

Why GEOGLOWS?

- **Water sustainability** (e.g. related to climate, surface and ground waters, water infrastructure and management, water use, water quality, basin/watershed sustainable productivity, hydro-climatological disasters, socio-economic and environmental aspects, etc., considered in a holistic, multi-sectorial, spatial, hydrologic context) is a critical issue in sustainable development and for the achievement of the SDGs.
- **Decision-making in water resources planning and management** can be supported with the improved use of earth observation data and associated analytical tools and services.
- Many institutions in the developing world (e.g. at national, sub-national, basin/watershed, or community levels) have **limited awareness** of the power of earth observation about the services in water resources. The issue is intensified by the **limited access** to existing and rapidly evolving services for data and tools from global and regional sources that could support their water-related activities.
- Need for improved awareness and networking at the global and regional level for the plethora of activities and products from a variety of agencies (e.g. GEO-related efforts, NASA, NOAA, ESA, CEOS, UN, World Bank, academia, etc.).
- There is a strong need to improve **public-domain open access to data** (from in-situ and satellite sources) and **analytical services** with appropriate information service infrastructure (e.g. cloud services, interactive knowledge products, portals/apps, discussion forums) to support sustainable water management, improve awareness and capacity to use existing relevant data and analytical services, and to support the work of global/regional communities of practice in accessing and contributing to global good practice in this regard.
- An initiative such as GEOGLOWS can support synergy among relevant initiatives associated with water sustainability as well as help support the long-term shared-vision strategic directions for such a partnership to help a wide variety of stakeholders (government, basin/watershed organizations, CSOs, academia/research agencies, private sector, development partners, general public) access public-domain data and analytical services to improve water sustainability.

Vision Statement

GEOGLOWS' vision is that **planning and management decisions related to water resources and water services are supported effectively by open earth observation data and analytical tools.**

Mission Statement

GEOGLOWS' mission is **to facilitate synergy among efforts to provide public-domain data and analytical services** to support decision-making on integrated water resources planning and management and provision of water-related social, economic, and environmental sustainable services.

This will **connect the demand for sound and timely environmental information** to the supply of data and information about the Earth's water system and to **explore the science** needed to achieve the goals outlined in the initiative. Advocacy for **broad, open data policies** and for **the realization of the right to access information** [to seek, to receive, and to impart data, tools, and knowledge services] will help ensure that the data collected through national, regional and global observing systems is both made available in the public domain and applied to decision-making.

GEOGLOWS Drivers

GEOGLOWS policy drivers include the Sustainable Development Goals, the Addis Ababa Action Agenda, the Paris Agreement on climate change, the Sendai Framework for Disaster Risk Reduction and Aichi Targets of The Convention on Biodiversity.

GEOGLOWS current Objectives

1. **Strengthen capacity** to understand water data needs and develop user-driven applications products from EO data and applications
2. **Engage end users and boundary organizations** to understand needs and decision making process by region, and to prioritize activities based on vulnerability analyses
3. **Coordinate and leverage GEOGLOWS partners** to more effectively provide information and expertise to stakeholder and end-user communities
4. **Strengthen capacity** to use science and water EO effectively across spatial and temporal scales
5. **Contribute to the assessments** of population and economic growth impacts on water resources availability and climate change, to inform planning and adaptation activities

Proposed Objectives by SC member

- Promote synergy (e.g. on shared vision, financing, joint/coordinated activities, products, and services) among initiatives for open water data and analytical services to support improved understanding and decision support
- Improve public-domain access to water sustainability related data, tools, and knowledge products and services
- Support awareness, capacity-building, and professional networking activities related to facilitating the use of earth observation data and analytical tools
- Support innovations and documentation of activities related to the effective use of earth observation for sustainable water management

Strategy of GEOGLOWS?

- Partnerships to improve synergy for:
 - Decisions to be supported
 - Data & Services catalog
 - Case studies (e.g. with Storymaps)
 - Knowledge products (e.g. e-books)
 - Training/Workshops
 - Competitions
 - Financing

Scope

The GEOGLOWS Steering Committee provides strategy, policy and technically related guidance and recommendations to the GEOGLOWS Working Groups and the GEO Secretariat as needed, and assesses progress on GEOGLOWS activities. In particular, it will:

- a. Advise the GEOGLOWS Working Groups on the development of a long-term strategy toward attaining the Initiative's goals;
- b. Ensure that the initiative's goals, achievements, implementation plans, and progress, as well as strategic issues follow GEOGLOWS objectives;

- c. Advise the GEOGLOWS Working Groups on how to ensure that their activities meet the objectives as they relate to SDGs and other relevant policy mandates;
- d. Advise the GEOGLOWS Working Groups and GEOGLOWS Secretariat on how to strengthen and broaden the engagement in GEOGLOWS, as well as how to expand institutional support for its activities;
- e. Advise the GEOGLOWS Working Groups on Strategic partnerships (including GEO members, GEO POs, organizations outside of GEO, private industry, and NGOs).
- f. Review and approve as needed, the documents submitted by the GEOGLOWS Secretariat on behalf of the GEOGLOWS Working Groups, such as inputs to the GEO Work Program.
- g. Provide guidelines for projects and activities which are seeking GEOGLOWS support
- h. Identify and mobilize potential funding opportunities for GEOGLOWS activities
- i. Respond to requests for advice from the GEOGLOWS Working Groups, The GEOGLOWS Secretariat, and from the GEO Secretariat;
- j. Respond to requests for advice from the GEO Secretariat;

Composition of the Steering Committee

The GEOGLOWS Steering Committee is composed of both Members and Observers. GEOGLOWS recognize the diverse community working in the water area and will carry that diversity into the co-chairs positions. Three Co-Chairs, including two nominated and selected from within the ranks of the Members and the other by USGEO, lead the Steering Committee.

