

Takeaways for decision makers from the Global Wetland Outlook



CONVENTION ON WETLANDS

(Ramsar, Iran, 1971)

The cover of the "Global Wetland Outlook" report features a photograph of a coastal wetland with a winding water channel and marshy banks under a cloudy sky.

GLOBAL WETLAND OUTLOOK

State of the world's wetlands and their services to people 2018

The cover of the "Perspectives Mondiales des Zones Humides" report features a photograph of a coastal wetland with a winding water channel and marshy banks under a cloudy sky.

PERSPECTIVES MONDIALES DES ZONES HUMIDES

L'état mondial des zones humides et de leurs services à l'humanité 2018

The cover of the "Perspectiva Mundial sobre los Humedales" report features a photograph of a coastal wetland with a winding water channel and marshy banks under a cloudy sky.

PERSPECTIVA MUNDIAL SOBRE LOS HUMEDALES

Estado de los humedales del mundo y de los servicios que prestan a las personas 2018



Royal C. Gardner
Professor of Law and Director
Institute for Biodiversity Law and Policy
Stetson University, USA

Wetlands & climate change:
Urgent restoration for our future

—
27 October 2021 Webinar



Ramsar-wide effort

- **September 2016: writing workshop in Changshu, China, on the margins of INTECOL**
- **February 2017: drafting at STRP20**
- **May to June 2017: First Order Draft released to STRP NFPs for review**
- **September 2017: writing workshop at Ramsar Secretariat**
- **December 2017: Second Order Draft released for peer review**
- **January 2018: drafting at STRP21**
- **March 2018: Third Order Draft prepared for internal review**
- **April-August 2018: Final editing and translation, and Technical Notes prepared**
- **September 2018: Official launch**



Martha Rojas Urrego
@martharojasu1

Following

Thank you to Scientific and Technical Review Panel & STRP Chair R.Gardner working tirelessly this week & making progress on key [@RamsarConv](#) publications for [#RamsarCOP13](#) [#WetlandOutlook](#)



8:13 AM - 18 Jan 2018

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Elements of the Global Wetland Outlook

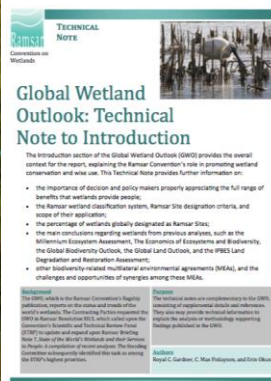
- Main report (with Executive Summary)

- Technical notes on each section of the report



GLOBAL WETLAND OUTLOOK

State of the world's wetlands and their services to people 2018



Context for the Global Wetland Outlook



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- **Builds on previous assessments**
 - **Millennium Ecosystem Assessment**
 - **CBD Global Biodiversity Outlook**
 - **IPBES Land Degradation and Restoration Assessment**
 - **The Economics of Ecosystems and Biodiversity**
- **Emphasizes the role of wetlands in delivering sustainable development**
- **Frames the role of the Ramsar Convention nationally and internationally**

1. INTRODUCTION

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.



Status and Trends



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- **Wetland extent**
- **Wetland-dependent species**
- **Water quality**
- **Ecosystem services**

2. STATUS AND TRENDS

Ramsar tracks global wetland status and trends, which helps measure progress in Sustainable Development Goal 6. Natural wetlands have declined in inland, coastal and marine habitats; a small growth in artificial wetlands fails to compensate. Populations of wetland-dependent species are declining and many are threatened. Global water quality is still getting worse. Yet wetlands are critically important for their ecosystem services: food and water security, disaster risk reduction and carbon sequestration amongst others. Their economic and biodiversity value far outweighs many terrestrial ecosystems.



