

Closing urban water cycles - transforming urban water solutions

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KFW



Bundesanstalt für
Geowissenschaften
und Rohstoffe

GEOZENTRUM HANNOVER

Changing urban landscapes...

- Population / urban growth
- Climate change
- *Water scarcity, floods, pollution problems*



Dharavi, India.
YGLvoices – Flickr

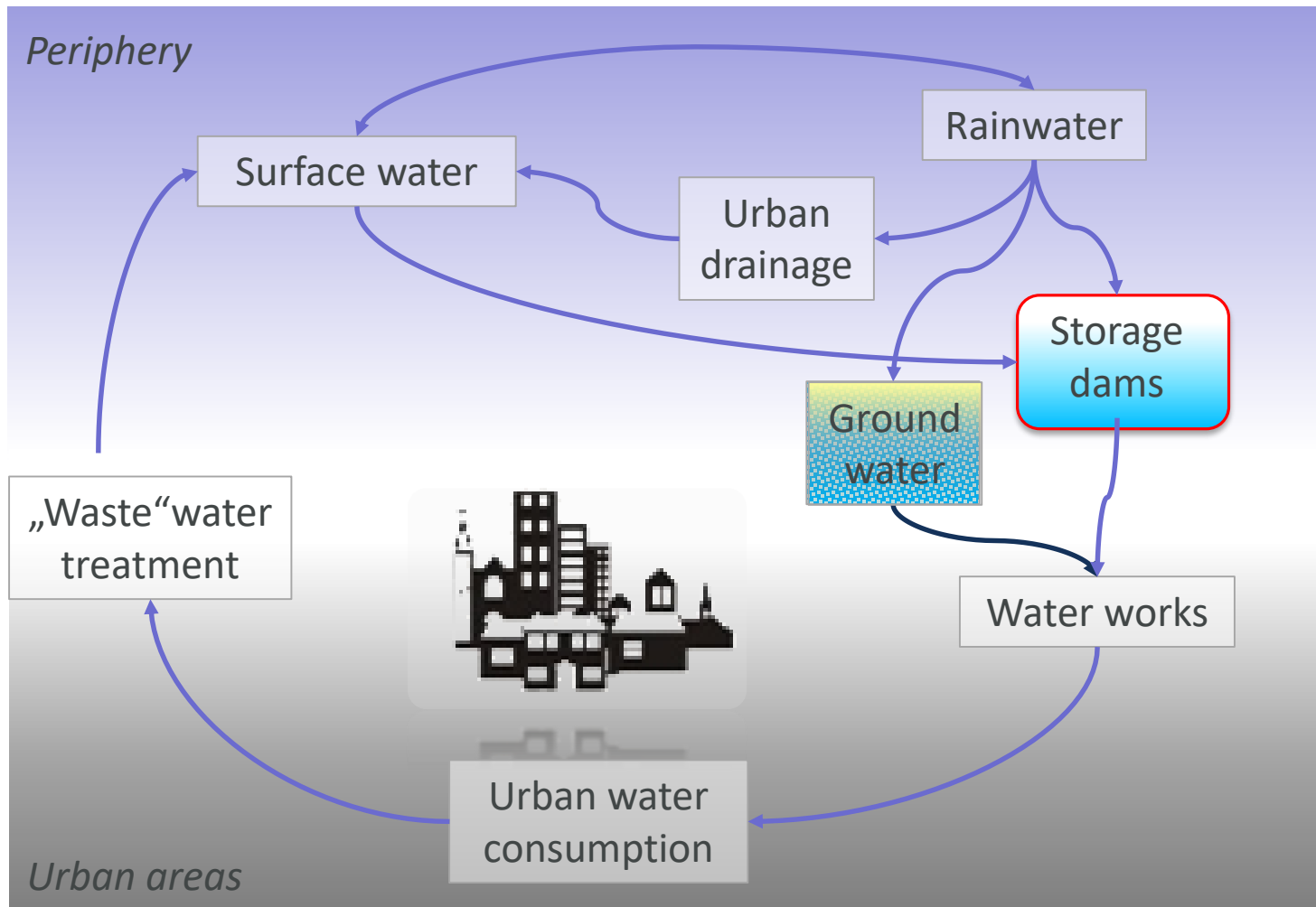


Sacramento, CA
Kevin Cortopassi. CC BY-ND 2.0



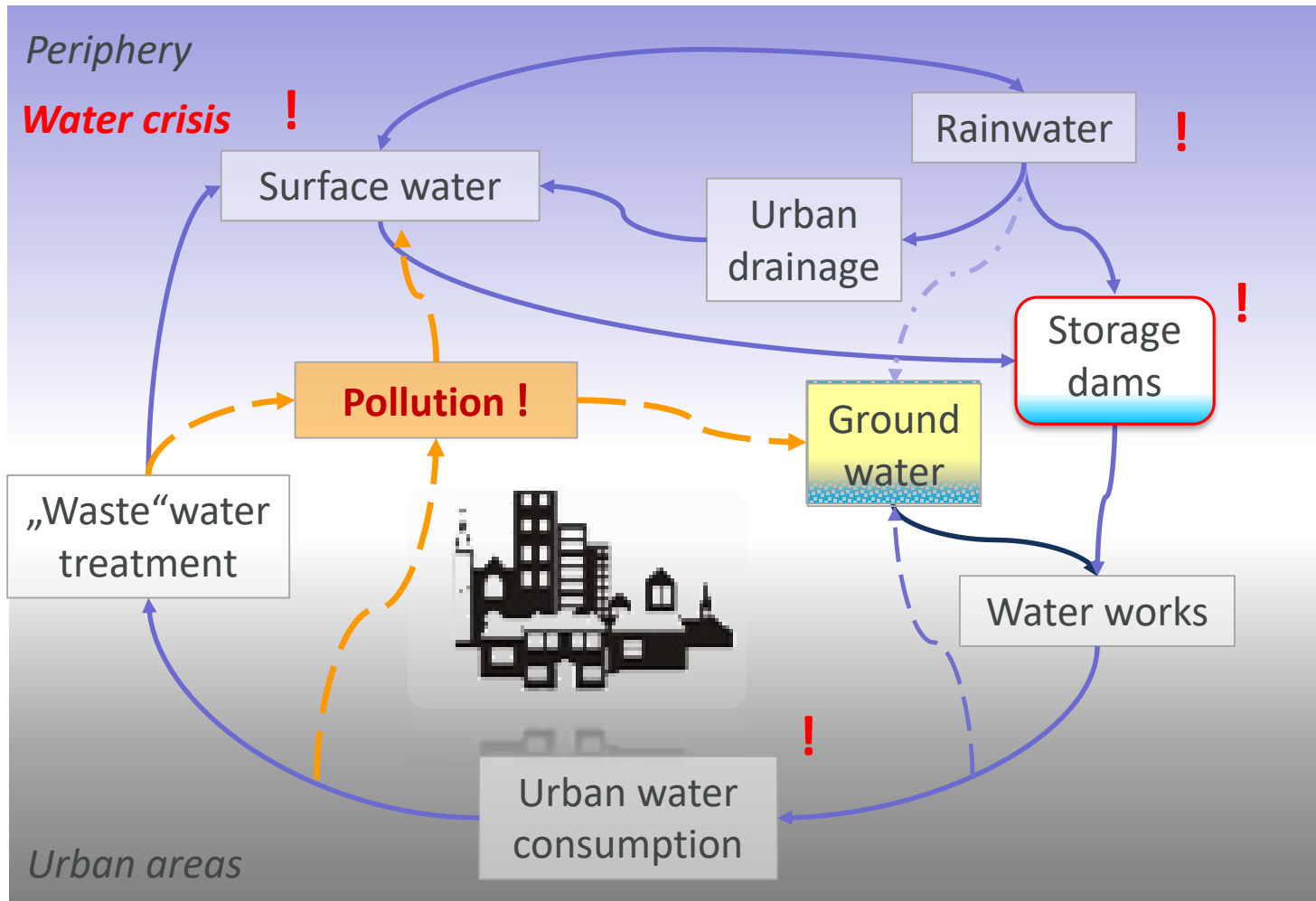
Cape Town
