

Save our Sources- SOS Hennops River Rehabilitation Establishing HRWAR, emergency meeting, minutes and programme for Bambanani Wetlands & Tshwaranang Hennops River Restoration campaign:

19 to 28 October

Hennops River & Wetlands Allied Restoration (HRWAR)

The first formative meeting on countering the severe River pollution crisis Hosted by FRESH on 8 October at the Royal Elephant Hotel, 10am - 1pm

Attendees:

Willem Snyman (FRESH.ngo, project co-ordinator),
Paul Frost (Africa Eco Green Solutions),
Dumisani Buthelezi (DEA, head of waste management),
Michael Correira (Tshwane Nature Conservation),
Anthony Duigan (ARMOUR chairman),
Thomas Linders (Sustainable Community Development),
Alison Hayes (Zwartkops Golf course),
Dr Heidi Richards (Wits School of Chemistry & APES Freshwater laboratory),
Pule Makena (JHB Environmental Management),
Gert van Wyk (Royal Elephant Hotel director),
Shane Bellamy and Taryn Celliers (Mea Miti, Npo tree planting)

Minutes and finding a way forward to save, restore and protect the Hennops River

Welcome and an introduction by attendees briefly describing their specialist fields and how they fit into the project. The formation of a high-powered technical action group - for the conservation of water and nature. Consisting of different environmentally focused bodies in an alliance of private companies, Non-profit organisations, educational and governmental bodies. To initiate, manage and monitor practical projects as well as to engage with Government to find sustainable, natural and economical solutions to the current Freshwater crisis that our country is facing - largely stemming from sewerage pollution and improperly treated waste water as well as poorly functioning waste disposal and lack of recycling, poisoning our environment and destroying endangered bio-diversity.

Audio-visual presentation by Fresh from a recent fact finding expedition, slides of the current highly polluted state of the Hennops and the huge trash accumulation around its wetland sources. The black and highly toxic state of the Hennops has been present for a month now and stretches all the way up through Ivory Park, no clear source could be identified, although five severe sewerage leaks were found and reported to JHB water's head of operations, Etienne Hugo.

Plastics and other waste is another huge problem along the banks, the accumulation in large quantities of **solid waste** dumped around bridges and weirs as well as the severe problems in and around Ivory Park in Tembisa, rubbish piling up in large heaps in dump sites formed in the wetlands next to bridges that is then washed and deposited downstream, large volumes also originate from informal recycling and waste sorting sites on the Riverbank that is also washed downstream when the river floods.

The **black pollution tide** present along the whole length of the river's flow for almost four weeks now and even escalating in intensity, a phenomenon never seen before, a discussion of its possible origin and causes. In the absence of a clearly identifiable cause, is the river dying and turning black from extreme toxicity and lack of oxygen causing accumulated sludge to rise from the river-bed?

Most riverine life wiped out in the last five years while flowing through three nature reserves along a mostly still natural river course, until recently Gauteng's cleanest? Huge loss of bio-diversity and even large amounts of trees dying. Can there still be any life surviving in this highly toxic ecosystem?

Health threats, flowing for a hundred kilometres through the heart of densely populated Gauteng and into the Cradle of Humankind where a large part of our freshwater is stored in an interconnected underground Karst system - the possibility of permanently contaminating the ground-water, bore-hole and drinking water. Flowing into the Hartbeespoort Dam, built for agriculture and irrigation of food crops. Health hazards to all the people using the water and the spreading of disease - most diseases are waterborne.

Human rights abuses to the millions of people eating crops irrigated with this water and coming in contact with it by using the water for spiritual and religious purposes as well as using the river as a place of worship and cleansing site for the practise of religious ceremonies by large groups of people like the ZCC. The state of the water is unconstitutional and violates the right to a healthy and clean environment - the possibility of legal action to be taken by Mark Hayward of Section 21.

Water testing to be done by Wits APES as a test case for micro-organisms, facts accumulated on pollutants entering our drinking water like heavy metals and Endocrine Disruptive Compounds (EDCs) that are not properly monitored to pressurise the authorities to upgrade and extend treatment quality to also remove these compounds through microbial and wetland action.

The pollution sources were discussed as well as ways to counter them. The proven effectiveness of Micro-organisms to break down pollutants by eating up the sludge that forms a food source for them - the reluctance of authorities to embrace these and other eco-friendly and economical **Green technology** was discussed to determine the reason for this dangerous procrastination and ignoring of solutions that are economical and eco-friendly in favour of very costly and high maintenance treatment works that are ineffective and hugely power hungry, with 80% not working properly.

