

ZANDVLEI PROTECTED AREA ADVISORY COMMITTEE

MINUTES

MEETING HELD AT THE IMPERIAL YACHT CLUB, MUIZENBERG ON WEDNESDAY 15 November 2017

Present:	Andy Killick (AMK) A. Lathif Gafoor (LG) Angus Hemp (AH) Anthony Roberts (AR) Nyanisa Tshaya (NT) Dave Jubb (DJ) Mark Clive Arendse (MCA) Dave Walker (DW) Dalton Gibbs (DG) Andrew Taylor (AT) Cherry Gilham (CG) Pam Hepple (PH) Mike Miller (MM) Neil Armitage (NPA) Bernelle Verster (BV) Gavin Lawson (GL) Peter Kruger (PK)	Recreational Fishing, resident Ward 64, also MDGA MDGA CTEET DEA & DP, Coastal Management MDGA Acting Manager, ZENR Sea Cadets /CPUT CoCT, Regional Reserve Manager CoCT Friends of Park Island Friends of Park Island PenCC UCT \ Recreational Yachting Chair, ZPAAC CBC TZT
Apologies	Gillion Bosman (GB) Abdulla Parker (AP) Aimee Kuhl (AK) Mabovu Bonelwa (MB) John Fowkes (JF) Sandra Fowkes (SF)	CoCT – Council TCT CoCT Councillor, ward 64 DWS ZVT, Westlake Wetlands Project ZVT
Invited:	Willie van Wyk (WvW) Liezl le Roux (LIR) Joan Aronowitz (JA) Karel Lewy-Phillips (KLP) Talcott Persent (TP)	ZAA Engineering Living Lands Weed harvesting Environmental Science Solutions Ltd CoCT, incl ZENR

Item		Action by
	Meeting opened: 14h06	
1.	Welcome: Extended to all by Bernelle Verster	
2.	Attendance Register: Signed by all.	

Item		Action by
3.	<p>Minutes of previous meetings: Matters Arising:</p> <p>Letters to council about green jobs bungle and conditions around Joshua's resignation has been sent.</p> <p>PAAC meeting held at Helderberg on 8 November feedback: Everything is in crisis. Other PAAC's also struggling, Julia Wood expecting to lose many posts.</p> <p>Ratified minutes are now on website: http://zpaac.org.za/zpaac-minutes/</p>	
4.	<p>City Matters</p> <p>Letter from Aimee Kuhl to Brett Heron. ACTION: Include communication into minutes (see at bottom of document)</p> <p>Dalton Gibbs:</p> <p>1) Zandvlei Manager Post have had no definitive answer for the City Council regarding the future of the Zandvlei manager post. It is unclear whether this post has been scrapped, frozen or can be filled. It is hoped that direction will be given for a short term intern arrangement to be put in place before the end of the year.</p> <p>2) EPWP Labour Staff The Area Based council has given 2x Expanded Public Works Programme worker posts for Zandvlei for this financial year (until 30 June 2018).</p>	BV - done
5.	<p>Province Matters</p> <p>DEA&DP</p> <p>The Provincial Department has the Provincial Coastal Committee on the 23rd of Nov 2017</p> <p>State of the Coast Report: Final Draft State of the Coast Indicators have been received from the Consultant. The Province is also busy with the State of Environment Report is out for comment, Bernelle will circulate the link. Available online here: www.srk.co.za (https://www.srk.co.za/en/za-western-cape-soeor); and in paper at several locations as shared via email to this group.</p> <p>ACTION: distribute to group</p> <p>Estuary Management Project (Estuary Management Framework and Implementation Strategy) The updated EMPs (including Zandvlei EMP) went through quality assurance, waiting for the Consultants to make the updates and it will be available for comment.</p> <p>Marine Outreach with Two Ocean Aquarium It was Eden Region (23rd to the 27th of Oct)</p> <p>The Province is also Planning a Stakeholders Workshop for March 2018 Invitation will be sent soon</p>	BV shared to group via email (via Nyanisa)
6.	<p>Memberships and Representatives Update</p> <ul style="list-style-type: none"> Cherry Gilham & Pam Hepple added as reps for Park Island 	

