

# 1. INTRODUCTION

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Healthy, natural wetlands are critical for human survival. Yet they face many challenges. The Convention on Wetlands (the Ramsar Convention) is the only international legal treaty primarily focused on wetlands. It works globally to promote their conservation and wise use, ensuring that wetlands play a key role in delivering the Sustainable Development Goals, Aichi Biodiversity Targets, the Paris Agreement on Climate Change and other related commitments. The Global Wetland Outlook outlines the status and trends in wetlands worldwide, along with the challenges and responses.



# Wetlands are globally important for sustainable development

Wetlands are vital for human survival. They include some of the world's most productive ecosystems and provide ecosystem services leading to countless benefits (MEA 2005; Russi et al. 2013). Wetlands include permanently or seasonally inundated freshwater habitats ranging from lakes and rivers to marshes, along with coastal and marine areas such as estuaries, lagoons, mangroves and reefs. The global water cycle underpins primary production and nutrient recycling and provides fresh water and food for people. Wetlands are used for transport and hydropower. They provide raw materials and genetic resources, including medicines. They also help to mitigate floods, protect coastlines and store and sequester carbon. Many are important for culture, spiritual values, recreation and inspiration. Some of these benefits are summarized in Figure 1.1 below.

The contributions that wetlands make to human well-being have often been overlooked or underappreciated. Consequently, wetland management has been underplayed in development planning. Stakeholders in one sector make decisions based on narrow and short-term interests, losing opportunities to achieve multiple benefits, and causing further wetland loss and degradation. Encouraging

policy makers across all sectors to recognize and take account of multiple wetland values, and their interdependencies, is essential if wetland wise use and sustainable development are to be achieved. Effective management of wetlands requires collaboration from many sectors of society, in particular those who make use of the many benefits provided by wetlands, or who can influence their management and conservation.

This report outlines the state of the world's wetlands and their associated benefits. It will set a baseline to assess progress on the Ramsar Convention's Strategic Plan, 2016-2024, and strengthen the attention given to wetlands in the Sustainable Development Goals, Aichi Biodiversity Targets, Sendai Framework for Disaster Risk Reduction and the Paris Climate Agreement. It examines the state and trends of wetlands, identifies knowledge gaps and looks to potential changes in the future. The Global Wetland Outlook identifies many negative trends, but also highlights successes and best practices. It reviews the drivers of wetland loss and degradation and outlines responses for the wetland community and other sectors.

## Box 1.1

### CONTEXT FOR THE GLOBAL WETLAND OUTLOOK

The *Global Wetland Outlook* builds on analyses such as the Millennium Ecosystem Assessment (MEA 2005), the *Global Biodiversity Outlook* (Convention on Biological Diversity 2014), *Global Land Outlook* (UNCCD 2017), Land Degradation and Restoration Assessment (IPBES 2018), and The Economics of Ecosystems and

Biodiversity (Russi et al. 2013), which all noted the loss and degradation of wetlands and the importance of wetlands for ecosystem services and supporting local communities. It draws on a large body of published literature, including that developed and compiled by the Convention's Scientific and Technical Review Panel since its inception in 1993.

# The Ramsar Convention's role

The Convention on Wetlands is the only international legal treaty with a primary focus on wetlands, signed in 1971 in the Iranian city of Ramsar and known as the *Ramsar Convention*. It came into force in 1975 and to date 170 countries have joined as Contracting Parties. The *wise use framework* developed by the Convention (see Box 1.2) provides a mechanism for ensuring that wetlands are incorporated into the global agenda for sustainable development, supporting initiatives relating to biodiversity, climate change, disaster risk reduction and land degradation.

The Convention defines wetlands rather broadly as “areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres”. Ramsar recognizes 42 wetland types in three categories: marine and coastal wetlands, inland wetlands and human-made wetlands (Ramsar Convention Secretariat 2010a).

Contracting Parties have three primary obligations, the “pillars” of Ramsar:

1. Conserving and using wisely all wetlands (see Box 1.2);
2. Designating and conserving at least one Wetland of International Importance, or Ramsar Site (Figure 1.2); and
3. Cooperating across national boundaries on transboundary wetlands, shared wetland systems and shared species (see Box 1.3, Gardner & Davidson 2011).

