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## WP23\_25: GEO Wetlands

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1252,228

### Basic Information

#### Full title of the Initiative

GEO Wetlands

#### Short Title or Acronym

GEO-WETLANDS

#### Current category in the 2020-2022 GWP

GEO Initiative

#### Proposed category in the 2023-2025 GWP

GEO Initiative

### Points of Contact

First Name	Last/Family Name	Email
Adrian	Strauch	adrian.strauch@uni-bonn.de
Lammert	Hilarides	lammert.hilarides@wetlands.org
Marc	Paganini	marc.paganini@esa.int
Ake	Rosenqvist	ake.rosenqvist@soloEO.com
Anis	Guelmami	guelmami@tourduvalat.org

### Purpose

#### Objective

The three strategic objectives of GEO – advocate, engage, deliver – are the cornerstones of the GEO Wetlands initiative, which overarching vision is to deliver sustained information from Earth Observation to support the conservation, management, restoration and wise use of wetlands worldwide, as a contribution to the Ramsar Convention on Wetlands and other Multilateral Environmental Agreements (e.g., Convention on Biological Diversity), and to the 2030 Agenda on Sustainable Development.

This is achieved through:

- ? advocating, through improved wetland information and knowledge products, the importance of these fragile ecosystems, their valuable and diverse ecosystem functions, the essential services they provide to society, and the benefits of their sustainable use and conservation;
- ? advocating the use and importance of EO information products and techniques to improve the global knowledge of wetland status and trends, and the collective capacity to sustainably manage wetland ecosystems;
- ? engaging the broad wetland community from local (e.g. wetland managers) to global (e.g. Ramsar Convention

on Wetlands, Convention on Biological Diversity, UN Environment Program) actors, and involving them within a Global Wetland Observation Community of Practice;

? engaging with a diverse community of stakeholders, including policy makers such as the secretariats of international conventions (e.g. Ramsar, CBD, UNFCCC, UNCCD) and their Contracting Parties, the national authorities in charge of the implementation of wetland policies (e.g. national environmental agencies), UN organizations active in wetland monitoring and assessment (e.g., UNEP), NGOs (e.g. IUCN, WWF, Birdlife, Wetlands International, etc.), donor and funding organizations, space agencies, research institutions, EO service companies and the private sector;

? delivering EO data, information and knowledge tailored to specific user needs and requirements, based on state of the art techniques, and produced in a co-design and co-creation effort within the Global Wetland Observation Community of Practice, according to GEO data-sharing and data-management principles;

? delivering the enabling EO infrastructure to allow discovery, access and use of these EO data, information and knowledge and connect it via the GEOSS Common Infrastructure to a vast amount of additional relevant data, information and knowledge.

A unique characteristic of the GEO Wetlands initiative is that it addresses several Societal Benefit Areas (SBAs) of GEO and is connected to several other GEO Community Activities and Initiatives. GEO-Wetlands especially addresses the 'Water Resource Management' and the 'Biodiversity and Ecosystem Sustainability' SBAs. As wetlands have a huge carbon storage potential GEO Wetlands activities are also strongly connected to climate change mitigation. Further, it allows for thematic linkages between these SBAs and specific aspects of other SBAs like 'Disaster Resilience' (e.g. flood protection through wetlands), 'Food Security and Sustainable Agriculture' (e.g. conversion of wetlands to agricultural areas) or 'Energy and Mineral Resources Management' (e.g. hydropower and its impact on freshwater ecosystems). One of the main benefits of having a dedicated GEO-Wetlands Initiative in the GEO Work Programme is that all aspects of wetland observation can be governed under this framework, rather than having wetlands scattered across several initiatives, community activities and working groups without overall coordination.

## **Please provide a short description of the Initiative**

The GEO Wetlands Initiative is a collaborative and distributed effort, which builds on existing large-scale initiatives, activities and projects and uses the momentum and availability of funding within the wetlands community to establish a Global Wetland Observation Community of Practice (GEO Wetlands CoP), which principal objective is to deliver robust and cost effective EO solutions for wetland inventory, assessment and monitoring, including Wetlands-based solutions.

