

Ensuring the Global Biodiversity Framework prioritises measures to safeguard wetlands and wetland biodiversity

Targets that lump wetlands within land and water will not deliver a 'Nature-Positive World'





Context

Wetlands cover just 7 percent of the planet but are home to 40% of the world's biodiversity. Over one million threatened species of plants and animals depend on wetlands for their survival. Wetlands also provide ecosystem services critical for humans to thrive and survive.

Wetlands are at the crossroads of many of the major challenges facing humanity today, and water, climate change and biodiversity loss are no exception. They are the hotspots of adverse change, and wetland-dependent species are most at-risk and at declining rates which are higher than terrestrial ecosystems. That is why many of the SDG targets signal the need to conserve and restore wetlands. Unfortunately, wetlands have received little attention within the negotiations for the Post-2020 Global Biodiversity Framework, which in turn is reflected in its goals and targets. This trend has continued from the previous iterations of Global Biodiversity Targets – the Aichi Targets, wherein these ecosystems were lumped under targets for land and water.

As wetlands are special ecosystems at the 'interface' of land and water, the lumping prevents concerted actions for addressing continued wetland degradation – a trend which has been confirmed by several assessments, including the <u>latest IPCC report</u> and

IPBES Global Assessment Report on Biodiversity and Ecosystem Services. Since connectivity through "source to sea" action is required for wetlands to recover their functional role in storing and regulating water flows and quality and buffering vulnerable coasts, it is contradictory to split wetlands into inland/freshwater and coastal. Safeguarding and restoring all kinds of wetlands is urgent and necessary to achieving the goals of the Post-2020 Biodiversity Framework. Halting and reversing wetland degradation and loss forms the very scaffolding on which the trajectory of nature-positive world is built upon.

This Post-2020 Global Biodiversity Framework will be a milestone in global environmental governance for a nature-positive world. To that end, this policy brief provides recommended textual edits to a selection of important post-2020 targets. In particular, it focuses on spatial targets 1 'Spatial Planning', 2 'Ecosystem Restoration', 3 'Conservation' — since they are particularly relevant to conserving and recovering the integrity of wetland ecosystems. With 170 countries signatory to the Ramsar Convention on Wetlands, joint workplans with other Conventions, and COP14 scheduled later this year, there is good opportunity for follow through on a Global Biodiversity Framework which includes wetlands as a focus for action.



What are we asking for?

Wetlands find specific mention under Target 1, 2 and 3 of the Global Biodiversity Framework

Target 1

Ensure that all land, **wetland** and sea areas globally are under integrated biodiversityinclusive spatial planning addressing land- and sea-use change, retaining existing intact and wilderness areas.

Target 2

Ensure that at least 20 percent of degraded freshwater wetlands, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems.

Target 3

Ensure that at least 30 per cent globally of land areas, **wetlands**, and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.



Why these targets?

Wetlands are ecosystems which occur wherever land and water meet. Wetlands are ecosystems that, by definition, are neither solely land / terrestrial, sea / marine or freshwater. Wetlands are home to 40% of the world's biodiversity. They occupy often huge areas with unique biodiversity, character and value of their own. Wetlands connect land and sea or are highly dynamic, connecting ecosystem types and so critically important for their health.

The difficulty to characterise them means that they are typically overlooked when biodiversity frameworks are developed or integrated into other sectoral policies and plans. This is a key facilitator of their loss, which is accelerating and exceeding that of any other ecosystem type. We are therefore asking for the Post-2020 Global Biodiversity Framework to adjust language and targets so that these hidden and overlooked systems are given the visibility, weight and attention they deserve.

- Lumping wetlands with land and sea does not work: it would result in wetlands continuing to be overlooked: they are distinct ecosystems which require specific measures.
- Wetlands are being lost faster than any other ecosystem on Earth, with the most extreme consequences for biodiversity and human well-being.
- Conserving wetlands will help deliver Target 3 efficiently. We have examined available science and knowledge-base on the status and trends of different wetland types, and the 30% target for wetlands (akin to those for land and sea areas) is needed at a minimum to halt and reverse the ongoing degradation and loss of wetlands.

What can you do?

We invite the CBD national focal points and partners to consider wetland targets while preparing the next draft of the Global Biodiversity Framework.



What is the underpinning logic?

Wetlands cover just 7 percent of the planet but are home to 40% of the world's biodiversity. Over one million threatened species of plants and animals depend on wetlands for their survival. Wetlands also provide ecosystem services critical for humans to thrive and survive.

But wetlands are disappearing three times faster than forests and are Earth's most threatened ecosystem. In just 50 years — since 1970 — 35% of the world's wetlands have been lost. Wetland-dependent species are in serious decline. Since 1970, declines have affected 81% of inland wetland species populations and 36% of coastal and marine species. The unprecedented loss of wetlands limits the possibility of achieving the goal of halting and reversing biodiversity loss, and the overall ambition set in the Global Biodiversity Framework.

Stepping up action on wetlands conservation, management and restoration is a no-regrets pathway for achieving the ambitions set in the draft Post-2020 Global Biodiversity Framework.

