

# Water, Peace and Security

# Global Tools and data sets

By supporting local, regional and international stakeholders, WPS aims to prevent and reduce water-related conflict and turn the vicious cycle of water challenges and instability into a virtuous one of sustainable water management and peace.



Presentation of the Global Tool at World Meteorological Organization

## **GLOBAL EARLY WARNING TOOL**

The Water, Peace and Security (WPS) partnership has developed a Global Early Warning Tool to inform the mitigation of water-related conflicts. Operated by the World Resources Institute (WRI), this tool uses machine learning to forecast the likelihood of water-related conflicts.

The web-based tool contains models which enable users to explore forecasts and indicators over time and space. It provides additional information on underlying vulnerabilities which help plan timely and effective water-related interventions to prevent conflict and build peace. Our forecasts are based on an expansive library of quantitative indicators linked to conflict, which can be viewed as interactive maps and in time series.

The Global Early Warning Tool provides a 12-month forecast, highlighting regions likely to experience water-related conflicts. Although it does not explain why these conflicts happen, it can show water shocks like heavy rains or droughts. While we do not know or claim that water shocks drive conflict, we do believe they are important for planning necessary on-the-ground measures and working towards climate-sensitive peacebuilding.



Turkana woman carrying jerry can to fetch water ©EWamba - Wetlands International

# Water, Peace and Security



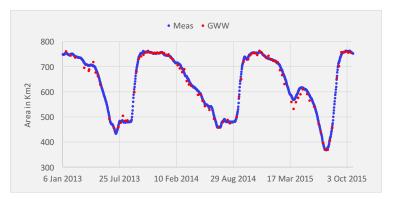
# **GLOBAL DATA SETS**

WPS uses earth observation (EO) data for establishing a common truth on water resources, simplifying and economizing data collection to inform stakeholders for cooperative and conflict-sensitive water management.

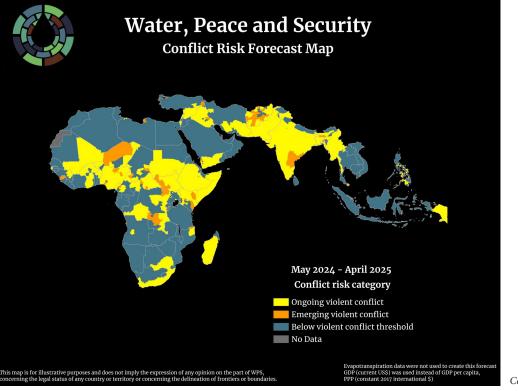
The reservoir area of Merowe dam, Sudan: Ground Measurement vs. Global Water Watch (GWW) dataset, showing the two measurements match.

## THE WPS EARLY WARNING OUTPUTS

Every 3 months, WPS compiles a Quarterly Update forecasting water-related conflicts. The Update is used by decision makers including experts from the 4-D community (Development, Diplomacy, Defence, Disaster). The Global Tool



is a resource for understanding water scarcity, climate change, and the likelihood of waterrelated conflicts. Researchers from universities and organizations such as GIZ, USAID, and River Basin Authorities, among others use the data for research, webinars and collaboration.



Conflict risk forecast map

## FOR MORE INFORMATION

- www.waterpeacesecurity.org
- ☑ info@waterpeacesecurity.org
- X @WaterPeaceSec
- in Water, Peace and Security

WPS is a collaboration between the Netherlands Ministry of Foreign Affairs and a consortium of six partners: IHE Delft (lead partner), World Resources Institute (WRI), Deltares, The Hague Centre for Strategic Studies (HCSS), Wetlands International and International Alert.







The Hague Centre for Strategic Studies