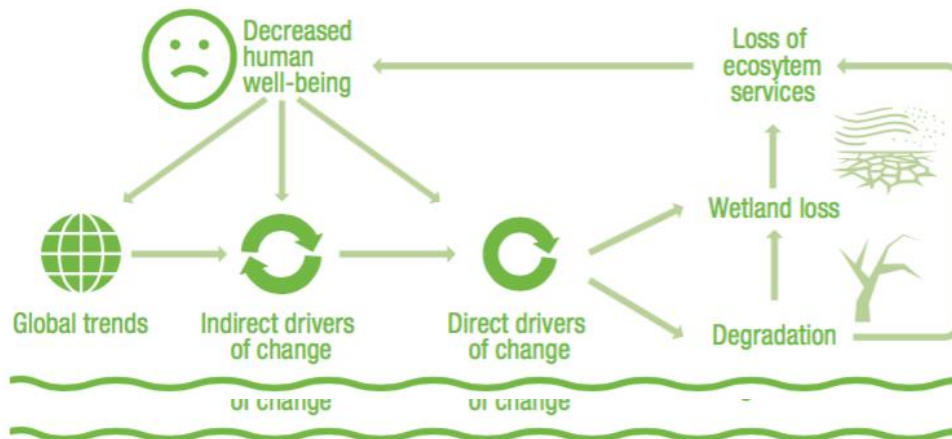
Drivers of Change



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- Direct drivers
- Indirect drivers
- Megatrends



3. DRIVERS OF CHANGE

There are three main drivers of change: direct drivers that create biophysical change in wetlands (land use change, pollution, etc.), indirect drivers that are the processes in society that create the direct drivers, and global megatrends that are behind several indirect drivers. Effective policy and management for wise use need a good understanding of the drivers of change in wetlands so that the root causes of wetland loss and degradation can be addressed. Effective governance at local, national and regional levels is a key factor for preventing, stopping and reversing the trend of wetland loss and degradation.

Responses



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- **Institutions and governance**
- **Management**
- **Investment**
- **Knowledge**

4. RESPONSES

Responses must address many challenges simultaneously. Enhancing the network of Ramsar Sites, and of other protected and conserved areas, ensures a conservation framework. Integrating wetlands into the post-2015 development agenda, and the Sustainable Development Goals, will help achieve wise use. Ramsar has several mechanisms to respond to problems and to measure progress towards goals. Other tools are also needed: legal and policy instruments, economic and financial incentives and sustainable production. Capacity building and encouraging diverse perspectives are both critical to success.

Responses: enhance the network of Ramsar Sites and other protected areas



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Search found **1125 Ramsar Sites** covering **89,786,152 ha** | ☐ Management plan available: Yes

