Pre-Project Visit
Project Title: Improvements in Marine Water Quality through enhanced Estuarine Management
Technical Report – TG Andrew, February 2020

Introduction:
The Nairobi Convention Secretariat (NCS) undertook a pre-project visit from 4 to 5 February 2020 to meet with project proponents, partners, and communities to gain first-hand information about the problem that the project intends to address, mechanisms and approaches to be used, how the identified issues are associated with the livelihoods of beneficiaries, and what benefits the project will bring them. The NCS conducted a "due diligence" to ensure proponents have and will consider community sensitivities, potential stumbling blocks, and leadership/ownership of the project. This serves as a "baseline" of the situation at the start of the project to which comparison can be made at the project's conclusion. In addition, visuals/interviews (of both the site and communities), were captured for storytelling and communications purposes.

From a technical perspective, the visit entailed the following:
1. Assessing institutional preparedness for project implementation
2. Meeting with key partners indicated in the proposal
3. Discussions around project implementation and coordination arrangements
4. Potential challenges and mitigating actions during implementation

A set of pre-determined questions were developed as a tool to guide discussions in the field and to provide the information needed to address these four aspects. This tool will be used in all demonstration project visits to allow for a standardized approach. Stakeholders were engaged during a meeting of potential partners and visit to several sites around the Swartkops estuary near Port Elizabeth, which was hosted by Mr Yamkela Mngxe and Mr Luvuyo Bali from the lead institution (National Department of Environment, Forestry and Fisheries (DEFF) – Oceans and Coasts Branch). The team was accompanied by representatives from the Nelson Mandela Bay Municipality, NGOs, and local communities. It should be noted that the Buffalo estuary in East London is included as a site under this project, although it was not possible to visit this site.

The visit entailed a meeting of partners to discuss the four key elements listed above, and on-site observation and discussion of potential hot spots that the project will focus on in the Swartkops estuary. It is envisaged that similar approaches and methodologies will be used in the Buffalo estuary, although different local stakeholders will need to be involved in implementation.

Assessment:

1. **Institutional preparedness for project implementation**

The institutional arrangements for this project are complex in that the lead institution is a national department headquartered in Cape Town, while on the ground implementation will be carried out by local stakeholders based near the project sites at Port Elizabeth and East London. This will require careful liaison between project leaders based in Cape Town and the structures set up for project implementation at site level. While the lead institution is well prepared for the demo-projects which fit within various national programmes and are supported by appropriate legislation

and policies, the challenge will lie in ensuring the local structures are able to implement activities effectively with the support of national and provincial structures.

2. Engagement with key partners provided in the proposal

Some potential partners were met in order to discuss the project and to ensure that they were aware and supportive of the proposed activities. Although all present were aware of the project and had been engaged by the proponents in the previous months, some key partners were not present at the meeting. These were identified and the proponents will ensure that they are on board from project inception. One area of concern at this early stage was the presence of several potential service providers from the NGO and private sector, who may or may not be engaged in the project. It is recommended that the structure established to coordinate this project at a local level includes the key partners as suggested below. Some of these partners have been identified in the proposal (although this contained categories of stakeholders rather than details in some cases) and are not discussed below, and others were identified during the pre-project visit.

Nelson Mandela and Walter Sisulu Universities – Although representative from the academic institutions were not present at the meetings, these research bodies will be critical partners in the success of this project. In particular, NMU has a long history of research on the Swartkops river and has accumulated a solid body of information on the ecological condition and anthropogenic impacts on the system. The universities need to be included in monitoring and capacity building activities.

Nelson Mandela and Buffalo City and Metros – The metros are responsible for estuarine management in their areas of jurisdiction. In addition, they are responsible for management of effluents and solid waste in the areas around the estuaries. It is therefore essential that the relevant departments from both metros are included from the outset of the project. These partners will be essential in mitigating sources of pollution into the estuarine systems.

Sustainable Seas Trust – This Trust is mainly concerned with marine litter, including plastics, and has an ongoing monitoring programme on the Swartkops estuary. They need to be engaged and any activities they are involved in that are aligned to the demo-project built upon to achieve cumulative impact in the short project timeframe available. If possible, activities that they are engaged with on the Swartkops could be replicated on the Buffalo river through the demo-project.

Swartkops Conservancy – This group is already actively engaged in environmental education and outreach activities in communities surrounding the Swartkops estuary. Their efforts could be strengthened by a partnership with the demo-project. Similar organisations working around the Buffalo River need to be identified and engaged with.

