What can we do to build a sustainable foundation for evidence-based policy, decision-making and conflict resolution in water resources management?



Collect data

Improve the capability of National Hydrological Services to produce high quality basic observations using efficient data collection processes and robust networks of stations; promote data standardization and quality management framefork (QMF); strengthen international cooperation in shared water resource management through the World Hydrological Cycle Observing System (WHYCOS), which is implemented through HYCOS components at regional and basin levels; share best practices in monitoring networks and hydrometric data collection.

Learn more about WHYCOS at www.whycos.org >



Process and store data

Promote the utilization of the WMO Meteorological, Climatological and Hydrological (MCH) Database Management System, a simple, customizable and license-free database for checking, storing and analyzing data.

Learn more at about MCH at www.wmo.int/pages/prog/hwrp/mch >



Make data visible and available

Promote the free exchange of hydrological data at basin, regional and global levels; share data through the WMO Hydrological Observing System (WHOS), a portal to the online holdings of National Hydrological Services around the world that publish their data without restrictions or cost. Standardize data according to WaterML2, a data exchange standard for Hydrology facilitating the exchange of a variety of hydro-meteorological observations and measurements.

Learn more about WHOS at www.wmo.int/pages/prog/hwrp/chy/whos ▶ Learn more about WaterML2 at www.waterml2.org ▶



Data rescue

Data can be secured in Global Data Centers, such as the Global Runoff Data Centre (GRDC, for river discharge); the International Data Centre On Hydrology Of Lakes And Reservoirs (HYDROLARE), and the International Groundwater Resources Assessment Centre (IGRAC,), specialised in regional- and transboundary monitoring of groundwater). These centers can as well disseminate their archived data if agreed by data owners.

Learn more about GRDC at www.bafg.de/GRDC ▶ Learn more about HYDROLARE at www.hydrolare.net ▶ Learn more about IGRAC at www.un-igrac.org ▶





The Global Hydrometry Support Facility supports the entire value chain – from data acquisition to knowledge sharing - by building on past gains while enabling innovative approaches, delivering technical assistance and fostering international cooperation.









DATA PRODUCTION & COLLECTION

World Hydrological Cycle Observing System (WHYCOS)

Standardisation and quality management **QMF**

DATA PROCESSING & STORAGE

Meteorological, Climatological and Hydrological (MCH) Database Management System

DATA VISIBILITY & AVAILABILITY

WMO Hydrological Observing System (WHOS)

WaterML 2.0

DATA RESCUE

Global Data Centers: Global Runoff Data Centre (GRDC), International Data Centre On Hydrology Of Lakes And Reservoirs (HYDROLARE) & International Groundwater Resources Assessment Centre (IGRAC)

GLOBAL HYDROMETRY SUPPORT FACILITY