GEO Wetlands will also support the monitoring and reporting on SDG targets and indicators related to wetland ecosystems (e.g., SDG Target 6.6 on the protection and restoration of water-related ecosystems) and contribute to the production of the Global Wetland Outlook on the State of World's Wetlands and their services to people, the flagship publication of Ramsar Scientific and Technical Review Panel (STRP), which periodically reviews the state of wetlands worldwide.

## **Why is this Initiative needed?**

Wetland inventory, assessment and monitoring constitute essential instruments for countries to ensure the conservation and wise use of their wetlands. However, information on wetland ecosystems and on their services to people (e.g., Nature-Based Solutions) is often scattered, difficult to find, and hard to integrate into decision making. National wetland inventories provide the core information that is needed by countries in order to put in place efficient wetland protection and management policies. Up to date information on wetland conditions help countries to prioritize wetlands for restoration and rationally allocate wetland management decisions. They also allow to establish baselines against which to assess effectiveness of regulatory mechanisms.

The GEO Wetlands initiative brings together the disparate activities on wetland inventory, assessment and monitoring across GEO (bringing together GEO work programme activities on wetlands) and across the wider EO community (engaging them in the GEO Wetlands CoP), to improve the availability of global and national wetland inventories, which large scale production can only be achieved and regularly updated through EO, and to drive nature-based solutions from wetlands (also called Wetlands-based solutions).

The past several years have seen remarkable advances in our capability to map and monitor wetlands, making progress toward a global wetland observing system much more feasible. Among the most important developments are:

1. The accumulation of a freely available archive of Sentinel-1 C-band radar data, systematically acquired

globally at intervals of 12 days or less since 2016. Although the usefulness of C-band SAR for wetlands applications has long been established (especially for cloud-prone regions or seasons), the long-term time series of Sentinel-1, with virtually no data gaps, allows calculation of multi-year statistics that greatly reduce the effects of radar speckle and facilitate interseasonal and interannual comparisons. Many researchers have used the Sentinel-1 archive for mapping of open water and of flooded vs non-flooded herbaceous vegetation, at regional or global scale.

2. L-band SAR data acquired by JAXA's JERS-1, PALSAR-1, and PALSAR-2 sensors has been shown to be very effective for mapping inundation beneath forest canopies at high resolution -- a capability that no other current sensors can fully match. Annual mosaics are freely available from JAXA but their usefulness for wetlands is limited by the combining of scenes from multiple seasons. Time series of PALSAR-1 data for many regions is freely available through NASA's Alaska Satellite Facility, and PALSAR-2 data has been provided for some key wetland sites through JAXA data grants. The U.S.-India NISAR mission, scheduled to launch in early 2024, will provide near-global, freely available L-band data at a weekly repeat cycle.

3. The development of cloud computing, open-source software, and freely available analysis-ready EO data sets has made global or large-region EO much more practical, and has made it possible for users without access to costly computers and software to carry out sophisticated analyses. Global monitoring of open water, for example, can now be done with optical satellites such as Landsat by compositing images in Google Earth Engine (although cloud and shadow artefacts may still be evident). Atmospherically corrected surface reflectance images are readily available for Landsat and Sentinel-2, as are terrain-corrected backscattering images for Sentinel-1 and ALOS PALSAR. Open-source software such as OSGEO4W (which includes QGIS) and R allow sophisticated analyses of EO data.

4. The Copernicus GLO-30 DEM provides ~30 m terrain information at sub-meter height resolution, allowing topographic information at a similar spatial scale to Sentinel-1, PALSAR, Sentinel-2, and Landsat to be incorporated into wetland mapping algorithms. Tree height data sets provided by the GEDI mission give information on extent of woody vegetation, and can be used to convert DEMs to DTMs (digital terrain, or "bare earth") elevation models. GLO-30 also gives more recent information than the older SRTM DEM for very dynamic wetlands such as floodplains of meandering rivers.

5. Validation of maps of seasonally varying wetlands remains difficult owing to the small number of wetland sites that are monitored at key flooding and phenologic stages, over multiple years. Nevertheless, the task has been made much easier by the advent of very high resolution (

### **What evidence is there to support this need?**

Wetlands are hot spots of biodiversity and provide a wide range of valuable ecosystem services, such as water purification, hydrological buffering against floods and droughts, coastal protection and climate regulation (wetlands store more carbon than the world's forests). They are scattered across the world in all bio-geographic regions, providing a range of critically important ecosystem services and supporting the livelihoods and well-being of many people. Wetlands provide ecosystem services including fresh water and food worth an estimated US \$47 trillion a year. They also have massive potential to contribute to climate change mitigation efforts—protecting the 53.2 million hectares of coastal wetlands globally would secure an estimated 10.6–12.1 gigatons of carbon.