Ward Councilors – The inclusion of Ward Councilors from identified hotspots around the estuary is essential, particularly in ensuring communities become actively and meaningfully engaged in project activities.

Local NGOs running 'Swop shops' – There are several NGOs operating these facilities in the Eastern Cape, where children can exchange litter collected for useful items of food and clothing.

Examples of best practice need to be identified and the potential for the establishment of similar facilities should be investigated as part of the demo-project.

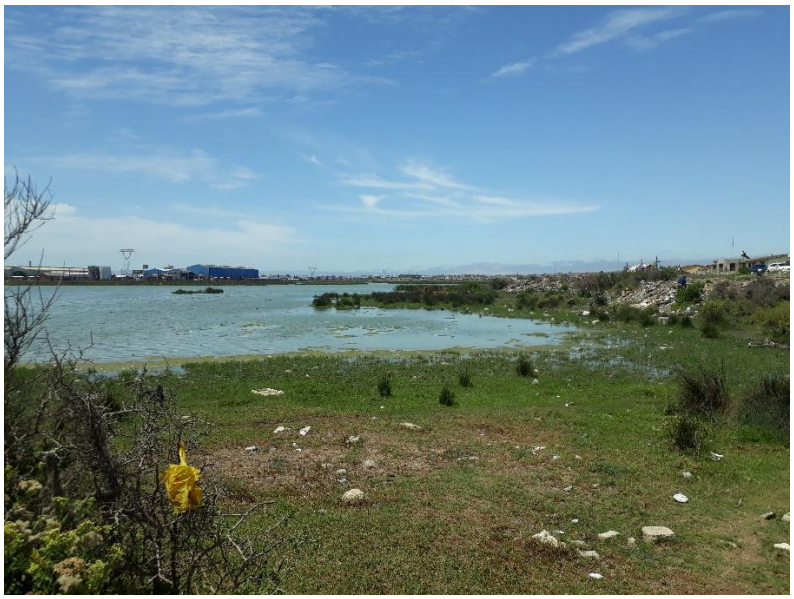

Figure 1. Pond 6 was previously one of a network of salt pans located on the saltmarshes of the Swartkops estuary. Now unused, the pans are heavily impacted by solid and liquid waste generated in the surrounding settlements and industrial areas, that eventually enters the estuary and impacts on water quality.

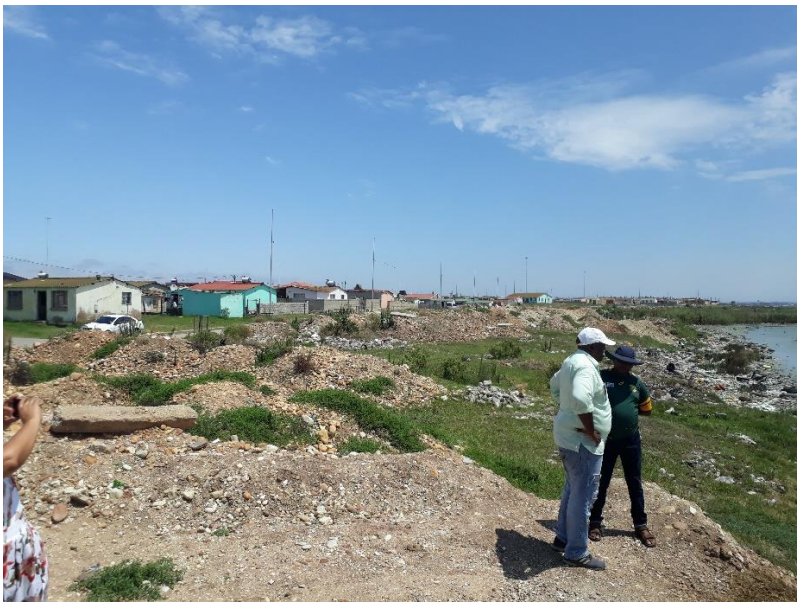

Figure 2. Solid waste disposal and dumping is common on the salt marshes surrounding the Swartkops estuary. Little to no municipal waste removal services are apparent in the area, leading to an accumulation of waste in this sensitive environment.

