kunming–Montreal Global Biodiversity Framework (2022)

This is a framework to support achievement of the UN Sustainable Development Goals (SDG), and to set out a pathway to reach a global vision of a world living in harmony with nature by 2050. Briefly, it seeks to (a) catalyze, enable and galvanize action by Governments, and subnational and local authorities to halt and reverse biodiversity loss, (b) promote coherence, complementarity and cooperation between the CBD and its Protocols, other biodiversity related conventions/multilateral agreements/ international institutions, and (c) to guide and promote, implementation of policies, goals, targets, and national biodiversity strategies and actions plans, and to facilitate the monitoring and review of progress.

The Kunming-Montreal Global Biodiversity Framework identifies 4 goals for 2050 and 23 targets for 2030. Goals A and B ([see text](#)), and Targets 2, 4, 10 and 11 are especially relevant to restoration and recovery of marine ecosystems. Target 2 is to ensure, that by 2030, at least 30% of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity. Targets 4, 10 and 11 collectively address recovery and conservation of species to restore genetic diversity within and between populations; manage fished areas sustainably and to restore biodiversity; and restore nature's contributions to people, including ecosystem functions and services, through nature-based solutions and/or ecosystem-based approaches.

## 2.2 EU Nature Restoration Regulation (2024)

This “Regulation lays down rules to contribute to (a) the long-term and sustained recovery of biodiverse and resilient ecosystems across the Member States’ land and sea areas through the restoration of degraded ecosystems; (b) achieving the Union’s overarching objectives concerning climate change mitigation, climate change adaptation and land degradation neutrality; (c) enhancing food security; and (d) meeting the Union’s international commitments. This Regulation establishes a framework within which Member States shall put in place effective and area-based restoration measures with the aim to jointly cover, as a Union target, throughout the areas and ecosystems within the scope of this Regulation, at least 20% of land areas and at least 20% of sea areas by 2030, and all ecosystems in need of restoration by 2050.”

Article 5 addresses the restoration of marine ecosystems. Briefly, restoration measures are to improve to good condition areas of habitat types in Annex II of the Regulation for at least 30% of the total area of the habitat types in Groups 1-6<sup>1</sup> listed in Annex II by 2030, 60% by 2040 and 90% by 2050. There are also targets for soft-sediments at <1000m depth (Group 7).

Restoration also applies to habitats of species listed in Annex III of the Regulation (includes a range of sharks, skates, rays and salmonids), as well as species listed in Annexes II, IV and V of the existing [Habitats Directive](#) and species within scope of the [Birds Directive](#).

Links to the [Common Fisheries Policy](#), [Marine Strategy Framework Directive](#), and other Directives are described in the Nature Restoration Regulation. The Regulation also emphasises the needs for mapping and condition assessment, knowledge of how to achieve restoration (active and passive), and ways of upscaling restoration measures.

## 3 Relevant ICES work

---

Several existing Expert Groups conduct work and harbour expertise relevant to aspects of restoration and recovery, currently with a stronger focus on individual populations (especially modelling of recovery in the context of stock assessment) than habitats and ecosystems. Relevant expert groups are addressing biodiversity science, value of habitats for exploited species, marine protected areas, human activities and impacts, habitat mapping and addressing restoration within marine spatial planning. The Working Group on Science to Support Conservation,

---

<sup>1</sup> Groups are (1) seagrass beds, (2) macroalgal forests, (3) shellfish beds, (4) maerl beds, (5) sponge, coral and coralligenous beds, (6) vents and seeps and (7) soft sediments (not deeper than 1000 m depth).

Restoration and Management of Diadromous Species ([WGDIAD](#)) is assessing habitat restoration practices for salmonids.

## 4 Consolidating and planning ICES work

---

While there is significant expertise in aspects of nature restoration and recovery in the ICES network, it needs to be more directly focused on addressing the science and advisory questions of relevance to current and emerging legislation and targets, both nationally and internationally. To help build a cross-disciplinary group of scientists to support future advice, ICES took an initiative to establish a 2025 workshop on nature restoration (Workshop on Nature Restoration ([WKREST](#))). The plan is to use the workshop to engage experts to address restoration and recovery of a broad range of ecosystem components (e.g. habitats and species) and processes.

### 4.1 Workshop on Nature Restoration (WKREST)

WKREST will provide insight into how the science community may advance prediction and measurement of rates of recovery of habitats and species. Tasks will include collating estimates of recovery times, assessing methods to monitor and assess recovery, looking into the effects of connectivity on recovery times, identifying existing data streams help to meet science and advice needs, and methods of active restoration. Connectivity also has relevance to ICES in the context of Vulnerable Marine Ecosystems (VME) science and advice (e.g. drivers resulting from [UNGA Resolution 77/118](#) paragraph 212).

The Workshop on Nature Restoration (WKREST) will meet from 3-7 March 2025 to review evidence on the active and passive restoration of marine habitats and species, and the ecosystem functions they provide. Further details and a registration link are available here: [WKREST](#). The Terms of Reference for the workshop are:

- a) Summarise available methods (including strengths and weaknesses) to model recovery times of marine habitats and species, the parameters and data required to apply these methods, and describe additional evidence needs to predict the effects of management measures intended to achieve restoration.
- b) Summarise available methods to monitor and assess the rate of recovery of marine habitats and species, the resources required to apply these methods, the scales of implementation and their statistical power to detect recovery on defined timescales. Identify additional evidence needs to guide effective monitoring and assessment of the effects of management measures intended to achieve restoration.
- c) Review and report on available methods to quantify habitat connectivity, and to monitor and assess changes in connectivity, with a focus on benthic species and habitats of the continental shelves and deep-sea. Report on the implications of habitat connectivity for recovery rates and restoration, and priority evidence needs.

d) Report on the ways in which existing data streams/ calls and methods adopted by the ICES Data Center and expert groups may contribute to meeting evidence needs and priorities identified in ToR a-c.

e) Summarise available and proposed measures and potential threats to achieving the active restoration of marine habitats, their state of development (e.g. from experimental to large-scale trials and applications), relative benefits and costs, and effectiveness. Identify additional evidence needs to evaluate the costs and benefits of active restoration.

f) Review the current use of ecological restoration objectives in marine management and policy and identify the set targets.