Discott, Wikimedia CC

The “traditional” urban water cycle



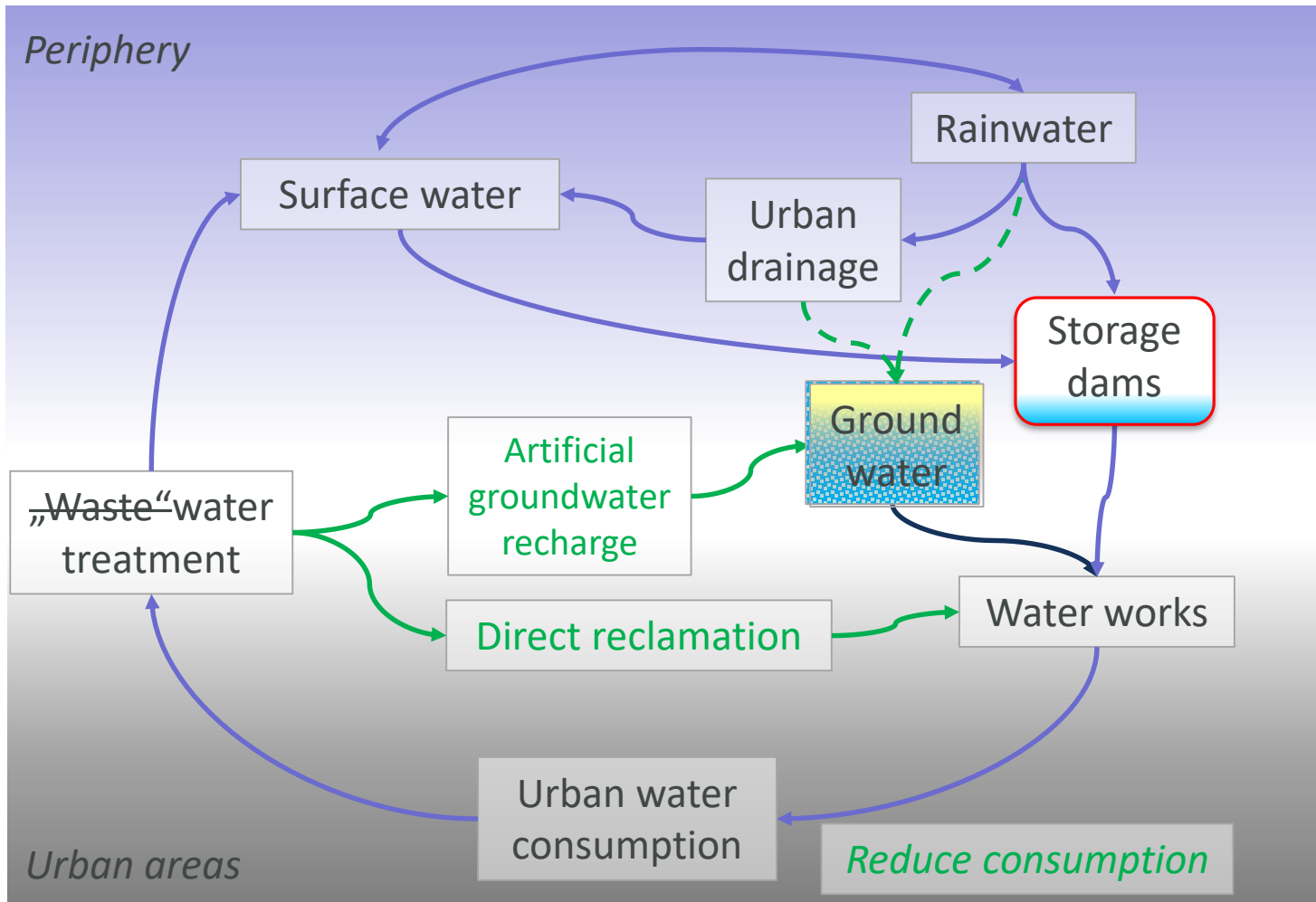
- Hydraulic mission / Large technical systems
- Water supply: seen as an engineering and administrative issue

The cycle is facing problems...