Despite their disproportionate importance for people and nature, wetlands are one of the most threatened and fastest declining ecosystems worldwide, disappearing three times faster than forests. For much of the 20th century, wetlands have been drained and degraded. Despite the existence of a number of intergovernmental agreements such as the Ramsar Convention on Wetlands and the Convention on Biological Diversity (CBD), wetlands are still severely under threat. Recent studies like the Global Wetland Outlook demonstrated that wetland areas and conditions continue to decline in most regions of the world. The loss of wetlands continues with direct and measurable negative impacts on the quality and availability of water, food security, biodiversity and carbon sequestration.

### **Is this Initiative open to participation by representatives of any GEO Member, Participating Organization, and GEO Associate?**

Yes

## **Are you aware of other projects or initiatives at a global or regional scale (both in GEO and externally) that provide similar products or services?**

Yes

### **Please describe.**

There are many existing initiatives and projects that provide data, information and tools for wetlands inventory, assessment and monitoring. We listed more than 35 projects that are contributing to international efforts to deliver on wetlands inventories from regional to global levels. These projects go from applied scientific studies to operational services. However, while these projects and programs have great potential to provide useful information on wetlands inventories and status, there is a lack of coordination from the conception of these programs to the delivery of the output products. This is a key new element proposed by this initiative. Most existing global and regional wetlands monitoring projects and programs were contacted and invited to contribute to the GEO Wetlands initiative, with a high level of acceptance.

Some platforms propose global integrated wetlands products such as the Ramsar Sites Information Service (RSIS), the Wetland Extent Trends (WET) of UNEP World Conservation Monitoring Center (UNEP-WCMC), the Freshwater Ecosystems Explorer (UNEP, Google, European Commission), the Sustainable Wetlands Adaptation and Mitigation Program (SWAMP), the NASA JPL/USGS Dynamic Surface Water Extent (DSWx), and the UNEP World Environment Situation Room (WESR). GEO Wetlands will coordinate with these platforms and raise the level of international cooperation to offer more integrated wetlands monitoring capacities.

### **How is this Initiative unique?**

Concerning Wetlands-Based Solutions (WBS), while there are some platforms that propose geospatial tools for nature-based solutions implementation and monitoring such as OpenForests or Restor that include mangrove restoration services, there is no platform that fully integrates what GEO Wetlands intends to offer.

## **Please identify the most important actual and/or intended outputs (products, services, etc.) produced by the Initiative, along with their intended and/or actual users. This list does not need to be comprehensive but should identify the outputs which are most used and are expected to have the greatest potential impact.**

- no answer given -

### **If needed, please provide additional comments or explanation to accompany the outputs table**

The main expected outputs of GEO Wetlands are the delivery for operational use of integrated solutions for national wetland inventory, assessment and monitoring, and the establishment of a GEO-Wetlands Knowledge Base and Community Portal as go-to address for open EO data, information products, open source tools, data processing and analytics platforms, monitoring guidelines, training materials and collaboration (including south to south cooperation) regarding the use of EO in wetland inventory, monitoring, mapping and assessment, in wetland conservation and restoration, and in the implementation of Wetland-Based Solutions

## **What kinds of decisions are the outputs of this Initiative primarily intended to support?**

Wetlands are biodiversity hotspots, mitigate against flooding and store more carbon than the world's forests. They provide ecosystem services including fresh water and food worth an estimated US \$47 trillion a year. Despite these critical benefits, wetlands have been drained and degraded for much of the last two centuries. The Global Wetland Outlook, a report by the Ramsar Convention on Wetlands, says that wetlands are our most threatened ecosystem, disappearing three times faster than forests. Reversing this trend could yield dramatic benefits. According to Project Drawdown, protecting the 53.2 million hectares of coastal wetlands globally would secure an estimated 10.6–12.1 gigatons of carbon, equivalent to more than 38.9–44.4 gigatons of carbon dioxide if released into the atmosphere. This would be a massive contribution to global climate change mitigation efforts. The use of Earth Observation data has several benefits for wetlands inventories, assessment and monitoring, as well as for the implementation of Wetlands-Based Solutions:

? to improve knowledge on the extent and conditions of wetland ecosystems, globally,

? to provide geospatial information to define priority areas in wetlands conservation and restoration,  
? to produce essential variables for key indicators on the impact of wetlands conservation and restoration (e.g., for climate change mitigation),  
? to increase knowledge on wetland biodiversity (wetlands habitats and species),  
? to value the role of Wetlands-Based Solutions in disaster risk reduction (e.g. flood regulation), water purification (e.g. contaminant retention), coastal protection, and other essential wetland ecosystem services. GEO Wetlands proposes to unleash the full potential of Earth Observation for wetlands conservation and restoration applications by coordinating existing international efforts in the field.

The initiative will support several international commitments to protect and restore wetlands including the Ramsar Convention on wetlands, the Sustainable Development Goals and in particular the SDG Target 6.6 on water-related ecosystems, the Convention on Biological Diversity (CBD) and in particular the post-2020 Global Biodiversity Framework (GBF), and the UN Framework Convention on Climate Change (UNFCCC) where Wetlands-Based Solutions can play an important role in the revised National Determined Contribution of many countries.

GEO Wetlands is an observer to the Scientific and Technical Review Panel (STRP) of the Ramsar Convention on Wetlands where it supports the use of Earth Observations for National Wetlands Inventory, Assessment and Monitoring, as well as for the Global Wetlands Outlook, the flagship publication of the Ramsar STRP on the status of pressures, and trends of the world's wetlands.

### **How will these decisions benefit from the outputs of this Initiative?**

GEO Wetlands will provide countries with the robust and cost-effective EO solutions to conduct their national wetland inventories, assess the conditions of wetland ecosystems, plan their wetlands conservation and restoration actions and monitor progress, and implement nature-based solutions. GEO Wetlands will also unlock financing and feed into the post-2020 global biodiversity framework.

### **What kinds of impacts (for example, reduced loss of life, monetary savings, conservation of biodiversity, etc.) are anticipated as a result of the use of the outputs of this Initiative?**

See above

### **Has this Initiative been asked to provide specific information (for example, reports, data, services) on an ongoing basis to an international convention, organization, or other multilateral body?**

Yes

#### **Please identify the requesting organization.**

- no answer given -

#### **Describe the nature of the request.**

GEO Wetlands will contribute to the production of data, services and methods to assist countries in carrying out their national wetland inventories for the Ramsar Convention, support UNEP and Ramsar in the development of best practice methods and guidelines for the monitoring and reporting of SDG indicator 6.6.1 (change in the extent of water-related ecosystems over time), and support the production of the Ramsar STRP Global Wetlands Outlook.

#### **Please provide supporting documentation of the request.**

- no supporting documents provided -

## **Technical Synopsis**

**Please provide a brief description of the methods used by the Initiative to produce its (actual or planned) outputs.**

For the 2023-2025 period, GEO Wetlands will deliver outputs for the following 4 cardinal priorities :

- A) Wetlands Inventory, Assessment and Monitoring
- B) Wetlands-Based Solutions
- C) Knowledge Sharing
- D) Capacity development and Regional Collaboration

A) Wetlands Inventory, Assessment and Monitoring

A1 - List existing wetlands monitoring programs and available wetlands extent datasets

A2 - Develop a data fusion methodology for a global synergetic wetlands inventory (including classification of wetland types)

A2-1 : Define a consensus on wetlands extent definition

A3 - Define a collaboration strategy for the collection and sharing of training and validation data on wetland inventory

A4 - Define the production and distribution strategy for the global synergetic wetlands inventory

A5 - Define a wetlands monitoring strategy using existing synergetic wetlands maps and open EO data

B) Wetlands-Based Solutions (WBS)

B1 - Identify needed products from EO for WBS implementation and prioritization

B2 - Identify needs for WBS impact monitoring (carbon, biodiversity, water, local economies...)