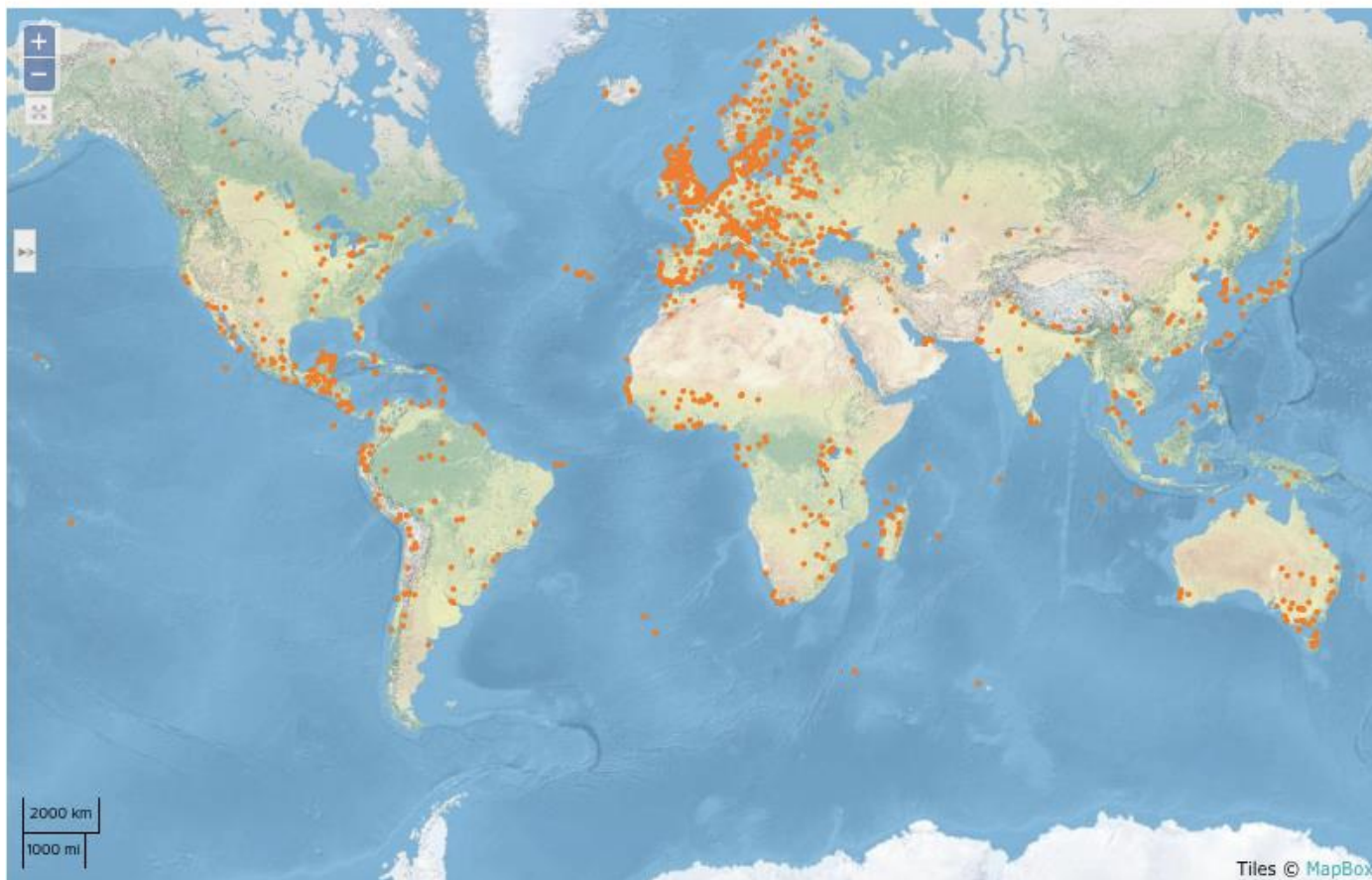
Reset

Map

List

Stats

Exports



More than
half of all
Ramsar Sites
lack
management
plans

Responses: integrate wetlands into the post-2020 development agenda



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Ramsar has a key role in supporting the Sustainable Development Goals



Guidelines for inventories of tropical peatlands to facilitate their designation as Ramsar Sites

Purpose

This Briefing Note aims to support wetland managers in tropical countries by providing step-by-step guidance on how to identify, assess and inventory tropical peatlands for their possible designation as Ramsar Sites, using Ramsar Sites designation Criterion 1 (if a peatland is "a representative, rare, or unique example of a natural or near-natural wetland type") including an argument about climate regulation and carbon storage capacity, and Criterion 2 (if a peatland "supports vulnerable, endangered, or critically endangered species or threatened ecological communities").

Background

Ramsar Resolution XII.11 on Peatlands, climate change and wise use. Implications for the Ramsar Convention asked the Convention's Scientific and Technical Review Panel (STRP) to develop 'guidelines for inventories of peatlands for their designation as Wetlands of International Importance'. The STRP recommended in its 2016 to 2018 work plan to focus on tropical peatlands, which face rising rates of degradation and loss, and the Standing Committee identified this task among the STRP's highest priorities. This Briefing Note provides scientific and technical guidance to assess the location, extent, peat depth and quality, and drainage status of tropical peatlands.

Peatlands trap and store carbon, help regulate water cycles, purify water and support a wealth of biodiversity. They cover an estimated 3 percent of the earth's land surface, yet they hold twice as much carbon as the world's forest biomass.

Despite their great ecological role, peatlands are being degraded and lost. Tropical peatlands in particular continue to be drained for the production of fuel, food and fibre, resulting in greenhouse gas emissions, fires, land subsidence, soil degradation and deteriorating surface water quality.

Knowing where tropical peatlands are located will facilitate their conservation, wise use and management. Tropical peatlands are believed to comprise between 10 percent and 12 percent of the total global peatland resource, but information about their extent and location is far from complete (Joosten, 2016).

This Briefing Note provides guidelines to wetland managers in tropical countries for conducting inventories of peatlands, which may also facilitate their designation as Wetlands of International Importance ("Ramsar Sites").