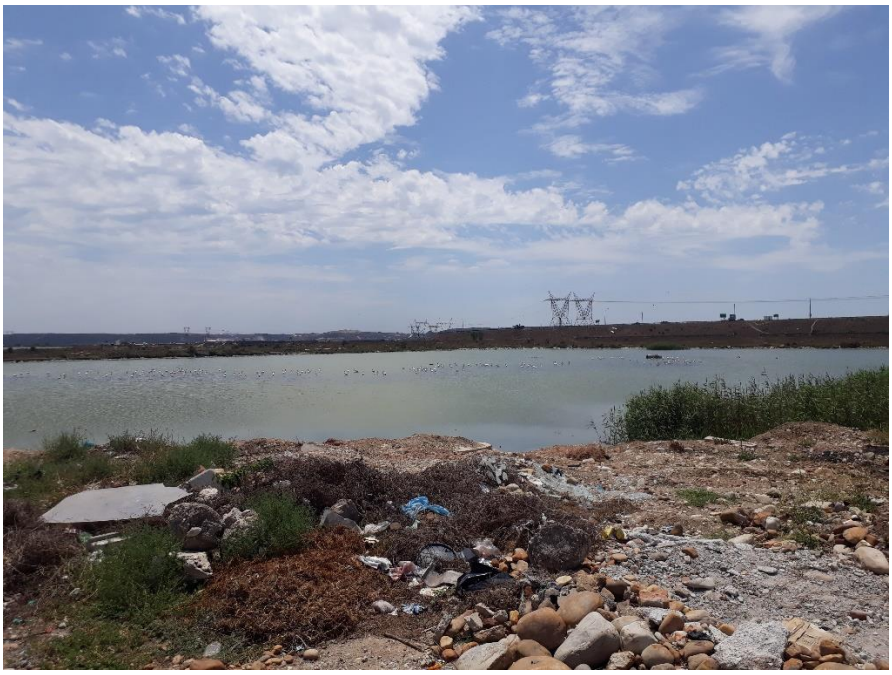

Figure 3. Flamingos in one of the unused salt pans on the Swartkops salt marshes. According to local residents, the numbers of these birds has declined in recent years and is thought to be associated with the increasing levels of pollution of the pans from surrounding sources.

3. Project implementation and coordination arrangements

The list of partners proposed in the project proposal is extensive and with some additions, would adequately capture the spectrum of stakeholders that would need to be included in local project coordination committees planned for Swartkops and Buffalo estuaries. However, the scope of the demo-project outlined in the proposal is very broad and it is recommended that this is narrowed down to concentrate on a few hotspots, and to include stakeholders associated with these in coordination structures. The project will not be able to solve all the water quality issues within the estuaries, so there will be a need to focus on areas where tangible benefits can be achieved within the project term. In addition, due to a relatively short timeframe for project implementation and budget constraints, it will be necessary to build on existing initiatives as much as possible to enhance impact in carefully chosen focus areas.

The coordination committees will be chaired by the national project manager who would ensure that all national WIOSAP demo projects are implemented according to contractual commitments.