B3 - Propose a strategy to develop products that will support and facilitate the certification of WBS

B4 - Animate a dialogue on WBS with other GEO activities for integration purposes

B5 - Define a methodology with other GEO activities for a "Wetlands Red Alert" solution

(looking at wetlands threats from urban sprawl and agriculture intensification)

C) Capacity Development, Regional Collaboration and wetlands knowledge community portal

C1 - Support regional collaboration in EO for wetlands

C2 - Support the development of an EO regional capacity development strategy for each region

C3 - Establishment of a Wetlands Knowledge Community Portal

**If you would like to provide further details on the technical methods, you may upload one or more documents here.**

- no supporting documents provided -

**Are there any significant scientific or technical challenges that need to be resolved by the Initiative during the 2023-2025 period?**

No

**Does the Initiative expect to complete any key new outputs, improvements to existing outputs, or improvements to the methods of producing outputs, in the 2023-2025 period?**

No

## Resources

**Have all resources required to implement the Initiative's planned work in the 2023-2025 period been secured?**

- Gap in financial resources

**What is the estimated funding gap for the 2023-2025 period?**

250,000 US£

**What actions is the Initiative taking to obtain the required resources?**

Discussions and proposals are being submitted to donors (ADA) and funds (CI's Broadleaf, IUCN's EBA, and Arcmor)

**Please list all financial and non-financial contributions to the Initiative (other than in-kind, voluntary participation by individual contributors) having a value of more than USD 50,000.**

- no answer given -

## **Lessons from the 2020-2022 Period**

**Were all planned activities for the 2020-2022 period implemented as expected?**

No

**Please describe which activities were delayed or not implemented and how has this affected plans for 2023-2025.**

The mangrove focused deliverables have been implemented, the other ones have not.

**Were there any key challenges faced by the Initiative in the 2020-2022 period?**

Yes

**Please describe.**

Resourcing coordination of the initiative was difficult during this period. Also the initiative was not able to finance a proper secretariat in the long term. Establishing and maintaining continuous coordination and communication activities was therefore not possible in the way it would be needed to manage and further develop the initiative and achieve all planned outputs.

We faced a continued lack of consensus on definition of wetland extent (e.g. long-term historical average, average of annual minimum extents, average of annual maximum extents, etc.).

**Were there any impacts or changes to operations due to COVID-19?**

No

**Please describe the key changes proposed for the 2023-2025 period, for example, new projects, new areas of focus, or adjustments to the activity governance.**

- no answer given -

**Does the Initiative have outputs (products, services, etc.) available to users now, even if only on a pilot or testing basis?**

Yes

**Please provide any available information describing this usage (for example, user statistics, results of user testing) and/or feedback from users (for example, user comments, evaluations).**

- no answer given -

**Please provide supporting documentation if available.**

- no supporting documents provided -

**Do you have evidence of any impacts that have occurred in part as a result of using the**

**outputs of the Initiative (for example, policy decisions taken, behaviour changes by users, risks mitigated)?**

No

**Have there been any internal or external reviews or evaluations of the Initiative since 2019?**

No

**Please indicate any GEO Work Programme activities with which you have ongoing collaboration.**

- AQUAWATCH - AquaWatch
- EO4SDG - Earth Observations for the Sustainable Development Goals
- GEO BON - GEO Biodiversity Observation Network
- GEOGLOWS - GEO Global Water Sustainability
- GEO-LDN - GEO Land Degradation Neutrality
- GEO-MOUNTAINS - Global Network for Observations and Information in Mountain Environments

**Please indicate any additional GEO Work Programme activities with which you would like to establish new collaborations.**

- AQUAWATCH - AquaWatch
- DE-AFRICA - Digital Earth Africa
- EO4EA - Earth Observations for Ecosystem Accounting
- EO4SDG - Earth Observations for the Sustainable Development Goals
- EUROGEO - European Group on Earth Observations
- GEO BON - GEO Biodiversity Observation Network
- GEOGLOWS - GEO Global Water Sustainability
- GFOI - Global Forest Observation Initiative

## **Stakeholder Engagement and Capacity Building**

**Are there specific countries or organizations that your Initiative would like to engage?**

Yes

**Please list these countries, regions or organizations.**

The audience is global currently, however there may be some pilots to work with in Africa, Asia and elsewhere

**What are your plans to engage them?**

Via co-created solutions and strategies that will be developed based on the discussions that will be had with the specific countries .

