

Part 2

BREAKDOWNS OF INFRASTRUCTURE AND RELATIONSHIPS OF ZEEKOEVLEI AND MAKHAZA

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Image 1: Zeekoevlei Lake and surrounding community (Source: Author)

Zeekoevlei is a freshwater body that covers 250ha and is located in the south-western edge of the rapidly growing and densely populated Cape Flats. One of the earliest recorded descriptions of the vlei (lake in the Afrikaans language) was by Jan Van Riebeeck, a Dutch navigator and early colonial

settler administrator, who said Zeekoevlei was “quite a large lake, as broad as the River Maas, and about two hours walk in circumference, with deep brackish water, full of hippopotami.” (<https://www.zeekoevlei.co.za/about-2/>). While hippopotami were poached to extinction by the 1700s, to supply ships visiting the Cape with meat, the neighbouring Rondevlei Nature Reserve is still home to the last remaining wild hippos in Cape Town. Zeekoevlei and Rondevlei fall under the False Bay Nature Reserve (FBNR) which was officially declared a Ramsar site¹ in 2015 (WC Government, 2019 <https://www.westerncape.gov.za/general-publication/investing-our-natural-heritage-false-bay-upgrade>).

For the first time in Cape Town’s known history, at the end of 2021 all three of its freshwater lakes, namely, Zeekoevlei, Zandvlei and the Milnerton lagoon were closed to the public due to concerns of the significant rise in pollution due to sewage spills caused by failing infrastructure. Residents in Zeekoevlei were particularly concerned that the ongoing spills of sewage into the lake were reaching a point of irreparable damage, allegedly caused by the release of untreated effluent from the Strandfontein Waste Water Treatment Works (WWTW). The problem of treating sewage at the Strandfontein WWTW was due to the failure of Archimedes screw pumps, which are used to cut through solid waste and help with moving sludge, grease chunks and other materials from waste water, which are then transported to landfills.



Image 2: Archimedes screws that have stopped working at the Strandfoentein WWTW (Source: Friends of Zeekoevlei and Rindenvlei).

¹ The [Ramsar Convention](#) is an international treaty for the conservation and sustainable utilisation of wetlands, recognising the fundamental ecological functions of wetlands and their economic, cultural, scientific, and recreational value. It's named after the city of Ramsar in Iran, where the Convention was signed in 1971.

A community organisation, Friends of Zeekoevlei and Rondevlei had been working tirelessly for years to get rid of the solid waste that was carried into the lake from tributaries such as the Big Lotus and Little Lotus Rivers and were dismayed at the more complications to their efforts as a result of the failing infrastructure. According to a resident of Zeekoevlei who had received feedback from a person who worked at the treatment plant, at the beginning of 2021 only two of the Archimedes screws were functioning. All four of the screws were due for replacement or upgrades, however due to the procurement processes put in place by the City of Cape Town (CCT) to curb corruption, there was a major delay in purchasing the screws. The procurement process sets a limit of how much money can be spent by the city without seeking approvals from certain department heads or going through a tender process. Obtaining the screws exceeded this limit by approximately R30 000, which meant that replacing the screws was not a simple exercise, and would take a much longer time, even in a case of emergency such as this. By the end of 2021, all four screws were no longer working. What happens when environmental governance is managed through spreadsheets and not informed by experiences on the ground?



Image 3: Barrier used by residents of Zeekoevlei to capture solid waste from the Big Lotus River before it enters Zeekoevlei (Source: Author).

In another case on the Cape Flats, in 2010, the CCT was taken to court over the erection of 'open-air' toilets in the Makhaza settlement located along the Kuils River. A group of African National Congress Youth League (ANCYL) activists, a branch of South Africa's political ruling party, took to the streets and engaged in what was eventually dubbed as 'poo protests', where the contents from portable flush toilets are flung at motorists on Cape Town's major highways or at the steps of government buildings to draw attention to the inequities of sanitation in the city (Robins, 2014). The ANCYL accused the local and provincial government, which are controlled by opposition party the Democratic Alliance (DA), of racism, taking the matter to the Human Rights Commission (HRC) and the Western Cape High Court. The City released a report stating there was no evidence of wrongdoing on their part and that their solution remained better than the national norm. The CCT said the installation of 1 316 toilets in Makhaza and other informal settlements in 2009 was done on condition that residents would erect their own structures around the toilets for privacy. Of these, 1 265 were enclosed by residents, i.e. walls were built around them, and the rest remained open. After the outcry, the CCT enclosed the remaining open toilets with corrugated iron sheets, but this was deemed inadequate by residents, who tore them down. In response, the City removed all the unenclosed toilets ('City of Cape Town loses...', 2011).

