

International Association of Hydrological Sciences

Recommendations for the future of the IAHS Digital Water Globe

Background and process

In 2021 there was an open call within IAHS for digital innovation and the IAHS Bureau approved the IAHS Digital Water Globe (DWG) project and costs. SMHI developed the IAHS DWG from 2022 until October 2023, and have hosted and maintained it since. The DWG can be accessed at: <u>https://iahs.info/Initiatives/digital-water-globe/</u> and <u>https://dwg.smhi.se/dwg/</u>.

The agreement between IAHS Ltd and SMHI for the DWG development, hosting and maintenance finishes on 31 March 2026. Within the agreement, provision is made for the continuation of the DWG hosted by a different provider after 31 March 2026, if desired by IAHS.

With the hosting and maintenance of the DWG ceasing on 31 March 2026, at the IAHS Ltd Annual Board Meeting in February 2025, it was agreed that a fixed term working group representing different stakeholders in IAHS leadership and membership (see the Appendix) should be convened during March–May 2025 to make recommendations to the IAHS Management Team and IAHS Bureau for the future of the DWG. The group held four meetings that considered:

- The performance of the DWG to date;
- The technical feasibility of migrating the DWG to another host, if desired by IAHS after 31 March 2026;
- The benefits and costs of the DWG (broadly not just financial) under different future scenarios;
- Recommendations for the future of the DWG.

During the meetings, input was also obtained from the HELPING Scientific Decade Chair (Thom Bogaard), SMHI, and technical expertise (Ampersand Studio Oxon Ltd in the UK – who host and support the IAHS website - and Innosystems SRL in Italy – with whom Salvatore Grimaldi has worked before).

Key findings

• The DWG is not working in its current form as evidenced by the low number of personal profiles, despite efforts to increase engagement. Although 311 login requests have been made, as of 25 June 2025 only 23% of these had resulted in addition of DWG content, and only 35% of IAHS Officers had created personal profiles. The number of different DWG contributions is summarised in the table below.

Personal profiles	Case studies	Data time series	Scientific publications
96	71	5	14

• Nevertheless, it is felt that the DWG has the potential to offer value to IAHS and its members for communication, networking and collaboration (e.g. communication and

coordination of HELPING outputs, and synergy among the IAHS International Commissions and initiatives). These benefits need to be clearly communicated to IAHS members so they experience value in engaging regularly with the DWG.

- Aspects of the DWG could be improved (e.g. so that it is easier for users to engage).
- Whilst it appears to be technically feasible to migrate the DWG to another host, it would be more effective to renovate the DWG in a simpler form.
- Any renovation of the DWG should consider IAHS member views and inputs from the DWG Editors, building upon experience.
- Any renovation of the DWG must be compliant with GDPR as the fines for breaches are enormous (millions of £).
- The DWG should not be maintained at all costs. A renovated DWG should be evaluated against key performance indicators (KPIs) and deadlines. Examples of KPIs could include: participation of all IAHS Officers by end of Year 1, a streamlined IAHS membership application process, DWG visitor statistics on the IAHS website.

Recommendations

- The vision and design specification for a renovated DWG (DWG2) should be worked on by a small design team (Salvatore Grimaldi, Kostas Soulis, E. Mario Mendiondo (DWG Editor-in-Chief)) led by IAHS President Salvatore Grimaldi. The DWG2 design will build upon experience of the DWG and be informed by surveys of IAHS officers and members and input from the DWG Editors.
- A costed DWG2 proposal including KPIs and project timeline, and ensuring compliance with GDPR, will be presented at the end of 2025 IAHS Bureau meeting (date to be arranged).
- 3) There should be a tendering process to select the provider to deliver the DWG2. The Chair of IAHS Ltd should be involved and all IAHS Ltd trustees kept informed.

Date	Activity
August–October 2025	SG, KS and EMM work on the design of DWG2 informed by experience and input from the DWG Editors and IAHS members (e.g. canvas views during the Scientific Assembly in Roorkee, India, in October 2025)
October–December 2025	SG presents costed DWG2 proposal and project timeline to the IAHS Management Team for feedback and to the IAHS Bureau meeting for approval (date to be arranged)
January 2026	Subject to Bureau approval, tendering process to select the company to deliver DWG2
February 2026	Draw up and sign agreement with the supplier selected to deliver DWG2
March 2026	Start of DWG2 project
July 2026	Launch of DWG2 ¹

Next steps and timetable

¹ Between 31 March 2026 and the launch of the DWG2, the IAHS DWG webpage can explain DWG2 and give the launch date.

<u>Appendix</u>

Composition of the fixed term working group:

- Chair IAHS Ltd (Kate Heal) Convenor of the working group;
- IAHS President-Elect (Salvatore Grimaldi);
- IAHS Secretary General (Jean-Marie Kileshye Onema);
- DWG Editor-in-Chief (E. Mario Mendiondo);
- IAHS Treasurer (Konstantinos Soulis) bringing the financial perspective;
- Chair of the IAHS Early Career Committee (Moctar Dembélé) bringing an early career scientist perspective;
- IAHS Executive Secretary (Claire Lupton) bringing knowledge of the DWG operations;
- IAHS Communications Officer (Tarryn Payne) bringing understanding of how the DWG sits within IAHS communications strategy and infrastructure.

As an employee of SMHI, Berit Arheimer could not be a member of the working group. She was kept informed of the process, along with Helen Houghton-Carr as the other IAHS Ltd trustee not present in the working group.