Are sponge cities a solution to growing urban flooding problems?
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So-called sponge cities use green roofs, rain gardens, wetlands, and other nature-based measures to absorb, retain, and purify excessive stormwater. A perspective published in WIREs Water discusses the potential of such initiatives to address flooding, and lists key components required for success.

The authors note that the national Sponge City Programme in China, which was initiated in 2014 and already supported 30 pilot cities for stormwater management, has been extended for a new roll-out phase from 2021–2023, with a first group of 20 cities announced in June 2021. The article provides a roadmap for this next stage development, which can play a key role in building flood resilience and adapting cities to climate change.

"Sponge cities have been heralded as a sustainable solution to China's urban flooding, but there are limits to how much rainfall they can absorb, so incorporation of a wider set of community-based interventions will be vital to make sponge cities flood resilient," said corresponding author Guangtao Fu, Ph.D., of the University of Exeter, in the UK.

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