

Practice what you preach,

Pass the baton!



Rationale for open water data

Open data are "data that can be freely used, reused and redistributed by anyone, subject only, at most, to the requirement to attribute and sharealike". In practice, it means that data are freely and readily available online for download. It has been demonstrated that open data policies improve existing services or support new ones, some of which might result in job creation and economic value. In the water sector, a wide variety of users benefit from open water data policies, whether in governmental organizations, research, consultancy, private companies, NGOs, civil society organizations, etc. Monitoring data, water use records and other observations of surface water and groundwater can be used at various levels, from local to regional, including transboundary assessments of shared water resources. Open data policies allow all stakeholders to participate in an efficient way to the management of water resources and constitute a key element of good water data management practice. UN-Water identifies data and information as one of the five accelerators where efforts and investments should be concentrated if we want a chance to achieve SDG 6. This will not happen if data are not accessible!

Furthermore, open data are time and cost-efficient. While advanced data sharing platforms with filtering, visualization or analysis functionalities might represent a long-term investment in terms of development and maintenance, open data can be as simple and as cheap as a downloadable data file stored on a website or in the cloud. Free data sharing platforms can also be used to share water data. In any case, not having to handle individual data requests is a significant time-saver for both data holding organizations and data users, which increases the overall efficiency of the water sector.

Finally, open data policies support transparency and accountability of the public institutions in charge of water management towards tax-payers and stakeholders, which has a positive impact on the adoption of public policies and the implementation of water management strategies.

The burden of groundwater data requests

Recent regional and global assessments of ground-water data collection and management suggest that groundwater data sharing and open data are on the rise. Yet, groundwater data collected by public authorities are not readily accessible in many countries. It is often necessary to submit a formal data request. A fee might be asked to get the data. Data requests can take several days or even weeks to be answered, if they are not unanswered. When the answer comes, it might be that no data exist in the requested study area. Those are some of the challenges that many water professionals frequently have to struggle with. It is a considerable burden in their work and for the management of water resources in general.

The particular benefits of open data for groundwater management

It is worth emphasizing the particular benefits of open data policies for groundwater management. A hidden resource, groundwater management relies almost exclusively on in-situ data, such as monitoring data and borehole data. Those data, in combination with hydrogeological maps, make up the backbone of any groundwater assessment study, such as siting successful wells, defining vulnerability and protection areas or advancing cooperation in shared aquifers. They also allow the integration of groundwater in environmental or socio-economic planning, drought early warning systems, public health policies or ecosystem conservation, only to name a few applications. Given the relevance, as well as the cost and the usual scarcity of groundwater data, it is even more regrettable if existing groundwater data are not open.

Background policy documents

This call for open data is meant to reinforce existing initiatives promoting open data across the world. The international policies on which this call builds up include:

- UNESCO Recommendation on Open Science (November 2021). Unanimously adopted by 193 member States, it recommends actions at different levels to operationalise the principles of open science, of which open data is a cornerstone. https://en.unesco.org/science-sustainable-future/open-science/recommendation
- WMO Unified Data Policy Resolution (2021). It reaffirms the commitment of all 193 WMO members States to a free and unrestricted exchange of Earth System data, including hydrologic data. https://public.wmo.int/en/our-mandate/what-we-do/observations/Unified-WMO-Data-Policy-Resolution
- Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information. It promotes the re-use of data in EU member states, in particular high value data such as geospatial data, earth observation and environmental data, or meteorological data. https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1561563110433&uri=CELEX:32019L1024

Commit!

The "United Nations 2023 Water Conference" will convene in New York, from 22 to 24 March 2023, as mandated by the UN General Assembly resolutions 73/226 and 75/212. This conference marks the mid-term of the International Decade for Action, "Water for Sustainable Development", 2018–2028. Key outcomes of the UN 2023 Water Conference will include the Water Action Agenda – a set of voluntary commitments taken by governments and stakeholders to accelerate implementation towards achieving the Sustainable Development Goal 6 and other water-related goals and targets (which is currently not on track, according to various SDG indicators). One of the 5 accelerators identified by Un-Water is "Data and information".

We therefore call upon all organizations holding water data to commit to open water data policies.

How to join?

Organisations and individuals that would like to join the Open Water Data movement can do that by:

- Commit | Go to https://www.un-igrac.org/OpenWaterData Join the commitment that IGRAC will submit to the Water Action Agenda (before 31 March).
- Practice what you preach | Make any water-related data, information or knowledge freely available to the public.
- Pass the baton | Join the social media campaign, by sharing campaign materials on Open Data Day (4th of March), during the NYC Open Data Week (11-18 March) or any time leading up to the UN 2023 Water Conference.

The #OpenWaterData commitment and campaign is an initiative of IGRAC.



International Groundwater Resources Assessment Centre