

# The Global Groundwater Crisis and Management Implications for Food and Water Security

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Groundwater depletion in the world's major aquifer systems poses a major threat to global food and water security. Many of these aquifers are trans-boundary, both within and between nations. However, very few formal trans-boundary groundwater agreements exist, at least internationally. In this presentation we review the 15-year lifetime of GRACE data (2002-2017) and our estimates of changing freshwater availability, including groundwater storage changes at the regional and aquifer scales. A roadmap for ensuring sound international groundwater management is discussed, as are implications for global food security.

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