**Does your Initiative engage users in the work of the Initiative (for example, consultation, testing, co-design)?**

Yes

**Please briefly describe the Initiative's approach to engaging users.**

Yes, the initiative has user organizations already engaged as key members and actively worked with users on the ground when developing products and services, for example NGO's and relevant government agencies. Important users are the Ramsar Contracting Parties. In the previous working period several members affiliated with GEO Wetlands (JAXA, ESA, Wetlands International) have engaged through Ramsar's Scientific and Technical Review Panel and plan to continue to do so as well as increase engagement with the



Ramsar Secretariat. Several of the projects contributing to GEO Wetlands also established close user interactions and networks, and actively involved users in their work.

**Does the Initiative have a user engagement strategy or similar kind of document?**

No

**Are there categories of users that are not represented at this time, but you would like to engage?**

Yes

**Please list these user categories or regions.**

Basin authorities are a key category of users with which GEO Wetlands would like to engage.

**What are the plans for further engagement of users in the Initiative?**

To be outlined in the user engagement and capacity development strategy.

**Does the Initiative have a documented capacity development strategy?**

No

**Please describe the approach to capacity development that is being implemented by the Initiative?**

Capacity development is one of the key outputs on which GEO Wetlands wants to deliver. The strategy will be developed with the new capacity development coordinator at GEOSEC.

**Are there any commercial sector organizations participating in this Initiative?**

Yes

**Please list the commercial sector organizations.**

Organization name	GEO Member/PO/...	Country in which the organization is based	City in which the organization is based
It was decided that the commercial organizations will be invited to participate through pilot projects and not as participants considering that private entities need to be financed to participate properly. Nevertheless, there are several SMEs (mainly from the remote sensing sector) that were involved in related projects and are still engaged in the GEO Wetlands community.		TBC	TBC

**Are there opportunities for commercial sector uptake of the outputs of the Initiative?**

Yes

**Please describe these opportunities.**

The Wetlands-Based Solutions sector will benefit from the initiatives. It is a sector with a high commercial potential.

**Is there already commercial uptake occurring?**

No

**Are there opportunities for further commercial sector participation in the Initiative?**

Yes

**Please describe these opportunities.**

- no answer given -

**Does the Initiative have a plan for commercial sector engagement?**

No

**Governance**

**Please describe the roles of each of the key leadership positions, as well as any team structures involved in day-to-day management.**

GEO-Wetlands was based on a rather loose, bottom-up governance and management structure. This grew out of the different projects and cooperation activities. There was a core team of partners (University of Bonn, Wetlands International, ESA, University of Jena) who took care of most management, communication and maintenance related activities as well as all the reporting and coordination towards GEO and other major stakeholders.

This loose structure had advantages and disadvantages at the same time. It was very flexible and allowed to easily adjust to new situations and changed requirements or framework conditions. But at the same time, it lacked commitment and substantial resourcing. This is especially obvious when it comes to community management and communication activities, which are almost completely based on best effort. Therefore, one of the major goals for the 2023-2025 period is to move the governance structure into a more permanent and long-term model with financial support and stakeholder commitment. While this has already been planned for the first two three-year phases, it showed that without tangible results and dedicated resources it is not feasible to set up such structures. The vision for the future of GEO-Wetlands is that it keeps its bottom-up and community driven character while still introducing some more top-down elements in the form of advice and steering through key global stakeholders. This more permanent and formal structure will also evolve towards broadening gender and geographic diversity of the GEO-Wetlands leadership.

The governance will be confirmed for the GEO WEEK 2022 as it evolved from the previous governance and as we are looking for funding this revived ambition for GEO Wetlands. The new governance proposal presented on the figure includes the following bodies :

? 3 working groups corresponding to the 3 main outputs of GEO Wetlands. Working Groups are generally intended to develop into long-term bodies of the initiative that develop a specific work plan with set outcomes and deliverables supported through necessary funding. The permanent establishment of these groups is a continuous effort that will migrate from the current to the new implementation plan and continue in the 2020-2022 period.

? A Leadership group that both lead the working groups and the governance of this initiative and support the GEO Wetlands secretariat. The Leadership group is actually the ideation team group but final composition will be confirmed at the GEO WEEK 2022.

? A secretariat that at the moment only exists in a virtual, best-effort form, and not as a permanently set-up body. The GEO Wetlands secretariat is receiving support from the GEO Secretariat.

