## **#CO**CREATE **BLUE-GREEN CITIES DESIGN** AWARDS 2022















## Pathways to Water Resilient South African Cities - Urban MAR In Retrofitted Infiltration Basins

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**ILASA** Institute for Landscape Architecture in South Africa









## **Key Findings**

- 1. Low-cost retrofitting is possible but requires residents' consent and input
- 2. #Co-Design, #Co-Implement, #Co-Maintain
- 3. High water table is a technical challenge
- 4. Retrofit can increase infiltration by 15 %
- 5. Future scenarios result in more SWH (110%)
- 6. Even 0.5m of soil can remove > 76% of metals and Phosphorus
- Retrofitted ponds can improve groundwater quality

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**Total retrofit cost: R300 000** Engagement: R10 000 Retrofit Design: R39 000 Materials: R49 000 Labour & PPE: R42 000 Monitoring Wells: R68 000 Topographical Surveys: R49 000 Other: R43 000





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