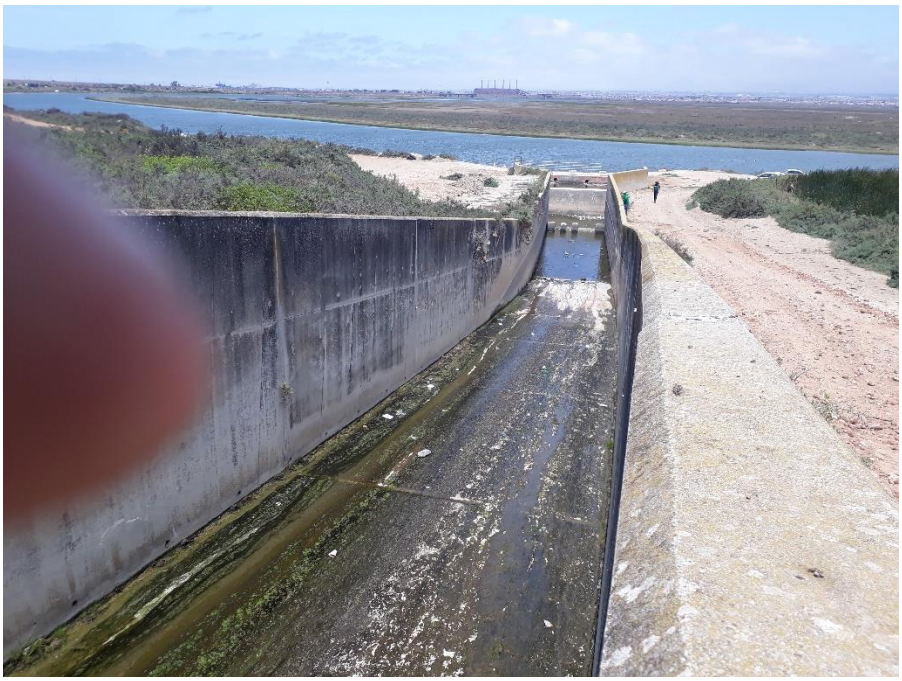

Figure 4. The Motherwell canal where it joins the main tidal channel of the Swartkops estuary showing the close proximity to the metropolitan area.

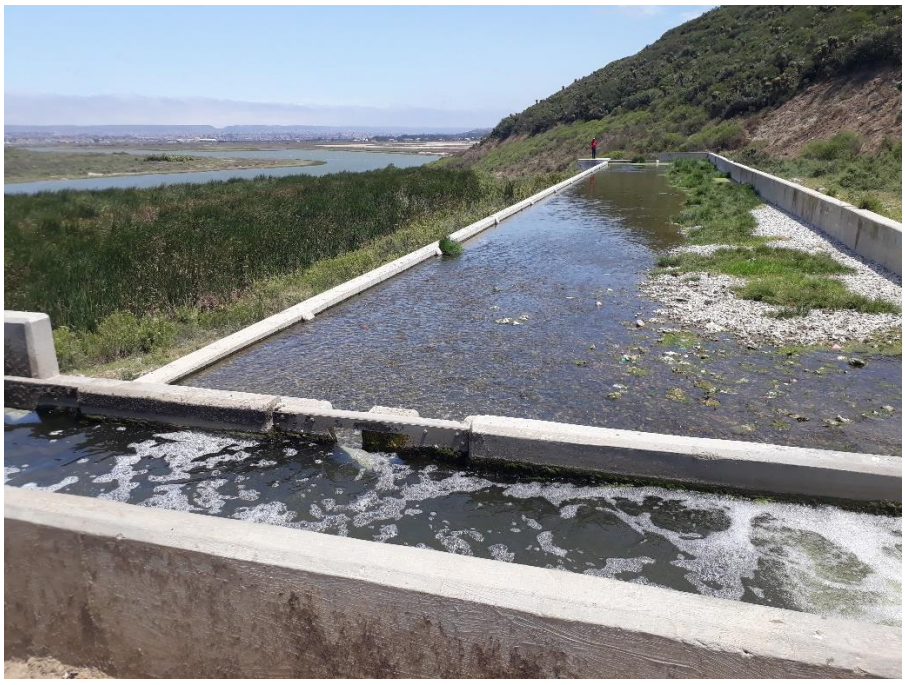

Figure 5. Hard engineering solutions have been established on the Motherwell side of the estuary to control solid waste entering the estuary through the Motherwell canal. Here, wastewater from the canal is directed through a biological filter before entering the river.

