

Groundwater and International Development

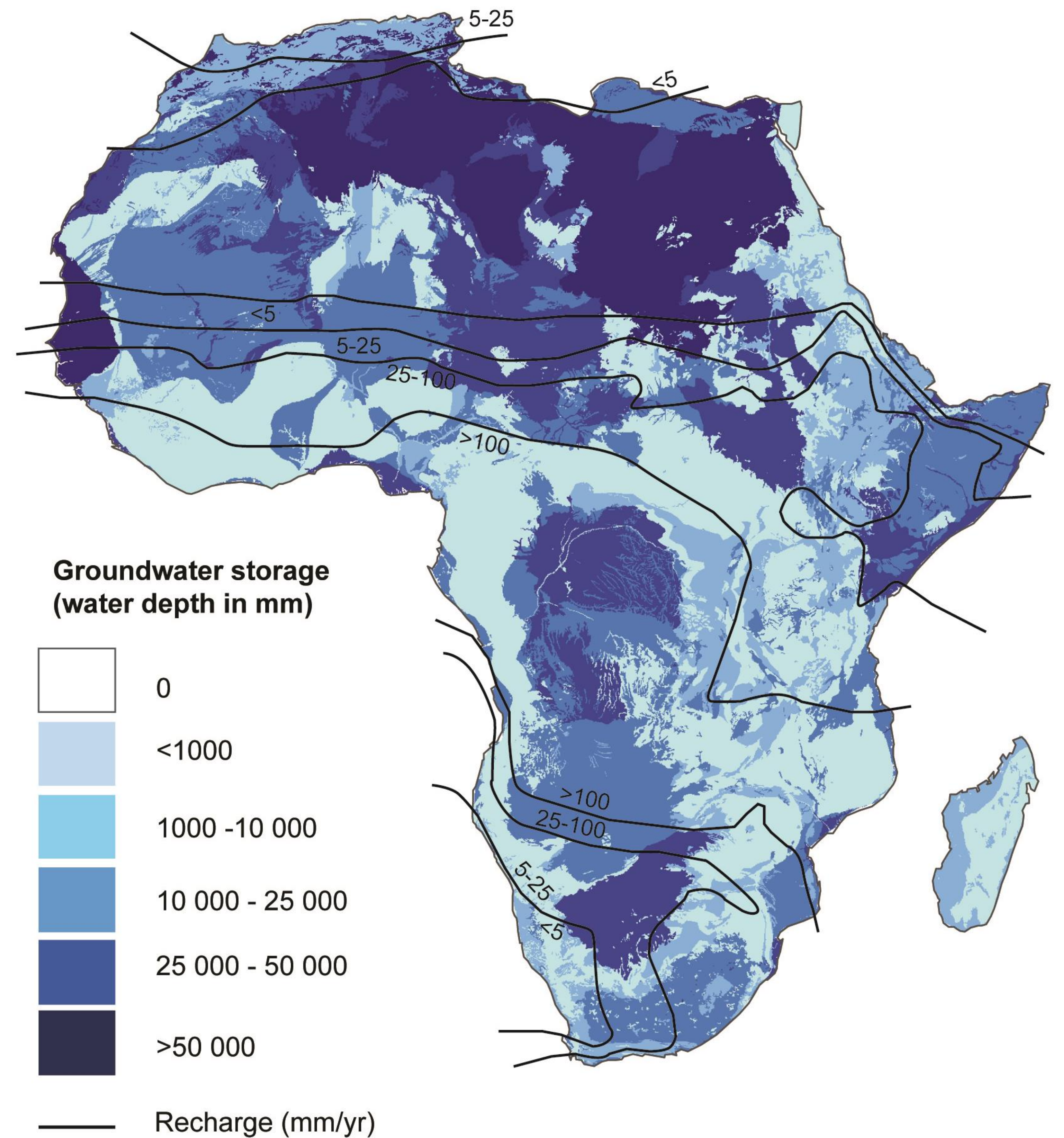
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Groundwater is the earth's main reserve of freshwater and its sustainable development and management are critical to society