Item		Action by
7.	<p>Project list report back and update</p> <ul style="list-style-type: none"> Weed harvester: A working group met on 25 October to explore ways to manage the pondweed, because a new weed harvester is not possible at this stage. The group consisted of Karel Lewy-Phillips (Environmental Science Solutions), Bernelle Verster (ZPAAC), Tlaleng Lemeke and Lerato Mahway (a 4th year Chemical Engineering project pair working on Zandvlei pond weed), Joshua Gericke (ex ZENR manager), Mark Clive Arendse (acting ZENR manager) and Lathif Abdool Gafoor (Ward 64 and resident of Marina da Gama) Minutes of that meeting is on the ZPAAC website: http://zpaac.org.za/wp/wp-content/uploads/2017/11/Zandvlei_Weed_harvesting_meeting_25oct17.pdf <p>From that meeting, recommendations going forward were shared and discussed:</p> <ul style="list-style-type: none"> <i>The current way of doing things is working well, the weed harvester is currently working, but it remains to be seen if this can be maintained without a dedicated manager.</i> <i>We think the new maintenance company is reducing downtime, which should improve the mechanical harvesting.</i> <i>We suggest refurbishment of the Princessvlei harvester. Send the current maintenance co to quote on it</i> DG responded that the Princessvlei harvester is used at Princessvlei for 3 to 4 months of the year, and transport between there and Zandvlei is too expensive. LG countered that at the meeting the group was told that the machine has been out of order for the past 18 months. DG could not comment on this, but the understanding was that if the machine was working it would be used at Princessvlei. The machine was refurbished about 7 years ago, have only about 10 more years. <i>We request access to another operator if this harvester works.</i> DG responded that on the R800k weed harvester annual operational budget he will not be able to afford another operator nor refurbishment of the machine. <i>The maintenance budget is not enough to refurbish the machine. But it is too difficult to move. The machine is not unused, does get used 3 to 4 months of the year. Not feasible from a transport point of view.</i> <i>While economically feasible, we do not feel confident to have a manual harvesting strategy due to the risk to the workers and the low level of efficiency possible due to the nature of the pondweed.</i> <i>We do feel, however, that this service could be outsourced to the Weed Man (?) - person on boat... to supplement the mechanical harvester.</i> This may have referred to JA who had a tender to remove pondweed/litter many years ago, and who was of the firm opinion that using a mechanical weed harvester was unsuitable to the ecological functioning of the vlei, that manual collection was feasible and desirable in terms of the functioning of the vlei as well as job creation. On request after the meeting, further information on how this tender worked and collection rates per person was not available. 	

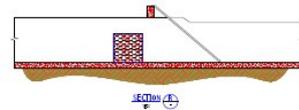
Item		Action by
	<ul style="list-style-type: none"> • <i>The best management method overall is maximum saline variability.</i> <p>This conversation then branched out into nutrient management and integrated estuary management in general. The recommendation from JA was that the banks get rehabilitation to restore natural function, with reedbeds to capture the litter. A heated conversation ensued about the nature of the litter. There was general agreement, however, that the rehabilitation of the banks was desirable even as DG and AT noted the difficulty in both funding and credible specifications in making this a reality, and that reedbeds would need land, and maintenance. This would need a shift how we manage the infrastructure. This led to a discussion on how to address the funding aspect, summarised in section 8 below.</p> <p>Way forward: For the moment use the mechanical weed harvester.</p> <ul style="list-style-type: none"> • Litter trap: <p>WvW presented on ZAA's progress on the litter trap and presented an interim report in hardcopy. The report and his feedback noted that ZAA took the current developments regarding the water crisis in consideration, and therefore suggested an interim solution which utilises the existing 'half-circle' at the existing litter trap which is achievable within the current budget capacity of the client. This interim solution was presented and discussed.</p> <p>It was noted with approval that the interim solution was similar to one that Talcott proposed (see presentation on ZPAAC website at http://zpaac.org.za/wp/wp-content/uploads/2017/11/2017_Talcott_Persent_Sandriver_littergrid_15nov17.pdf)</p> <p>NPA noted that an imperfect solution is worse than no solution. He at first commented that he understands what is going on, but wouldn't have done it this way, and cautioned that an interim solution would require high maintenance, that it is not a highly engineered solution. Further comment was reserved until after the meeting, where between NPA, WvW, TP and onlookers several modifications were suggested, and the general feeling seemed very positive.</p> <p>ACTION: WvW to send through modifications and next steps.</p> <p>The next step includes how to get funding to actually implement this. TP mentioned an annualised tender R500k to R1m without a formal tender process, and BV asked to clarify what this means. AT said this means the process to approve this is reduced from about 9 months to a few weeks, but this money is still needed from a budget, in short term either from a cancelled project, or in a new budget.</p> <p>This may also need an EIA.</p> <p>TP noted his budget cuts, and said his main team is focusing on the litter traps and the litter. In the past they had an agreement with City Parks, where they help collect litter. DG noted that it is in no one's interest to collect litter, but rather push it through until it becomes another department's problem. BV noted that the mandate of a PAAC probably includes to be able to force some cohesion. TP asked if we can we get an agreement where everyone helps with litter clean up, and help to coordinate with other directorates.</p> <p>ACTION: Get the list of names of the people in the directorates.</p> <p>CG noted that any such project must include educational programme against litter to build</p>	<p>WvW</p> <p>BV, TP, others</p>