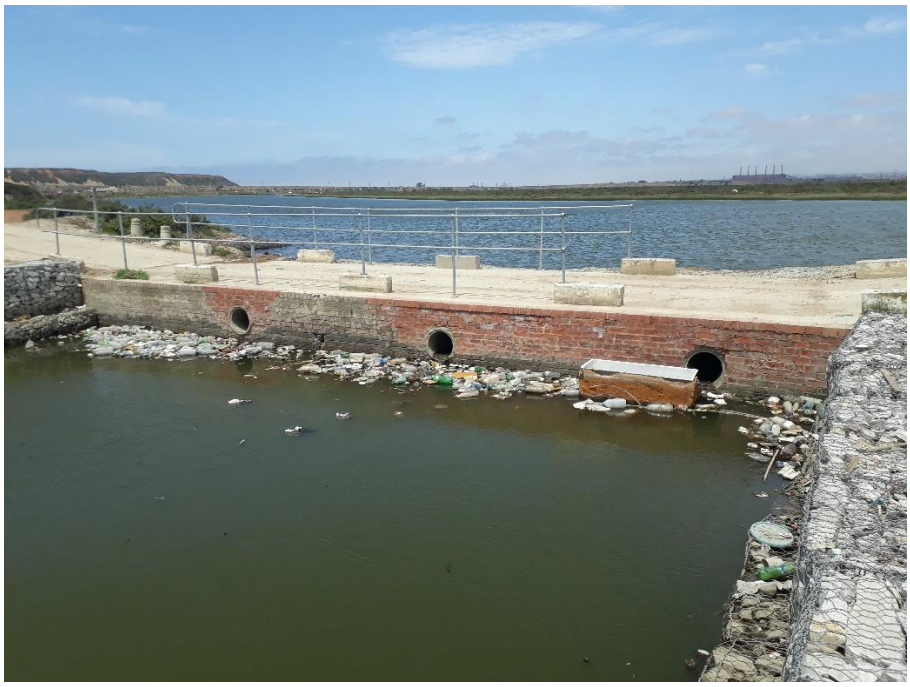

Figure 6. Plastics and other floating waste is collected in a litter trap before water from the Motherwell canal enters the Swartkops estuary.

4. Potential challenges and mitigating actions during implementation

The environmental threats facing both estuaries which are located within expansive urban areas are enormous. This demo-project will not be able to solve all the challenges faced, as many of these require large scale infrastructural improvements and improvements in service delivery in the concerned metros. There is therefore a need to narrow down the focus of the project to specific hotspots and particular problems where interventions can lead to tangible benefits in the relatively short project timeframe of 2 years. In order to achieve the most impact, the project needs to partner with existing initiatives who have ongoing activities in the project sites. In addition, the project needs to draw heavily on past studies and processes such as the Estuary Management Plan process for the Swartkops. Existing and past University research programmes need to be harnessed and in particular, the project needs to engage with and develop synergies with post-graduate student studies that may be ongoing or planned for the estuaries.

Examples of partnerships that can be built upon would include those with the Sustainable Seas Trust, and community outreach programmes such as those run by the Swartkops Conservancy, as well as existing ‘swop shops’ in the area.

Because of the extensive nature of the two estuarine systems involved, every effort should be made to develop common methodologies and approaches for the Swartkops and Buffalo systems. It may even be appropriate to engage with some the same partners to carry out work at the two sites in order to achieve logistical efficiency.

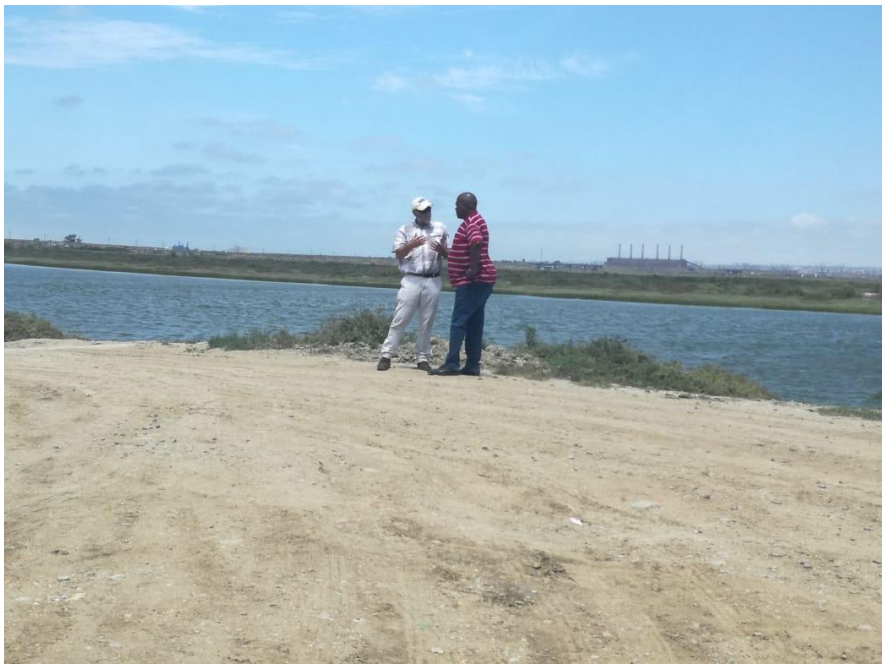

Figure 7. On-site discussions with the DEFF Project Manager on selection of hotspots that the project can focus on.