The CCT believed they had met their mandate by providing each household with a toilet, supposedly a better option than the national norm that provides a communal toilet to be shared by five households. In April 2011, however, the Western Cape High Court ruled that the CCT had lost sight of the constitutional rights and needs of the poor ('City of Cape Town loses...', 2011). The erection of these toilets was deemed a violation of section 10, the constitutional right to dignity, and section 26, which requires the implementation of housing in a reasonable manner (South African Constitution, 2003: 1247). In 2013 and 2017, the protests against poor service delivery in Cape Town became known as 'poo protests'. Clearly, the decisions made about toilets in particular and infrastructure in general impact the built and natural environments and determine how bodies, behaviours and communities are controlled and regulated in the everyday (Jaglin, 2002; Hanson, 2010). In this case, the problem was a lack of adequate toilets; the technical solution was to provide said toilets. The CCT felt they had met and delivered on their mandate, making it clear that in their understanding, meeting mandates and adhering to bureaucratic expectations superseded the citizen needs of democratic governance. Service delivery is an integral part of municipal government, taking up time, resources and effort from City employees to ensure the proper functioning of infrastructure to meet the needs of its citizens. Melosi (2008: 1) highlights that most contact between government and citizens is because of service delivery needs and is

often a site of contention when infrastructure fails or is incongruent with the needs of citizens – as evident from the confrontations that residents have had with the City over several months due to the spillage of sewage into Zeekoevlei and ‘open air toilets’ in Makhaza.

In the cases described above, the material form of infrastructure is only variable and durable to those that work directly with infrastructural projects. Concrete used to form pipes, canals and major infrastructure is seen as flexible, fragile and vulnerable by those who create and design with it. However, the recipients of the infrastructure may encounter it as a solid form: unbending, unmoving and unyielding, and may have to adapt their environment and lives to suit said structures. Lack of understanding of context facilitated a governance and management of infrastructure ‘from above’, from the proverbial ‘god’s-eye-view’, removing decision-makers from the actual lived realities of the people they were intended to serve. The perspective from above comes with specific power and provides the authority to shift and shape citizens’ lives, but these outcomes were often made invisible or underplayed by the ‘hard disciplines’ of engineering and science. A better approach with mutually satisfactory outcomes might have been to make an effort to understand the community’s struggle to meet every day needs and work in dignified partnership rather than apply top-down enforcement.

I was introduced to the Khayelitsha Wetlands Park (KWP) by residents of Makhaza. The KWP is a pleasant urban wetland park, the CCT’s poster child of sustainable development in townships. The area was selected as a critical biodiversity hotspot worthy of conservation because it is a functional ecosystem that supports various plant and animal species and carries out essential regulatory services, such as flood attenuation and water cleansing. Local communities enjoy the wetland park for recreational activities, collecting medicinal plants, ritual cleansing, watering and feeding livestock and more. Over the months, I witnessed many changes to the wetland as the CCT introduced more infrastructure to ‘benefit’ the local community and attract tourists.

When I did my preliminary visits in 2015 (before my meeting with Siviwe, whom I met in 2018), the KWP was still open, without any fencing. As my research progressed, however, I noticed the introduction of concrete palisade fencing along Spine Road, one of the boundaries of the park. The fence marked the area as separate from the formal and informal housing in the area, but sections of the fence were quickly taken down by residents to create access points for locals and livestock, not allocated in the earlier planning for the park. Conversations while digging in the

vegetable gardens and picking up litter with waste picker entrepreneurs suggested that this was no surprise. Mam' Wana, a woman in her late 50s who was one of the gardeners, said:

But what did they [the CCT] expect? They do these things without talking to the people and expect us to just be okay with it. Before they started doing these development things, people could just easily go to the wetlands and feed their goats and cattle. You could even just go and get some special plants. But now they put up this fence, and people have to walk all the way around to get in. Even with the water meters that they have put in other houses. They don't even explain what it is, next thing you see you have a R10 000 water bill. I will never have that in our house. They just want to make money from us. (Translated interview with Mam' Wana, 16 May 2016)

Mam' Wana's statement above and my later conversation with Siviwe in Silvertown highlight the CCT's natural resource management practices, predicated on the separation of people from the natural environment of the KWP and Kuils River.

