



14th

IWA International Conference on **WATER RECLAMATION & REUSE**

HOSTED BY



WATER REUSE



16-19 March 2025

Cape Town South Africa

IN ASSOCIATION WITH



water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA



CITY OF CAPE TOWN
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Linking local engagement to BGI interventions: Lived experiences of researchers and residents in repurposing a stormwater pond in Mitchell's Plain, Cape Town, South Africa

Presenter : Lauren Grootboom

Amber Abrams, Sithabile Hlahla, Kirsty Carden

Future Water Institute, University of Cape Town



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Research Context and Aim

CONTEXT:

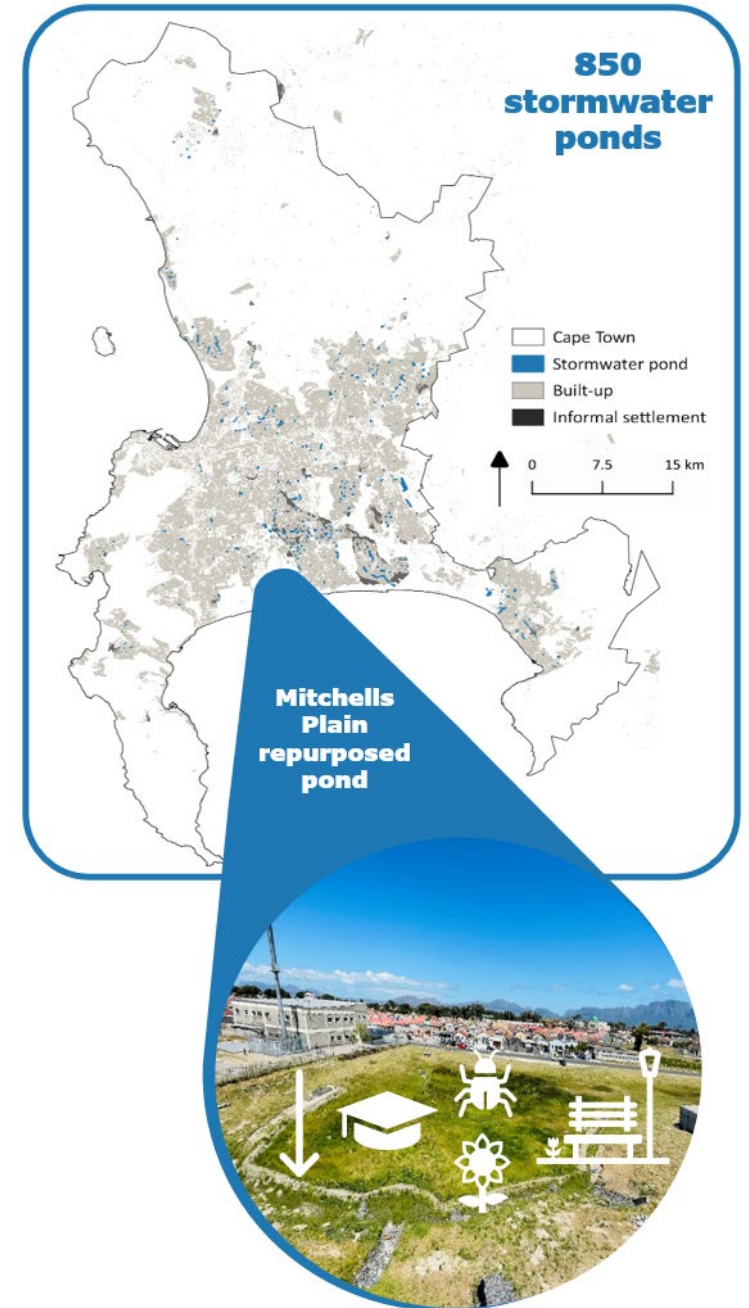
- Rapid South African urbanization
- Rising water demand amid worsening water scarcity and quality
- Need for multifunctional open spaces like stormwater ponds in urban areas
- Towards realisation of more water sensitive cities

AIM: Understand the lived reality and experiences of people involved in the implementation of a MAR-BGI intervention (stormwater pond retrofit) in Mitchells Plain, Cape Town, South Africa

“Key implementation lessons from repurposing existing stormwater infrastructure to BGI with multiple functions to achieve water resilient South African cities”

PaWS and MAR BGI projects

- WRC-funded *“Implementation guideline for managed aquifer recharge (MAR) in combination with blue-green infrastructure at local settlement level”* - MAR BGI project
- Danida MFA-funded *“Pathways to Water Resilient South African Cities”* - PaWS project
 - Retrofitted stormwater pond in Mitchells Plain, Cape Town, South Africa