Key messages

- Avoid peatland drainage. The draining of tropical peatlands causes significant and continuous greenhouse gas emissions, destructive fires, soil degradation, subsidence, the loss of productive land and deterioration of surface water quality.
- Determine the location of tropical peatlands and map them. Tropical peatlands are widespread and diverse, and occur from sea level to high altitudes. Detailed and comprehensive information on their location and extent is scarce, but in most countries national and regional data enable a rapid initial identification of the main peatland areas.
- Detailed inventory and monitoring based on standard Ramsar guidance¹ should where possible be supplemented by field research to assess peatland extent and the thickness of peat. This will entail peat coring in the field and (if feasible) the application of earth observation technologies.



www.ramsar.org

¹ See Ramsar Handbook No. 13: Inventory, assessment, and monitoring and Ramsar Handbook No. 15: Wetland inventory, available at: <https://www.ramsar.org/resources/ramsar-handbooks>.

Responses: strengthen legal and policy arrangements

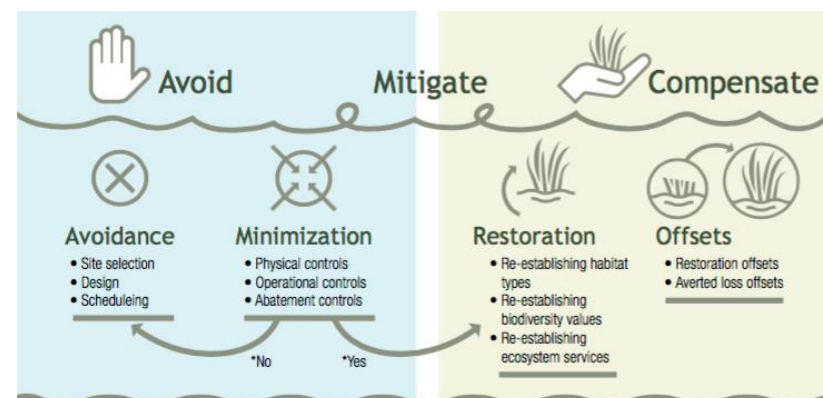
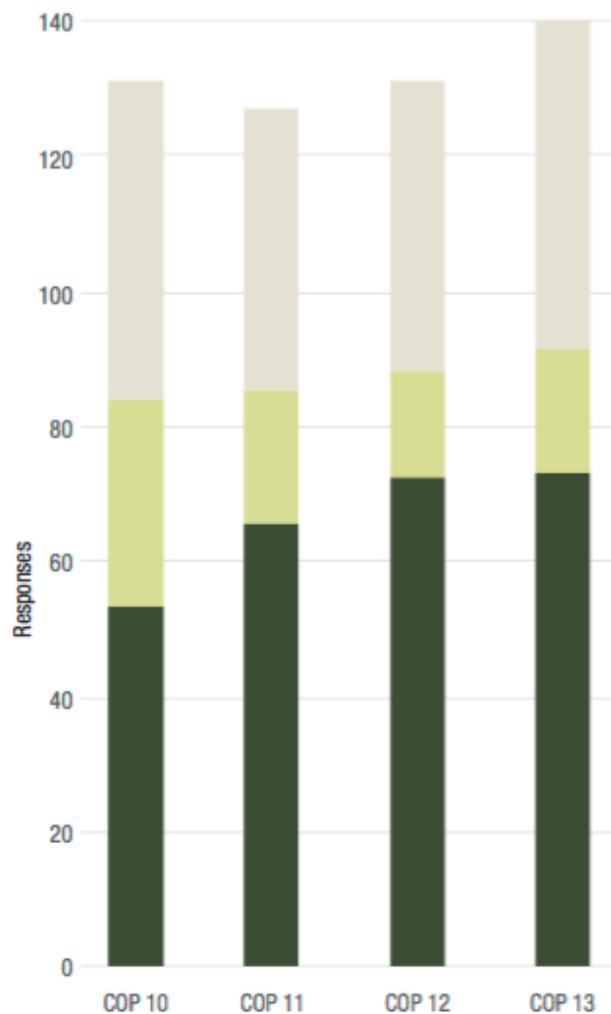


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Figure 4.4

Is a Wetland Policy (or equivalent instrument) that promotes the wise use of wetlands in place?

- Yes
- In preparation
- No



* can potential impacts be managed adequately through remediative measures?

Responses: apply economic and financial incentives



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Table 4.2

Wetland losses and gains in the U.S. agricultural sector. Adapted from data in: Frayer et al. 1983, Dahl & Johnson 1991, Dahl 2000, 2006, 2011.

