



water



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Stormwater Management in Sponge Cities

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Message from the Guest Editor

Sponge cities are urban areas designed to absorb, capture, and manage stormwater runoff in a sustainable manner, mimicking the natural hydrological cycle. Some key aspects of stormwater management in sponge cities include the permeable surfaces such as permeable pavements, green roofs, and porous sidewalks. These surfaces allow rainwater to infiltrate into the ground rather than running off into storm drains. Incorporating green infrastructure elements like rain gardens, bioswales, and vegetated swales helps to capture and absorb stormwater. These features not only manage stormwater but also provide additional benefits such as improving air quality, enhancing biodiversity, and reducing urban heat island effect. Water Harvesting and Reuse is another key aspect to promote the harvesting and reuse of stormwater for various purposes such as irrigation, toilet flushing, and groundwater recharge. By implementing these strategies and technologies, sponge cities aim to mitigate the adverse impacts of urbanization on water resources, improve urban resilience to climate change, and create healthier and more sustainable urban environments.



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Special issue



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