Methods – MAR BGI project

WP1

Policy review, scoping, mapping, and analysis

WP2

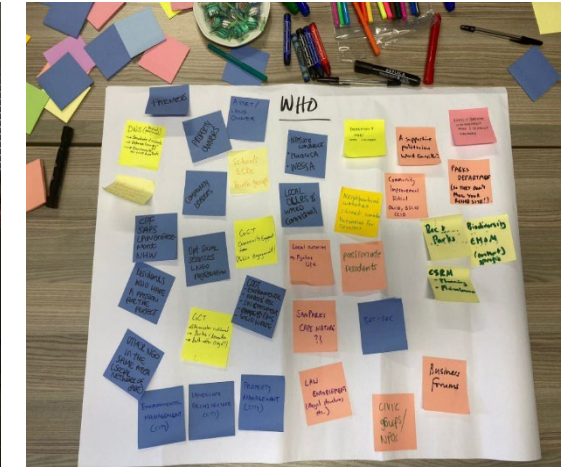
Ethnographic fieldwork to explore implementation facilitators and barriers (local community and CoCT)

- Workshops
- Interviews
- Community events/activities
- Focus group discussions
- Participant observation





WP2 Community Engagement



Key stakeholders



Public information session

Tuesday, 10th of March at 6-7pm

We will meet at the bus-stop adjoining the open space, next to the Leadership College Hyde Park

Researchers from the Future Water research institute (University of Cape Town) and the University of Copenhagen are collaborating with the City of Cape Town on a project entitled 'Pathways to water resilient South African cities'. One of the aims of this project is to look for opportunities to repurpose the open space located adjacent to the Leadership College Hyde Park site in consultation with the school and the surrounding community.

Tonight, we would like to start a conversation about your thoughts on the open space and to discuss possible ideas for future uses. This exercise forms part of a Masters research project being undertaken by Bettina Käppeli (University of Copenhagen) which involves developing a design proposal for the open space using a landscape architecture approach.

Thank you for participating and for giving us the opportunity to learn from you as experts in your neighborhood.

Agenda

- A. Introduction and presentation of the team
- B. Talk and discussion about wishes, needs, and issues by answering 5 leading questions
 1. Do you know this area? Do you use it, and if yes, how do you use it?
 2. What do you think this open space does? Who do you think created this space?
 3. What does this open space mean to you? What do you think about it?
 4. To create a vision; If you would be in charge of this open space, what would it look like and which activities would happen here?
 5. What are the main needs of the neighborhood?
- C. Summing up and thank you for today!

Contact information

To learn more about the project in general feel free to contact Kirsty Carden kirsty.carden@uct.ac.za

To participate or to discuss further topics in frame of the master thesis research please contact Bettina Käppeli bdc849@alumni.ku.dk / WhatsApp +4179 739 58 26 / Calls +2779 909 18 33





INVITATION

Be part of PAINTing this mural:
community painting -
Sat 20 Aug 22 10 am- 12pm









WHAT IS THE PAWS PROJECT?

This is a research study that aims to consider Pathways to water resilient South African cities.

UCT researchers are working with colleagues from the University of Copenhagen, with the aim of identifying opportunities for integrating stormwater retention ponds to provide useful spaces to local residents.

This part of the study aims to develop a MURAL that can explain this work and the importance of stormwater, as well as highlight the biodiversity here.



Questions/ more info?