Years	Average wetland loss	Average wetland gain
1950s-1970s	161,251.2 ha/year lost	
Mid-1970s to mid-1980s	63,373.8 ha/year lost	
1986-1997	6,155.3 ha/year lost	
1998-2004		4,773.3 ha/year gained
2004-2009		8,994.8 ha/year gained

South Africa gets first biodiversity tax incentive



Surveying fiscal benefits pilot sites © Candice Stevens

Cross-sector requirements

We will **not** provide financial services to clients who:

- Are involved in child or forced labour, or violations of human rights
- Have operations that adversely impact upon the Outstanding Universal Value of UNESCO World Heritage Sites
- Have operations that are located within, or significantly impact negatively upon wetlands designated under the Ramsar Convention on Wetlands of International Importance
- Convert or degrade High Conservation Value (HCV), High Carbon Stock (HCS) forests, or peatlands
- Trade or process species listed on the Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES)

PROHIBITED ACTIVITIES

Here are the activities we will not support

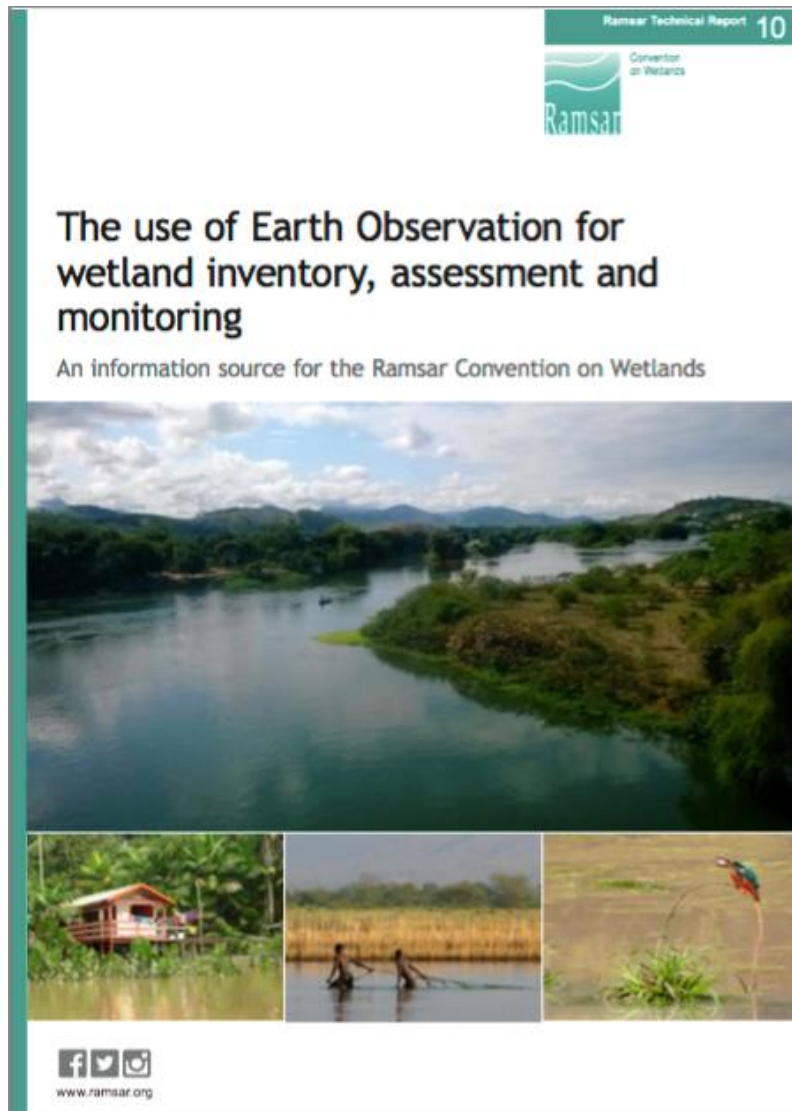
We will not provide financial services to clients who breach these restrictions