? A moving number of pilots where specific tasks will be handled and profit to the different working groups. These pilot projects correspond to former task teams that were used in the former governance but being less determined for a specific task. Pilot projects will be decided with both users and funders for higher impact. Pilots are a mechanism for ad-hoc achievement of temporary activities like the set-up of the GEO-Wetlands website and knowledge-base or the development of specific reports and other documents.

? An advisory board. Participants from the Ramsar Secretariat and from UNEP will be invited in priority as well as other key stakeholders for wetlands-related issues. We hope to create a momentum around the Ramsar COP this year where GEO Wetlands has an opportunity to attract more enthusiasm in participating to the governing bodies.

? A wetlands & GEO and Nature-based Solutions community of practice. This broad community is involved in the initiative through different projects or as participants in working groups. This network is open and inclusive, with the goal to establish a global community of practice. The community of practice is at the core of GEO-Wetlands and it is where most of the developments and achievements come from. Collaboration between users and producers of wetland related information through projects and in working groups and task teams are the motor for achieving the goals of the initiative based on a co-design and co-creation approach.

? A user's community. The users are at the center of this activity and already benefiting from an active wetlands, GEO and Nature-based solutions community that GEO Wetlands will solicit and animate.

? A group of funders that will be connected to the activity not only for funding but also to co-design the pilots. The funders will play a visible role as this initiative will need a strong and sustainable link with funders to be developed. They will be key partners for the pilot projects that we will develop with the support of the working groups.

A goal for the 2023-2025 period is to achieve the set-up of a financially sustainable and permanent secretariat to continue and strengthen the overall management of the initiative. In addition, the setup of an official advisory board involving representatives from authoritative organizations in the field of wetlands conservation such as the secretariat of the Ramsar Convention on Wetlands, Ramsar regional initiatives, UN Environment and IUCN (besides others) is very high on the agenda for the next phase of the initiative.

**Is there a steering committee or other governance bodies that advise the Initiative but are not involved in day-to-day management?**

Yes

**Please describe the roles of each body. If there are multiple governance bodies, please describe the relationships among them (such as through a governance structure diagram).**

An advisory board will be settled during the second semester of 2023 inviting main custodian agencies for wetlands to participate.

- no supporting documents provided -

**What methods does the Initiative use to communicate with its participants?**

- Other

**Please describe.**

A GEO-Wetlands #Slack ([www.slack.com](http://www.slack.com)) has been established as a tool for community management and communication. The idea is to develop this into an easy to use community tool allowing everyone to connect with each other, discuss about GEO-Wetlands related issues and coordinate collaboration activities and GEO-Wetlands tasks etc.

We are also using Miro for brainstorming sessions, the Miro stays open after the remote meetings and participants can share ideas on possible developments of the initiative.

**Please describe the key risks that could delay or obstruct the completion of the**

**planned activities and outputs of the Initiative, along with any actions taken to mitigate these risks.**

<b>Description of the hazard</b>	<b>Description of the possible impacts</b>	<b>Scale of impact</b>	<b>Likelihood of occurrence</b>	<b>Mitigation measures</b>
Lack of funding	High	Severe	Possible	Aggressive resource mobilization to be prioritized in the coming months

**What methods are used by the Initiative to monitor its effectiveness?**

- Informal discussions with users / beneficiaries
- User or beneficiary surveys
- Website statistics
- Consultations or events

**Would the Initiative be interested in assistance from the GEO Secretariat for developing an impact plan?**

Yes

**How are the results of the monitoring and evaluation activities shared with participants and the wider GEO community?**

GEO Wetlands has a website that will be used to share information and knowledge resulting from the development of the different outputs.