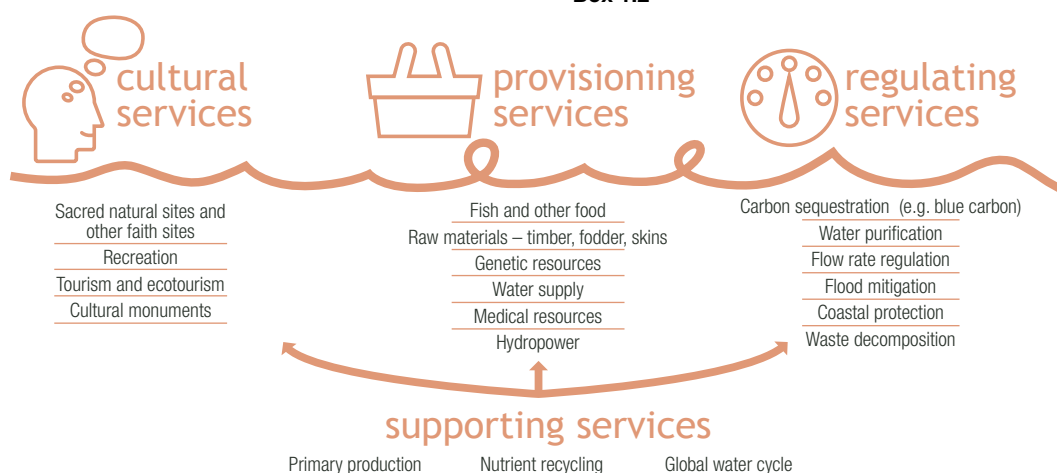
Another key Ramsar concept is the *ecological character* of wetlands: “the combination of the ecosystem components, processes and benefits/ services that characterize a wetland at a given point in time” (Ramsar Convention 2005). Countries are encouraged to maintain the ecological character of all wetlands, and are required to report any adverse human-induced changes in a Ramsar Site to the Secretariat and take necessary actions to restore these sites to their former state.

## WISE USE OF WETLANDS

“Wise use” is at the heart of the Convention and applies to all wetlands. It is defined as “the maintenance of [a wetland's] ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development” (Ramsar Convention 2005). Human well-being depends on wetland ecosystem services. Wise use focuses on managing wetlands and human needs across landscapes in collaboration with local communities, underpinned by good governance. While some wetland development is inevitable, it is not suitable for every wetland. Contracting Parties promote wise use through national policies and legislation; inventory, monitoring and research; training, education and public awareness; and integrated site management plans.

Box 1.2

Figure 1.1  
Ecosystem services  
from wetlands





# The Ramsar Convention works nationally and internationally

There are currently over 2,300 Ramsar Sites, covering almost 250 million hectares, an area almost as large as Greenland. Each site meets at least one of nine criteria—related to wetland types, ecological communities and support for waterbirds, fish and other taxa—that signify

international importance. Ramsar Sites likely cover 13-18% of the global area of terrestrial and coastal wetlands, demonstrating considerable commitment from Contracting Parties (Davidson & Finlayson 2018).

## Box 1.3

### INTERNATIONAL COOPERATION

The Ramsar Convention calls for international cooperation in wetland management (Ramsar Convention Secretariat 2010b). One response is cooperation across national boundaries, either informally or through the designation of Transboundary Ramsar Sites. Twenty such sites exist, including two trilateral sites: the Wadden Sea (Denmark, Germany and The Netherlands) and the Floodplains of the Morava-Dyje-Danube Confluence (Austria, Czechia and Slovakia). Collaboration covers river basins through multi-state management commissions, such as the Niger Basin

Authority with Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Guinea, Mali, Niger and Nigeria. Management of shared species is also important, including migratory, non-migratory and invasive alien species. Examples include the East Asian–Australasian Flyway Partnership, a Ramsar Regional Initiative, and through less formal cooperation with the Western Hemisphere Shorebird Reserve Network.

