



[Translate to English:] Punktuelle und diffuse Quellen von anthropogenen Schadstoffeinträgen ins Grundwasser: Industrie, städtische Abwässer und Landwirtschaft. (Quelle: Burri et al., 2019)

Human influence on groundwater quality

September 9, 2019 | Stephanie Schnydrig

Topics: Drinking Water | Pollutants | Wastewater

Awareness of sustainable groundwater consumption is increasing in importance because of changing land use and climate change. As a result, the desire to better understand the natural and anthropogenic processes that have an influence on groundwater quality is growing.

Eawag researchers have identified the major anthropogenic threats and their chief origins in a review article. Intensive agriculture, urban sprawl, the pharmaceutical industry, poor wastewater infrastructure, lack of water-quality data as well as lack of awareness of the meaning of groundwater as a renewable resource are among the most urgent problems. Because groundwater aquifers have varying characteristics, it is still difficult to keep reliable track of the transport of contaminants and to identify their exact origin, the researchers write.

In the article concrete case studies are presented, in order to demonstrate the threats to global groundwater resources – for example the aftermath of mining in South Africa or nitrate accumulation as a result of intensive agriculture in the USA.

The researchers stress the importance of transdisciplinary research and communication across borders, in order to guarantee sustainable groundwater quality all over the world.

Original publication

Burri, N. M.; Weatherl, R.; Moeck, C.; Schirmer, M. (2019) A review of threats to groundwater

quality in the anthropocene, *Science of the Total Environment*, 684, 136-154, doi:
[10.1016/j.scitotenv.2019.05.236](https://doi.org/10.1016/j.scitotenv.2019.05.236), Institutional Repository

<https://www.eawag.ch/en/info/portal/news/news-archive/archive-detail/human-influence-on-groundwater-quality>