Members of the GEOGLOWS Steering Committee:

- are individuals in a position to provide strategic advice and help identify and mobilize resources needed for GEOGLOWS implementation, with particular insight into how to secure enduring institutional support for all activities related to Earth Observations including 1) the identification of areas (monitoring, data management, data access, etc.) where science and technology development is needed, 2) the implementation of research into operational environments, 3) Leveraging resources within GEO and outside GEO for Capacity Building in the application of EO in response to water sustainability issues.
- may choose to hold a vote to reach consensus among them regarding their recommendations to the GEOGLOWS Secretariat and Working Groups should the need arise.

Members of the GEOGLOWS Steering Committee are expected to attend all meetings and actively participate in activities of the committee, including closed sessions. They are further expected to take part in the approval of the Steering Committee's Recommendations. Individuals will be invited to serve on the Steering Committee by the GEO Secretariat upon recommendation from the Steering Committee. Members of the GEOGLOWS Working Group and Secretariat may assist the Steering Committee Co-Chairs in the identification of potential new members. Individuals are invited to serve on the Steering Committee for two-year terms with a possible extension to three years. Should Members of the Steering Committee depart their institutions or change roles during their terms, it is at the discretion of the Co-Chairs and the GEOGLOWS Secretariat whether and how that position be filled.

To maintain clarity of roles and responsibilities, members of the Steering Committee cannot chair or be members of the Working Groups and vice versa.

Observers of the GEOGLOWS Steering Committee:

1. are members of national or international organizations that fund GEOGLOWS projects but that are not country members or Participant Organizations in GEO;
2. will have access to all materials developed for and by the Steering Committee, but are not expected to contribute to their generation;
3. may participate in the open sessions of the Steering Committee, and may attend the closed sessions upon invitation from the Steering Committee;
4. will not participate in the Members' vote on recommendations to the GEOGLOWS Secretariat and Working Groups.

Co-Chairs

The Steering Committee members and US GEO will nominate and select two Co-Chairs to serve on a staggered two-year rotation basis. One co-chair will come from the regional GEOSS programs. In addition to the general activities of the Steering Committee as outlined in the Scope section of this document, the Co-Chairs responsibilities include:

1. serving as the primary points of contact between the GEOGLOWS Secretariat and the Steering Committee;
2. managing the Steering Committee meeting agenda formulation, with the support of the GEOGLOWS Secretariat;
3. directing the Steering Committee meetings and the generation of Steering Committee recommendations;
4. coordinating with the GEOGLOWS Secretariat on the Steering Committee Meeting documentation, with inputs from and approval by the members;
5. With the support of the GEOGLOWS Secretariat reviewing the progress of the Working Groups and making recommendations for program shifts; and
6. Representing GEOGLOWS at the GEO Plenary meeting.

Logistics and Organization

The GEOGLOWS Steering Committee shall, in general, convene once per year in person, and via teleconference, with logistics arranged by the GEOGLOWS Secretariat on a quarterly basis. The GEOGLOWS Secretariat, under the guidance of the Steering Committee Co-Chairs, will prepare the meeting agenda and materials. The GEOGLOWS Secretariat will circulate these materials to all parties at least two weeks before each meeting. The GEOGLOWS Secretariat will prepare a summary of the deliberations, capturing the high-level discussion topics and Steering Committee recommendations. The summary document will be distributed to the Co-Chairs within two weeks of the meeting, and the entire Steering Committee within three weeks of conclusion of the meeting. A final version of the summary document will be made available to the GEOGLOWS Working Groups, GEOGLOWS/IGWCO Community of Practice, GEO Secretariat and the general public within one month of the meeting.

Interaction among GEOGLOWS Steering Committee, GEOGLOWS Working Groups, and Secretariat

- The GEOGLOWS Secretariat will assure the liaison among GEOGLOWS partners and the Steering Committee, and maintain open communication with the Co-Chairs.

- Chairs of the Working Groups should, in general, be requested to attend the Steering Committee meetings, with the exception of the closed sessions.
- The GEOGLOWS Working Groups and Secretariat will work together to respond to the Steering Committee Recommendations.
- The GEOGLOWS Secretariat will work together with the Steering Committee Co-Chairs as warranted and mutually desired to amend these Terms of Reference.

Performance Indicators

The GEOGLOWS steering committee will review, modify as needed, and adopt, performance indicators provided by the GEO Secretariat to ensure progress in achieving the initiative's goals.

Tentative List of Performance Indicators:

- Number of timely open water-related data services available in the public domain.
- Number of open water-related analytical tools available in the public domain
- Number of knowledge products (e.g. multi-media documentation, e-books, storymaps, Apps, portals) created by GEOGLOWS network data and tools
- % of targeted SDG indicators incorporating GEOGLOWS network data and tools
- Number of times data and analysis services from the GEOGLOWS network are accessed per year
- Number of capacity-building efforts (e.g. workshops, training courses, webinars, etc.) to promote GEOGLOWS network data and tools
- Number of people participating in capacity-building efforts
- Satisfaction of users (%)