The **Main problems** were identified and summarised:

1. Numerous **sewerage leaks** from blocked and overflowing sewerage mains in Ivory and Ebony Park, five large leaks flowing down streets as health hazards, were reported to Jhb Water.
2. Non-compliance of **Wwtws** and poor quality of effluent causing sludge build-up in River.
3. Accumulation of **solid waste** at weirs, bridges and riverbanks, much originating from dumping next to streams and wetlands in Ivory Park as well as informal waste sorting on river banks lower down such as at Super-sport Park.
4. **Erosion of banks** aggravated by the loss of natural river bank vegetation, removed by the large scale mealie farming and crop planting of mostly pumpkins along the banks of the Kaalspruit below Ivory Park, huge encroachment of alien trees and weeds not holding soil.
5. **Siltation** due to erosion and **sand mining** removing natural banks causing further collapse
6. **Invasion** by **informal settlements** of wetland and stream banks mostly without services and in some cases where banks were disturbed by the recent laying of a sewerage pipeline.

Solutions: Starting the Hennops sources Kaalfontein and Tswelopile, wetland and River restoration

1. The **stopping and prevention of sewerage leaks** by Jhb water and the involvement of the community in early leak detection, prevention of pipe mining and the abuse of the system through education campaigns, seeing the value of clean water in streams and wetlands.
2. Using **Effective Micro-organisms** and **helpful bacteria** to break down and consume the toxins and sludge in the wetland as well as establishing symbiotic colonies further downriver, where sludge accumulates especially slow flowing sandy areas, critically toxic.
3. The **removal of solid waste** starting with a **clean-up day campaign** – 19 October with DEA and the community on the 20 October, finding sustainable recycling solutions for Ivory Park as prevention.
4. **Re-establishing wetland life** at a microbial level and expanding to re-establish the whole spectrum of endangered wetland as a protected living source seeding life downstream.
5. **Restoration of banks** with indigenous tree planting and re-establishing wetland vegetation where disturbed, the removal of concrete rubble left over from pipeline installation.
6. **Establishing People`s Parks** in disturbed areas - repatriating illegal shacks on the banks to proper areas and finding them RDP housing. Planting trees food forests and Permaculture.
7. **Educational projects** in the community and at the five surrounding schools on wetlands, recycling and environmental aspect, introducing the inhabitants of their outdoor classroom.
8. **Freshwater and river awareness campaigns** to prevent abuse, destruction, pollution and litter problems, working towards public engagement with the rivers. It is time for the people to take back their rivers and reconnect with their natural environment for the uplifting of everyone`s lives through clean water.

It was decided to hold these technical meetings on a monthly basis while the crisis persists, and to have quarterly public feedback and river-culture days on a Saturday to engage with the public; the Royal Elephant Hotel has graciously offered their riverside facilities for these events, it is centrally located in the middle of the length of the River and can accommodate large groups of up to 500.

A supplementary board meeting was held afterwards on ways of saving the last endangered animals in the lower Hennops Nature Reserve area and finding ways to feed and keep the rare Spot-necked Otters alive until the water quality can be improved. It was decided to establish a clean water rehabilitation centre in a dam area with micro-organism cleansed river water, as a breeding place and Ark to preserve and sustain the last endangered river life for their eventual rehabilitation into this and the other Fountain Rivers originating on the Witwatersrand, as soon as water quality can be restored and stabilised.

The Bambanani Wetlands & Tshwaranang Hennops River Restoration

Emergency clean-up and reseeded life over ten days from 19 to 28 October 2018

Meaning togetherness in Tswana it aims unite the river communities against pollution ten days (x), restoring three hot-spots in three Municipalities with clean-up days for solid waste - to also prevent it all washing downriver when flooding. The introduction of micro-organism for cleansing toxicity and restoration of life, rehabilitation of streams and river banks with alien removal and the planting of indigenous trees. Making people's Parks with fruit tree food forests and permaculture, engaging with the community for sustainable solutions and recycling projects.

The top wetland source part is called **Bambanani Wetlands** (meaning togetherness or embracing), starting with the upcoming Kaalspruit Wetland clean-up and restoration campaign, a River week.