Item		Action by
	<p>DG: This would need a shift how we manage the infrastructure.</p> <p>BV: It is frustrating to have to operate like this. Every potential solution has three associated follow-on problems making it unfeasible, and even if it is a good solution then we don't have money. Even when things are operating perfectly we are just above crisis mode. I can't carry on like this. Even if it is only for the sake of maintaining our motivation, let's have a dream about how it could be – Dream Zandvlei discussion in next section.</p> <p>ACTION: All to contribute wild ideas about Nutrient Management and integrated estuary management in general.</p>	ALL
8.	<p>Financial, Operational and Political Strategy</p> <p>The challenges above have corresponding plans, they are incorporated into the management plans, they have budget allocated to them which continually gets revoked, they are scheduled but continually is postponed. It seems that the only thing holding progress back is money.</p> <p>There seem to be several ways to address this, albeit with low probability of success:</p> <ol style="list-style-type: none"> 1. Understand the annual budget better, understand how items make it into the budget and by when this has to happen. From what we can see, this is all happening the way it should, but does not guarantee that the work will get done – the budget can easily get relocated. ACTION: Find out how the budget gets allocated and by when, what are the systems in place and when does this get submitted. Who deals with this? (A general query asking for this at the meeting was met with silence) 2. Get more government money through tenders. NT sent through information for EPIP funding – details in a dropBox folder, link in the previous minutes. This and finding money through other tenders and avenues as well as lobbying becomes a full-time job, so we need a dedicated, paid person for this. ACTION: GL to write up a job description for this. After this we can start worrying about where the salary will come from. Noted that it is better to have an internal person who knows how the system functions. 3. (Long term view) Subsidy from responsible development – Dream Zandvlei. Having responsible development may provide economic incentive to protect and take care of the estuary as a multi-functional, productive space. Three areas can potentially be considered for this, either together or as a unit: The area of the Zandvlei Sports Club, the caravan park and the area of the Bowling club. DG noted that this is under consideration for the caravan park, that there are many questions, like how much council can accommodate different income groups. The proposal has not gone to council yet, but the plan is to privatise it. Much discussion followed about the feasibility of this, that even if feasible it will take very long, that we don't know if the developers and commercial interests would take care of the vlei, along with potential benefits of such an approach. But to keep our motivation up, let's have a dream, and if it could happen, then we are prepared with a plan. We have the ability and the mandate to set the terms of engagement to shape what development and commercial activity can take place. Some ideas flighted in the meeting is having a 'little waterfront', having a promenade like at GreenPoint. The vision of an international water sports tourism destination was mentioned again. ACTION: All to contribute their dreams for Zandvlei, however small or large. 	<p>BV</p> <p>GL</p> <p>ALL</p>