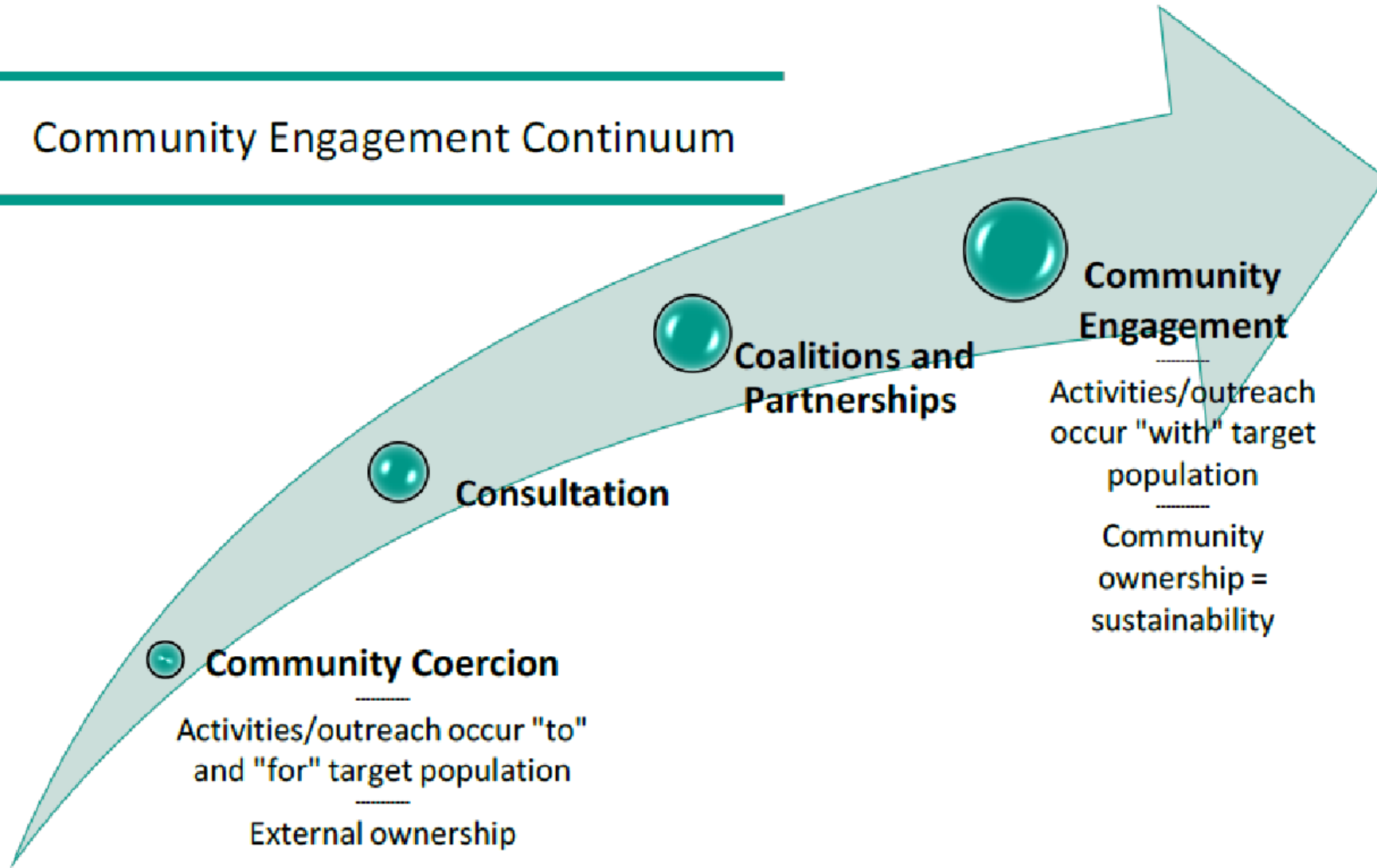
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Community Engagement Continuum



The background of the slide features a photograph of a wastewater treatment plant. In the upper portion, there is a large metal structure, likely a bridge or part of a conveyor system, spanning over a body of water. Below this, the water flows through various channels and structures, creating white foam and splashes. The entire image is overlaid with a semi-transparent green filter and several large, stylized green leaf shapes that partially obscure the underlying scene.

Outcomes, barriers and challenges encountered with
the implementation and community involvement

“Balancing the very loud voices with the ones we don’t get to hear that often”

“We are missing the people who don’t pitch up; have we expanded around neighbourhood enough to ask questions?”

“It is often also a strategy for people to not get involved because they don’t want to engage with the dynamics at play as there are many.”

The moles (Ruining the space)

“The people were concerned with who were the people implementing in the space. There were racial barriers and backlog, people see some as a particular body who is not allowed to have access to the space.”

“The social , governance and financial challenges are things that actually make or break the project.”



Lessons Learned and Recommendations

Key lessons learned

- Local champions are necessary
- Identify a social meeting point, e.g. a school
- Respect religious aspects and rights of the school through negotiation
- Draw on local capacity of the community, e.g. caterers, manual labour, people willing to move equipment around
- Use local resources as far as possible. Recognising the need to pay for services without drawing on capital without paying.
 - Use / maintain social capital within community to sustain project
 - Employ local residents for construction / maintenance crews
 - Focus on youth and women in the construction hiring process creates many vital opportunities around the space

Key lessons learned continued...

- Creating a sense of ownership for the project within the community will ensure its sustainability long after the project ends
- The roles of external stakeholders and local residents/communities in any local intervention need to be clearly defined within policy
- The practice and implementation of these interventions cannot become the sole responsibility of local residents without capital support or compensation
- Ownership with these projects/ spaces need to lie with the community to ensure the sustainability of the intervention

Thank you for your attention!



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