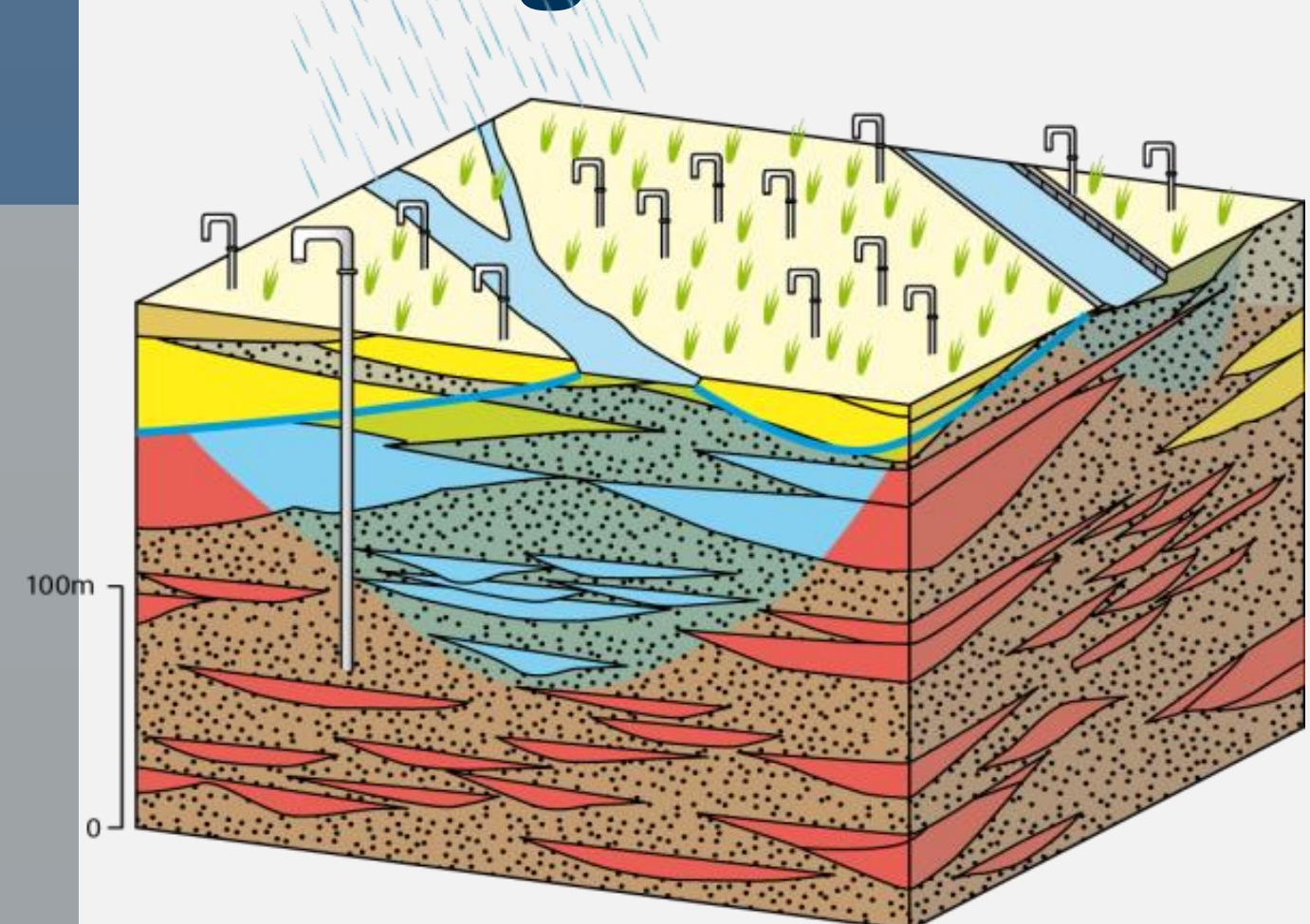
- More than 40% of the world's water use is from groundwater
- Groundwater offers an excellent buffer to changes in climate
- Not all groundwater is renewable and the main risks are pollution and overuse
- Development and management requires understanding of groundwater systems



Some of BGS Groundwater's international projects since 2011



Groundwater underpins South Asia's agricultural revolution and keeps the Ganges and Brahmaputra flowing



BGS led research measured groundwater residence times and found pollution to be a bigger threat than depletion

New techniques show that groundwater in the Himalayas sustains rivers and livelihoods



MacDonald et al 2016. *Nature Geoscience* 10.1038/ngeo2791
Lapworth et al. 2015 *GRL* 10.1002/2015GL065798

The map above, developed by BGS, shows groundwater storage in Africa

In most areas there is enough for a hand-pump. Current BGS research addresses recharge, source functionality, and pollution.



BGS are global leaders in groundwater and development research

publications, data, policy advice, partnerships, capacity building