Ramsar additionally has 15 networks for regional cooperation and four Ramsar Regional Centres for training and capacity building.

**Figure 1.2:**  
Wetlands of International Importance throughout the world. Source: RSIS



# Wetlands in global policy and targets

Healthy, ecologically functioning wetlands are a key delivery mechanism for several other global commitments, including those relating to biodiversity, sustainable development, land degradation, climate change and disaster risk reduction.

## 2030 Sustainable Development Agenda and Sustainable Development Goals

Wetlands are central to meeting many of the United Nation's 17 Sustainable Development Goals (SDGs) and 169 associated targets, focusing on poverty, hunger, health, energy, consumption and climate change. These will set the agenda for global development efforts in the next decade. SDG 15 specifically calls for conservation and sustainable use of "*inland freshwater ecosystems and their services*". SDG 14 encourages protection of coastal and marine areas. SDG 6 focuses on water and sanitation with a target relating to trends in water-related ecosystems, which will draw on data from Ramsar. Several SDGs are modelled on Aichi targets (see below) and like them will be revised after 2020.

## Aichi Targets

The "Aichi Biodiversity Targets" are part of the *Strategic Plan for Biodiversity 2011-2020*, from the Convention on Biological Diversity; virtually all are relevant to wetlands (Juffe-Bignoli et al. 2016). Several seek to halt ecosystem loss, including Target 5 that aims to at least halve, and ideally eliminate, loss of natural habitats by 2020, and Target 11 that aims to conserve at least 17% of terrestrial and inland water, and 10% of coastal and marine areas by 2020 in "*effectively and equitably managed, ecological representative and well connected systems of protected areas and other effective area-based conservation measures*". Target 10 focuses on conservation of coral reefs, Target 6 on sustainable use of aquatic species and Target 7 on management of aquaculture (CBD 2010).

## Land degradation neutrality

The UN Convention to Combat Desertification set a target for *land degradation neutrality* to halt the slide towards further degradation. Many forms of land degradation are linked to water management, and land degradation directly impacts wetlands such as peatlands, estuaries and rivers; these include some of the degradation hotspots around the world.



# Wetlands in international agreements

## The Paris Agreement

In December 2015, 196 governments agreed to an ambitious programme of climate change mitigation and adaptation under the UN Framework Convention on Climate Change. This calls on States to develop Nationally Determined Contributions (NDCs) to address climate change, with nature-based solutions as a key component, including from wetlands. These have a critical role in both adaptation and mitigation; in the latter through carbon storage and sequestration, particularly in peat soils and blue carbon in coastal waters (Ramsar Convention 2015). Encouraging countries to include wetland conservation and management in NDCs is a major priority.

## The Sendai Framework for Disaster Risk Reduction

In March 2015, the UN Office for Disaster Risk Reduction agreed on a 15-year voluntary strategy on disaster risk reduction. The non-binding agreement recognizes the need to “*implement integrated environmental and natural resource management approaches that incorporate disaster risk reduction*”. The importance of wetlands in building resilient communities is emphasized, noting their role in reducing flood risks and attenuating storm damage.

## Biodiversity-related multilateral agreements

Wetlands and wetland-dependent species are protected under other biodiversity-related Multilateral Environmental Agreements (MEAs), such as the Convention on Biological Diversity, the Convention on Migratory Species (and its African-Eurasian Migratory Waterbird Agreement), the Convention on International Trade in Endangered Species of Wild Fauna and Flora, and the World Heritage Convention. Secretariat-level collaboration occurs through the Biodiversity Liaison Group and engagement in MEA processes. Scientific and technical cooperation takes place through joint missions and coordinated guidance, including on emerging issues such as responses to highly pathogenic avian influenza (Gardner & Grobicki 2016), guidance on rapid ecological assessment of biodiversity in inland, coastal and marine waters (Convention on Biological Diversity & Ramsar Convention 2006), and joint commitments to Land Degradation Neutrality with the UN Convention to Combat Desertification (Ramsar Convention and UNCCD 2014).



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