The CCT commissioned several environmental assessments of the wetland park and the potential economic opportunities and environmental benefits that might be derived from it. But for many of the residents I spoke to, the marking of space for the benefit of the community implied the imposition of parameters by the state, a command and control approach (which could have been unintentional) for the use of the commons – how it could be accessed, and by whom or what.

Societies transform their environments to suit their needs and aspirations, but how this is done (Mol, 2002) highlights different concerns and priorities and enacts different outcomes. Over the years of my research, I often heard Khayelitsha residents describe their relationship with the CCT as one that lacked care, while they (the community) interacted with the KWP with care. Conversely, some CCT members tasked with managing the wetland were frustrated because the locals did not seem to appreciate the beautiful space, which explained 'why they were able to just defecate in the space'. Fences were erected to conserve the natural state of the KWP, and outdoor gyms and braai areas were constructed so that the locals could enjoy the space too – so why were they (the locals)

not vested in keeping the wetlands clean? After all, keeping it pristine would make it an attraction for tourists, which would mean money and jobs coming into the community.



Image 4 (a-d): Earlier improvement of the KWP. The improvement included additions of play and exercise areas as well as cleaning the river itself which led to arrival of more bird life in the area (Source: Author).

In interviews and informal conversations, many residents living with and along other parts of the Kuils River described their interactions with the river in the same way that Mam' Wana had. They also described their relationships with ward councillors, park and natural resource managers as having broken down over the years, characterised by an increasing lack of care at both the local and government level. They also focused on what they called the proliferation of 'development', with an emphasis on the multiple meanings, understandings and expectations that come with the term. A common understanding of all the development was that provincial and CCT authorities (e.g. CCT Waste Water and Informal Settlements; Environment and Development Planning; Human Settlements) had allowed their obsession with development to be skewed towards those that already had, and less advantaged communities had to endure the waste from that development.

In conclusion, toilets, taps and the KWP were part of the upgrading of the Silvertown informal settlement (established in 1989, making it the second oldest settlement in Khayelitsha) as part of a CCT commitment to providing housing for residents, granting them access to formal tenure and entry into the housing market and providing green spaces for health and well-being. It can be argued that in this case, these infrastructures are symbolic of political promises for a future in which residents have access to basic services, better environments and, by extension, better lives. ‘They are a material and aspirational terrain for negotiating the promises and ethics of political authority, and making and unmaking of political subjects’ (Anand et al., 2018: 20), because how they are imagined, created and distributed occurs through negotiations between the state and the people it governs. It is therefore important to consider the materiality of infrastructure (e.g. how it degenerates), but also to consider how politics is enacted in everyday life by the mobilisation, management and control of infrastructure that determines how people live. Thomas Lemke (2014:14) argues for an exploration of the role of liberal modes of governance through material forms, paying careful attention to the ‘matter of governance and the governance of matter’. As such, Anand et al. (2018: 21) argue that ‘to govern infrastructure … is to govern the politics of life, with all its inequalities’.

References

- Anand, N., Gupta, A. and Appel, H (eds). 2018. *The Promise of Infrastructure*. USA. Duke University Press.
- Hanson, S. 2010. Gender and mobility: new approaches for informing sustainability. *Gender, Place & Culture*, 17(1): 5-23. DOI: [10.1080/09663690903498225](https://doi.org/10.1080/09663690903498225)
- Jaglin S. 2002. The right to water versus cost recovery: participation, urban water supply and the poor in sub-Saharan Africa. *Environment and Urbanization*, 14(1):231-245. doi:[10.1177/095624780201400119](https://doi.org/10.1177/095624780201400119)
- Lemke, T. 2014. New Materialisms: Foucault and the “government of things.” *Theory, Culture and Society*, 32(4): 3-25.
- Mail & Guardian Staff Reporter. 2011. City of Cape Town loses open toilet battle. Mail & Guardian.
<https://mg.co.za/article/2011-04-29-city-of-cape-town-loses-opentoilet-battle/>. Accessed 19 May 2020.
- Melosi, M.U. 2008. *The Sanitary City: Environmental Services in Urban America from Colonial Times to Present*. Pittsburgh, USA. University of Pittsburgh Press.

South African Constitution. 2003.

https://resource.capetown.gov.za/documentcentre/Documents/Maps%20and%20statistics/2011_Census_CT_Suburb_Khayelitsha_Profile.pdf

Robins, S. 2014. Slow Activism in Fast Times: Reflections on the Politics of Media Spectacles after

Apartheid. *Journal of Southern African Studies*, 40(1): 91-110,

DOI: [10.1080/03057070.2014.889517](https://doi.org/10.1080/03057070.2014.889517)