The science is clear and the social and economic cases for recovering wetlands are powerful. Wetlands offer effective nature-based solutions to global problems. But environmental protection of wetland sites is not sufficient since the fluidity of water means that effective action requires coordination across landscapes and national boundaries. Even so, by stepping up action to safeguard and restore wetlands we can save nature, better capture and store water, improve food security through sustaining agriculture and fisheries, keep carbon out of the atmosphere, and safeguard cities and settlements from the worst impacts of floods and droughts.

With partners, Wetlands International proposes global, habitat-based targets for wetlands recovery by 2030, based on the best available science, that reflect the scale of change needed to halt and reverse wetlands loss and degradation.



PEATLANDS

The remaining undrained peatland carbon stores remain intact and 10 million hectares of drained peatland are restored, by 2030.

Locking up carbon in peatlands, as well as the maintenance and recovery of other values of drained and degraded peatlands, including their roles in water storage and biodiversity conservation, depends on keeping them wet or fully restoring them through re-wetting. The on-going high greenhouse gas emissions due to drainage means that for peatlands to become carbon neutral in accordance with the Paris Agreement, the remaining peatlands must be conserved and around 50 million hectares need to be rewetted to prevent carbon emissions, by 2050. This is the total current area of drained peatlands, taking into account that around 15 million ha of former peatlands is not restorable as the peat has already been completely oxidised (Global Peatland Database, Greifswald Mire Centre and Joosten, 2021).

Materialising large scale conservation and restoration efforts to achieve this outcome depends on peatland assessments, technical and institutional capacities, as well as finance, policies and social acceptance. Therefore, a target of 10 million hectares is proposed as a feasible while still challenging target for 2030.



MANGROVES

A net gain of 20% in global mangrove cover, by 2030.

Mangroves are highly valued for their rich biodiversity, the nursery role they provide in fisheries, their potential to store vast amounts of carbon (so-called blue carbon) making them critical for climate regulation and mitigation, as well as for protecting coasts from erosion and enabling communities to adapt to climate change. Of an estimated original 33 million ha of mangroves, half was lost, with an additional 15-20% severely degraded, by 2015. At this rate of loss mangroves will disappear over the next 100 years.

The target aims to address feasibility as well as the need for large scale recovery to restore ecosystem functionality. It takes into account likely positive changes in coastal zone policies and practices as well as the permanent loss of former mangrove land to aquaculture, farming and urban development and limitations imposed by climate change.



WETLANDS FOR MIGRATORY BIRDS

50% of the estimated 7000 critically important sites identified along flyways come under favourable management, by 2030.

The conservation and recovery of the world's 2,500 migratory and resident waterbird populations along all major flyways requires favourable management and restoration of a connected network of an estimated 7,000 critically important wetland sites worldwide. This depends on no net loss of already identified critical sites and net gain through identification and improved management of other critical sites. The proposed target uses numbers of critical sites as a proxy for the adequacy of site networks needed by waterbirds at the population level.

"Favourable management" is the terminology adopted by the East Asian – Australasian Flyway Partnership and while further work is needed to agree how to measure this, we consider it to be a concept and approach to targets that could be adopted globally. The proposed 50% level of 'favourable management' is a balance between ambition and reality. It takes into account current and future climate scenarios that are expected to affect spatial distribution and availability of suitable habitats, with losses in many regions (Breiner et al in development, Nagy et al, in development). The intention is to improve the target and monitoring by introducing measures of network functionality and connectivity in future.



RIVERS & FLOODPLAINS

Remaining free-flowing rivers and floodplains are preserved and river connectivity is enhanced, restoring floodplain ecosystem functionality and area.

Riverine floodplains are very complex, dynamic and diverse ecosystems. As producers of food and regulators of water and carbon, their health is of huge importance to freshwater biodiversity, global climate and development agendas. Dams, levees and other factors such as rapid spreading of alien invasive species often severely disrupt flow and sediment pulses. These affect river – floodplain interactions and can cause a cascade of effects which have real consequences for biodiversity, human livelihoods and societal resilience to water shocks.

It was recently estimated (Grill et al,2019) that only 37 percent of rivers longer than 1,000 kilometres remain free-flowing over their entire length and 23 per cent flow uninterrupted to the ocean. There are many advances in understanding how climate, human interventions and floodplain dynamics influence the natural functions of the riparian system, biodiversity and ecosystem services. However, the development of a simple global target to drive conservation and restoration remains a challenge at the time of writing.



TIDAL FLATS

A net gain of 10% in area of tidal flats, by 2030.

Protection and restoration of tidal mudflats is vital and urgent to conserve globally threatened biodiversity in light of sea level rise associated with current and future climate scenarios, as well as coastal and inland human development and associated changes in river discharge and sediment flows. It is estimated that 16% of tidal flats have been lost over the last 3 decades (Murray et al, 2019). The target to restore 50% of the recent loss over the past three decades (1990 benchmark), means approximately a net gain of 10%. This modest target recognises the low feasibility of mudflat restoration, given the increasing human development demands in coastal zones. The target is meant to imply not only an area gain but also return to a state of good ecological functionality, to support the full range of ecosystem services. Within this, priority should be given to protecting and restoring critical sites for migratory shorebirds.



Sources

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More information

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Wetlands International is a global not-for-profit organisation dedicated to the conservation and restoration of wetlands for their environmental values as well as for the services they provide to people.

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