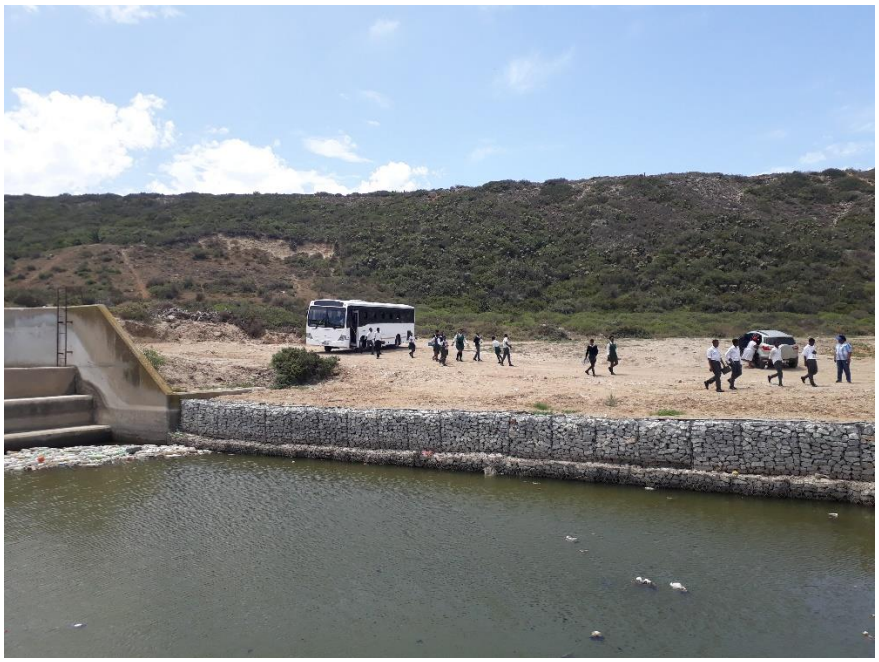

Figure 8. School children from the surrounding communities are brought to the Motherwell canal to expose them to various efforts to reduce the impacts of effluent and solid waste on the sensitive estuarine ecosystem. Around 100 children per week are already engaged in these activities by a local environmental NGO through their outreach activities.

5. Summary of technical assessment

This demo-project, as described in the project proposal, is extremely ambitious given the 2-year timeframe and limited budget available. It will not be able to address all issues related to water quality through the project, and it will be critical to identify hotspots to work in where tangible benefits can be achieved. The most important criteria for selection of these sites will be the ability to positively impact on, or control, the pollution that is occurring from land-based sources. Without being able to do this, no tangible impacts will be manifested as measured by water quality. Enough historical information exists on water quality parameters and sources of pollution, especially for the Swartkops, which has been comprehensively studied.

The project will need to focus on changing the behavior of residents of the area, cleaning-up hotspots, and relating these actions to a change in environmental parameters such as water quality. Another important contribution from the project will be coordinating the activities of a variety of stakeholders so that they can jointly work towards addressing the identified challenges.

Lastly, it will be important to identify and engage with existing initiatives working in the study sites so that the project can assist to enhance the impacts of these activities. There is good information identifying issues that need to be addressed within these estuaries. The challenge that the demo-project needs to address is 'how' to do this, and use these experiences as examples of best practice that can be replicated at other sites, both locally, nationally, and in the wider WIO region.

List of Stakeholders engaged with during the visit

Name	Designation and affiliation	Date met
Mr Yamkela Mngxe	DEFF (Oceans and Coasts)	5 February 2020
Mr Luvuyo Bali	DEFF (Oceans and Coasts) – Project Manager	5 February 2020
Ms Pearl Jonas	Penoclem Environmental Services (Private Sector)	5 February 2020
Mr? Mkhalekwa Mazibuko	RULIV (NGO)	5 February 2020
Mr? Makani Athule	DEFF – Coastal Monitoring	5 February 2020
Mr? Xola Sabani	Ward 16 Councilor, NMBM	5 February 2020
Mr Monwabisi Gomomo	Hluma Creations (Private Sector)	5 February 2020
Mr? Zamuxolo Malangeni	DEFF	5 February 2020
Mr? Chillie Tshaweni	Ward 21 Councilor, NMBM	5 February 2020
Mr? Noxolo Soyama	Likamua Environmental Foundation	5 February 2020
Mr? Kolekile Boqwana	Ward 24 Councilor	5 February 2020
Mr? Mnyamana Yanga	DEFF Communications	5 February 2020
Mr? Ntlabati Adly	Waste Management NMBM	5 February 2020