

Rethinking Sewers

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Without proper sanitation, waste enters the environment directly



Photos courtesy of R. Gilsdorf



But existing sewer networks often have problems of their own



Photo courtesy of R. Kennedy-Walker



Photo courtesy of R. Gilsdorf



Photo courtesy of R. Gilsdorf



Photo courtesy of restorationeaze.com/services/sewage-cleanup

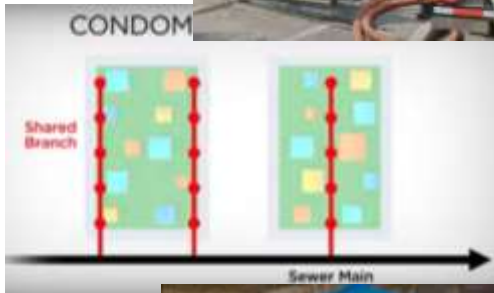
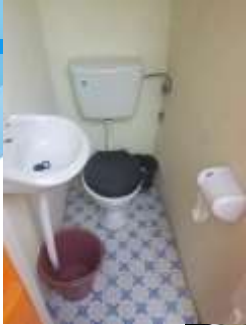
Challenges with sewers

- Oversized systems
- Low household connection rates
- Poor design and/or construction
- Combined sewer overflows – how to handle high stormwater flows
- Missing manhole covers, allowing rubbish and sediment to enter system



Photo courtesy of R. Kennedy-Walker

Striking the right balance: sewers and onsite sanitation



- A ***diversity of technical solutions*** should be embraced, being adaptive, mixed and ***incremental***
- Combining ***both onsite sanitation and sewerage solutions***, in either ***centralized or decentralized systems***, to better respond to realities faced in cities
- Effective ***resource recovery and re-use*** ***should be considered***
- Need to also consider ***complementary services***: water supply, drainage, greywater, solid waste

Why are we not replicating/scaling up successful experiences?

Session overview

- Condominial Sewers in Brazil
- Simplified Sewers in Senegal
- Slum Networking in India & South Africa
- Connecting the Unconnected
- Group Discussions around Implementing Appropriate Sewerage

THANK YOU!



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Discussion Questions

- How can you apply these ideas/approaches in the places where you work?
- What obstacles have you faced/would you face in applying these approaches?
- What other resources would be helpful in applying these approaches?