Responses: update and improve national wetland inventories



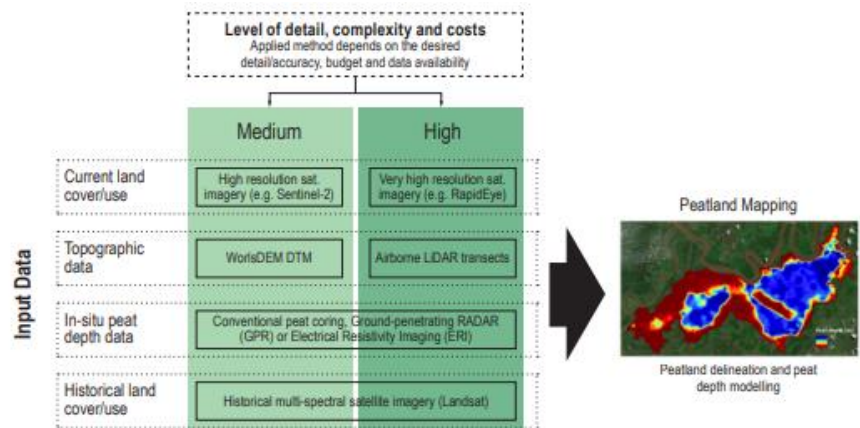
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EO for tropical peatland mapping

This case study provides an example of a best practice for a national level approach to EO-based mapping of tropical peatland extent and peat depth. The approach described here was selected as the best methodology to measure the extent and depth of peat in Indonesia in the framework of the Indonesian Peat Prize and was developed in direct support of the Indonesian Government's One Map Policy.



Methodological framework. The approach has two phases: collection and processing of input data (left: current land cover/use, topographic elevation data, *in-situ* peat depth data and historical land cover/use), which then goes into peatland mapping, including peatland delineation and peat depth modelling. An increase of detail and accuracy together with a decrease in uncertainty leads to an increase of costs and methodological complexity.

Resources



Finlayson, C.M., Gardner R.C. (2020). Ten key issues from the Global Wetland Outlook for decision makers. *Marine and Freshwater Research* 72, 301-310. <https://www.publish.csiro.au/MF/MF20079>

Gardner R.C., Finlayson C.M. (2018). Global Wetland Outlook: State of the World's Wetlands and their Services to People. Gland, Switzerland: Ramsar Convention Secretariat. <https://www.global-wetland-outlook.ramsar.org/outlook>

Gardner, R.C., Finlayson, C.M., and Okuno, E. (2018). Global Wetland Outlook: Technical Note to Introduction. Gland, Switzerland: Ramsar Convention Secretariat.

Finlayson, C.M & Davidson, N.C. (2018). Global Wetland Outlook: Technical Note on Status and Trends. Gland, Switzerland: Ramsar Convention Secretariat.

van Dam, A.A. (2018). Global Wetland Outlook: Technical Note on Drivers of Change. Gland, Switzerland: Ramsar Convention Secretariat.

Gardner, R.C., Finlayson, C.M., Kumar, R., Okuno, E., and Stroud, D. (2018). Global Wetland Outlook: Technical Note on Responses. Gland, Switzerland: Ramsar Convention Secretariat.

Rebelo, L.-M., Finlayson, C.M., Strauch, A., Rosenqvist, A., Perennou, C., Tøttrup, C., Hilarides, L., Paganini, M., Wielaard, N., Siegert, F., Ballhorn, U., Navratil, P., Franke, J. & Davidson, N. (2018). The use of Earth Observation for wetland inventory, assessment and monitoring: An information source for the Ramsar Convention on Wetlands. Ramsar Technical Report No.10. Gland, Switzerland: Ramsar Convention Secretariat.
https://www.ramsar.org/sites/default/files/documents/library/rtr10_earth_observation_e.pdf

Ramsar Convention. (2018). Resolution XIII.12: Guidance on identifying peatlands as Wetlands of International Importance (Ramsar Sites) for global climate change regulation as an additional argument to existing Ramsar criteria.
https://www.ramsar.org/sites/default/files/documents/library/xiii.12_identifying_peatlands_ramsar_sites_e.pdf

Ramsar Convention. (2018). Resolution XIII.13: Restoration of degraded peatlands to mitigate and adapt to climate change and enhance biodiversity and disaster risk reduction.
https://www.ramsar.org/sites/default/files/documents/library/xiii.13_peatland_restoration_e.pdf

Thank you for your attention and to all who contributed to the GWO!

