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World Groundwater Mapping - WHYMAP: the Global Map of Groundwater Vulnerability to Floods and Droughts and the World Map of Karst and Carbonate Aquifers

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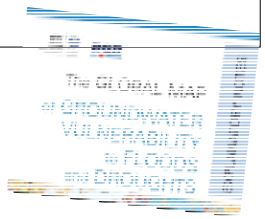
The **World-wide Hydrogeological Mapping and Assessment Programme (*WHYMAP*)** coordinated by the UNESCO International Hydrological Programme (IHP) aims at collecting, collating and visualizing hydrogeological information on a global scale. This project is intended to convey groundwater related data in an appropriate way to support global discussion of water issues, and to raise awareness of underground water resources that are not directly visible. The products generated by the programme are compiled using data on groundwater from national, regional and global sources, and provide information on the quantity, quality and vulnerability of the Earth's groundwater resources.

The Global Map of Groundwater Vulnerability to Floods and Droughts - 2015

www.whymap.org



The map is accompanied by two insert maps included in the legend (type of aquifer and mean recharge) and an Explanatory Notes booklet.

CONTEXT. The majority of the world's natural disasters is related to extreme water-related events. This global map, that covers groundwater vulnerability to floods and droughts, wishes to contribute to highlight this phenomenon and call to the attention of decision makers the areas of highest vulnerability. Vulnerability is an intrinsic (natural) property of a groundwater system, which depends on the sensitivity of that system to natural and/or human impacts, and the ability of the system to cope with such impacts (Vrba and Zaporozec, 1994).

APPROACH. The use of the parameters that are commonly applied in the assessment of groundwater vulnerability were restricted, because of both the scale of the vulnerability map (1: 25 000 000) and the scarcity of available, reliable and consistent data sets on the global scale. Consequently, two parameters of groundwater vulnerability to floods and droughts were employed: type of aquifers and groundwater recharge.

References

UNESCO-IHP & BGR (2015) "The Global Map of Groundwater Vulnerability to Floods and Droughts", www.whymap.org
Vrba J., Richts A. (2015) etc
Vrba and Zaporozec, 1994

The World Map of Karst and Carbonate Aquifers - draft

CONTEXT. Karst aquifers are the main freshwater supply in many regions of the world. However, their specific hydrogeological characteristics makes them vulnerable to contamination and they require specific tools for exploration, protection and management. The extent of karst system over large areas implies often a transboundary approach in their assessment and management.

THE MAP AND DATABASE. The world map will be accompanied by a database of karst aquifers. They will both not only show carbonate rock outcrops, but also display deep and confined karst aquifers, large karst springs, including thermal and mineral springs, drinking water abstraction sites and selected caves.

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