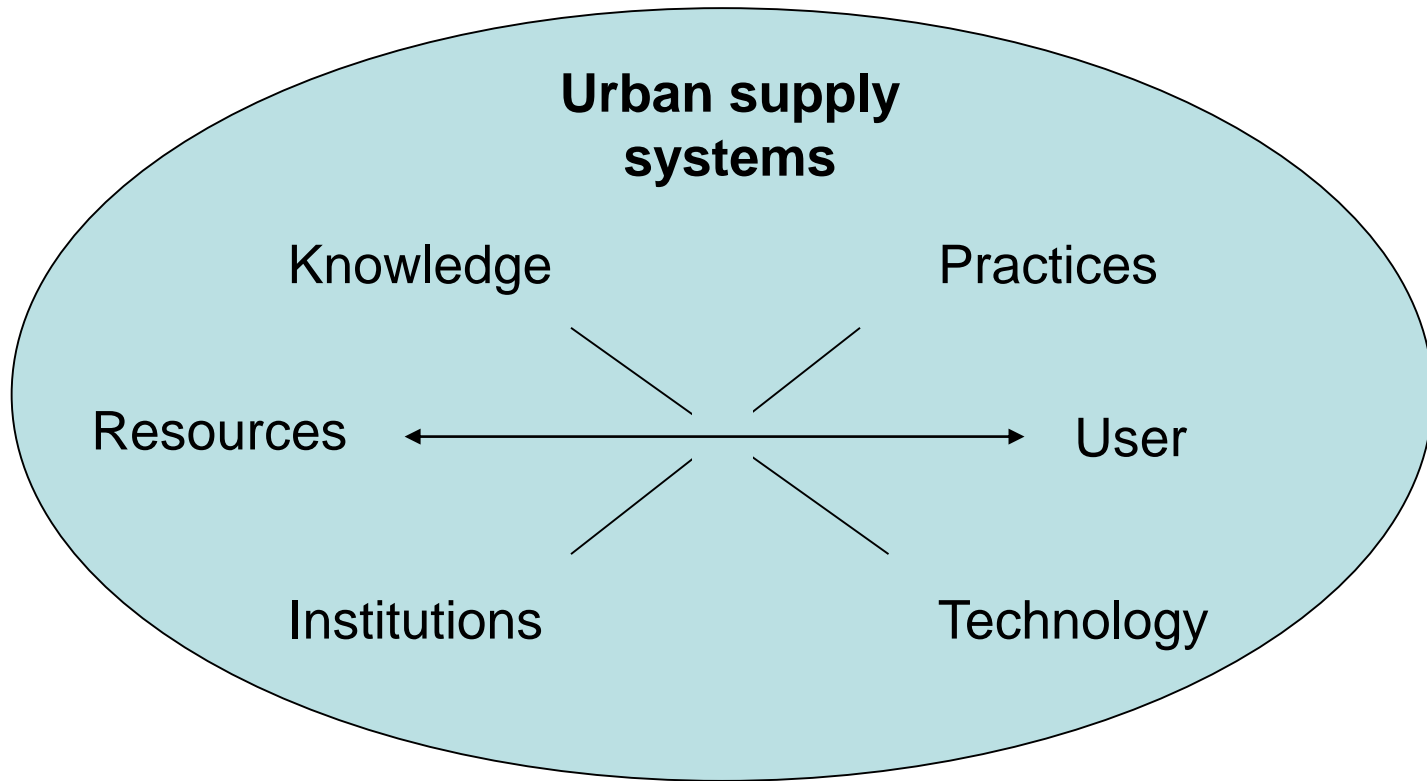
- More variability, less availability
- Exploding demand
- Increased pollution
- Critical relations between urban and periphery areas

Transforming solutions...



- Increase recharge
- Increase storage
- Diversification of sources
- Shorten the water cycle

What is the transformation about...



based on Lux et al. 2006

Open questions

- Coherence between institutions and technologies
 - What are the challenges for utilities and public authorities with new technologies?
- Relation between centralized and decentralized approaches?
- Relation between green and grey infrastructure?