**Are any monitoring or evaluation activities required by funders/contributors?**

Yes

**Please describe and provide reports if available.**

- no answer given -

- no supporting documents provided -

## **Participants**

**Please list the active individual participants in the Initiative**

<b>First name</b>	<b>Last name</b>	<b>Email address</b>	<b>Member</b>	<b>Org</b>
Michael	Riffler	riffler@geoville.com	Austria	- GeoVille
Christian	Tottrup	cto@dhi-gras.com	Denmark	- DHI GRAS
Anis	Guelmami	guelmami@tourduvalat.org	France	- Tour du Valat
Kathrin	Weise	kathrin.weise@jena-optronik.de	Germany	- Jena-Optronik GmbH
Jonas	Franke	franke@rssgmbh.de	Germany	RSS GmbH - Remote Sensing Solutions GmbH
Jonas	Eberle	jonas.eberle@uni-jena.de	Germany	- University of Jena
Eleni	Fitoka	helenf@ekby.gr	Greece	EKBY - Greek Biotope Wetland Centre
Richard	Lucas	rml2@aber.ac.uk	United Kingdom	- Aberystwyth University
Christoph	Schröder	christoph.schroder@uma.es	Spain	- ETC University of Malaga
Susanne	Thulin	susanne.thulin@brockmann-geomatics.se	Sweden	Brockmann Geomatics - Brockmann Geomatics, Sweden
Nathan	Thomas	nathan.m.thomas@nasa.gov	United States	NASA - National Aeronautics and Space Administration
Lola	Fatoyinbo	lola.fatoyinbo@nasa.gov	United States	NASA - National Aeronautics and Space Administration
Emily	Landis	elandis@tnc.org	United States	- The Nature Conservancy
Mark	Spalding	mspalding@tnc.org	United States	- The Nature Conservancy
Lisa-Maria	Rebelo	l.rebelo@cgiar.org	IWMI - International Water Management Institute	IWMI - International Water Management Institute
Chris	Dickens	c.dickens@cgiar.org	IWMI - International Water Management Institute	IWMI - International Water Management Institute
Adrian	Strauch	adrian.strauch@uni-bonn.de	Germany	- University of Bonn
Lammert	Hilarides	lammert.hilarides@	Netherlands	- Wetlands

		wetlands.org		International
Marc	Paganini	marc.paganini@esa.int	ESA - European Space Agency	ESA - European Space Agency
suhaib	bin farhan	dh.trd@suparco.gov.pk		
claudio	barbosa	claudio.barbosa@inpe.br		
Jonas	Franke	franke@rssgmbh.de	Germany	RSS GmbH - Remote Sensing Solutions GmbH
ake	Rosenqvist	ake.rosenqvist@soloeo.com		
Anis	Guelmami	guelmami@tourduvalat.org	France	- Tour du Valat
Osamu	Ochiai	ochiai.osamu@jaxa.jp	Japan	JAXA - Japan Aerospace Exploration Agency
Laura	Hess	lauralhess@gmail.com		
Zhenguo	Niu	niuzg@aircas.ac.cn		
Ming	Jiang	jiangm@iga.ac.cn		
Roger	Sayre	rsayre@usgs.gov	United States	USGS - United States Geological Survey
Frédéric	Huynh	frederic.huynh@ird.fr	France	
Sandra	Lohberger	lohberger@rssgmbh.de		
David	Ongo Nyang'acha	dnyangacha@rcmr.d.org		
Joerg	Helmschrot	jhelmschrot@geocg.com		
Ian	Harrison	iharrison@conservation.org	CI - Conservation International	CI - Conservation International
Jane	Olwoch	jane.olwoch@sasscal.org		
Heidi	Van deventer	hvdeventer@csir.co.za		
Lisa	Hall	lisa.hall@ga.gov.au	Australia	GA - Geoscience Australia
Albano	Dos Santos	albano.dossantos@sasscal.org		

Fang	Yuan	fang.yuan@ga.gov.au	Australia	
Bex	Dunn	bex.dunn@ga.gov.au		
Jean-François	Faure	jean-francois.faure@ird.fr		
Marie-Paule	Bonnet	marie-paule.bonnet@ird.fr		
Marc	Despinoy	marc.despinoy@ird.fr		
Farrel	Nzigou Boucka	farrelboucka@gmail.com		
Meghan	Halabisky	halabisk@uw.edu		
Alessio	Satta	satta@medwet.org		
Norman Emmanuel	Ramirez	rrcea.po@gmail.com		
Seung	Oh Suh	suhseungoh@gmail.com		
Chris	Dickens	c.dickens@cgiar.org	IWMI - International Water Management Institute	IWMI - International Water Management Institute
Zoltán	Vekerdy	z.vekerdy@utwente.nl	Netherlands	- Univeristy of Twente

## Other information

**Please provide any other comments or information that was not included in the previous sections, but you would like to appear in the Implementation Plan.**

- no answer given -

- no supporting documents provided -

## Co-Editor Management

**List of co-editors for this initiative**

- no answer given -