Bambanani Wetlands SOS project - Save Our Sources: Starting on the **19 to 22 October** with the **Kaalfontein Wetland** flowing through Ebony and Ivory Park in Tembisa (JHB), then from the **23 to 25 October** focusing on a long **Wetland in Tswelopele**, Tembisa (Ekurhuleni) and after that down to **Tshwane** next to **Super-Sport Park Centurion, 26 and 27 October** to clean, restore and find sustainable solutions for a riverside informal recycling area and it's **Bagarezi** or waste pickers, a small informal settlement and riverbank community of about a 100. A closing day **River Spirit revival** ceremonies to be held at the Royal Elephant Hotel on the **28 October from 10 am to 5pm** involving water purification and river blessing ceremonies by delegations from the different religions of the world.

We thank all the participants and hope to see you all in a great synergy of resources and man-power.

Willem Snyman

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www.FRESH.ngo

(Fountains Rivers Environmental Sanctuary Hennops)

Preliminary programme.

Friday 19/10/18 (7 am)

Kaalfontein Wetland clean-up day with DEA, officials and the community along with the introduction of Micro-organisms to clear toxicity.

Saturday 20/10/18 (7am)

Kaalfontein Wetland community clean-up day, to clean litter and once again spraying with Micro-Organisms to disinfect, clear toxicity and prevent disease, starting the restoration of life.

Sunday 21/10/18 (7am)

Kaalfontein Wetland, Freshwater spiritual connection and wetland blessing, Yoga, Chi Kung and Tai Chi sessions, local religious groups, wetland and bio-diversity presentations.

Monday 22/10/18 (7am)

Kaalfontein Wetland: Clearing of debris and starting to rehabilitate damaged banks, recycling programme Tree planting and establishing People's parks, Permaculture and food forests. Educational campaigns, targeting two schools a day and interacting with and educating local communities on wetland systems and waste recycling.

Directions to Kaalfontein and Ebony Park Tembisa - meeting area will be sign posted and can be reached following Main Rd into Ivory Park, after the traffic light, the first T-junction at Kaalfontein Corner turn right into Angelfish St and then the second street left going down to the stream and Rabbit Fish St. where a Base area will be made.

Tuesday 23/10/18 (7am)

Tswelopile Wetland in Ekurhuleni, Starting with clean solid waste and cleansing with micro-organisms. Training water ambassadors and involving the people.

Wednesday 24/10/18 (7am)

Tswelopile Wetland community clean-up day.

Thursday 25/10/18 (7am)

Tswelopile Wetland tree planting and restoration of the banks, educational programmes at schools and community centres.

Directions to Tswelopele Ivory Park, Tembisa, Olifantsfontein Rd, turning into Soutward Dr becoming Dr M Marokane Dr, at the crossing with Riverside St turn left and go over the wetland, following signposts.

Friday 26/10/18 (7am)

Tshwane, Old mushroom Farm informal recycling area next to Super-sport Park, clean-up with officials and engaging with the Bagarazi through educational and recycling programmes.

Saturday 27/10/18 (7am)

Tshwane, Old Mushroom Farm Community Clean-up, dosing with Micro-organisms, removal of aliens, tree planting.

Directions to Tshwane, Old Mushroom Farm, Bagerezi next to SuperSport Park Cricket Stadium, corner of South St and West Ave, signposted to clean-up site on old Mushroom farm.

Sunday 28/10/18 (10am to 5pm)

Royal Elephant Hotel, Tshwane Hennops River Spirit cleansing, blessing and re-awakening, a Freshwater day with micro-organism seeding, tree planting and spiritual cleansing through freshwater ceremonies by delegates from different religions, group Yoga, Chi Kung and Tai Chi sessions (wear loose fitting natural clothes to allow free movement). A togetherness of different spiritual traditions and cultural groups, focusing energy on the water element - a social, resting and fun day.

A lunch-time River-bank picnic and fruit sharing with unplugged live music events, bring your own picnic basket and culturally unique food to share, a buffet lunch is also available at the Hotel. Talks on shared human riverine origin, forming the Birthplace of Humankind Wild-life Reserve in the lower half of the Hennops and confluence, a Protected Environment along the whole length of the River as bio-diversity corridor to allow free movement through fish ladders.

Directions to Royal Elephant Hotel Eldoraigue Centurion, corner Wierda Rd (M10), Willem Botha St, Bondev Park, follow the road to the riverside parking.