Item		Action by
9.	<p>General</p> <p>The Chair asked to instate committee portfolios: have a lead person on each project, but also have a contingency plan for poor progress, bearing in mind we are volunteers. There was still no response, but MM noted to share the invitations to specific focus meetings with the wider group which may help with getting more people to help maintain momentum on projects.</p> <p>For the new representatives of Park Island, queries addressed via email was shared again:</p> <ol style="list-style-type: none"> 1) Signage for Park Island stalled? Just waiting for new logos after the City restructuring – CG and PH to contact DG for logos. 2) CG and PH asked if it was possible to have an after dark activity at full moon each month. DG advised that they can ask the reserve and need to arrange with the security company to not lock the gate and possibly look after the security during this time, but should not be a problem. 3) CG enquired about the litter via email but this was dealt with in detail during the meeting. <p>LG asked about rumours that eland could come to Zandvlei. DG responded that the vegetation forms part of False Bay Dune Strandveld and needs herbivorous movement and browsing. His department is aiming to restore the migration routes using transport. This is not about the animals, but about the vegetation management. The plans to bring eland is dependent on funding which at the moment looks unlikely, the City will not fund it.</p> <p>This was met with excitement, and it was asked how much money could be needed. This programme is running successfully at False Bay. Next place potentially University of the Western Cape. Long term viability is at risk. Cost about R350k per year.</p>	CG, PH
10.	<p>Any Other Business:</p> <p>NT suggested setting the dates for ZPAAC meetings for 2018 in advance to be able to be included in calendars e.g. in the Provincial calendar schedule. BV asked all to send through calendars that need to be considered for clashing dates. The frequency of meetings were discussed, with some feeling that the bimonthly (6 times a year) works well to maintain energy, but others saying it makes it hard to attend and opting for quarterly (4 times a year) instead. The compromise is 4 general meetings, with formalised smaller focused meetings that everyone knows about. Public meetings about interesting topics like the toad highways, fish slipways etc is also good and can be coordinated with Friends groups and e.g. the Zandvlei Trust.</p> <p>Do Wednesdays still suit?</p> <p>Proposed meetings for 2018: Wednesdays, 14:00, Zandvlei Sports Club, roughly second Wednesday of the month:</p> <ul style="list-style-type: none"> - 28 March - 13 June - 12 September - 12 December <p>Working meetings (topics, venue and time TBC, likely some or all of the top priority areas – litter, weed, nutrient, sediment management) – attendance is optional, minutes will be distributed to rest of the group and ratified at next general meeting after discussion if required.</p> <ul style="list-style-type: none"> - 17 January 	

Item		Action by
	<ul style="list-style-type: none"> - 11 April - 29 August - 28 November 	
11.	<p>Next Meeting: TBD.</p> <p>Meeting closed: 15h40 with impromptu working groups continuing until 17:00 when the venue closed.</p>	

Working group after meeting: Further discussion on litter trap:



Email from Willie, ZAA, 25 October:

We are working on a concept which also utilises the existing “half circle” overflow area (please see attached drawing), deepening it very slightly and installing a series of 0.5m gabion weirs. We have left the existing litter screen in place to function as an automatic sluice which blocks up with the initial flush of litter. Low flow litter load is catered for by another 1m X 1m gabion within the canal directly downstream of the screen.

Upon blocking of the screen, overflow water containing additional litter load is forced into the wetland area where progressive blocking of the gabions in a radial direction, directs the overflow water further and further away from the canal and thus increasing the overall filtration area. This will allow the system to function for two or three (maybe more) “flushes” without having to be cleaned out.

Cleaning and servicing of the system will be manual, with workers being able to walk along the gabion weirs in order to collect the litter that has been trapped. Once cleaned, the system is “reset” to its original state.

A feature of the system is thus that it will self-adapt to the flood magnitude and litter load. It will also be able to handle multiple floods without cleaning, and can easily be resized if it is found that it has been either over or under designed. The permeability of the gabions may be fine-tuned during detail design by varying the size of the stone fill. Stone size may also be reduced incrementally through the system. Routine maintenance (say once every two years) will be required to clear small items that have been stuck inside the gabions. This is easily done by unpacking, cleaning out and re-packing the gabions.

A similar system can also be placed on the Langvlei canal, or by moving the system closer to the confluence of the two canals, they may be combined into a single system.

We have made good progress with the hydrological model and are currently refining the flood attenuation features within the catchment. The proposed litter trap will also be tested numerically once we have finalised our methodology.

I still have Neil's sketches – I can scan them and send them on. The pertinent features that we agreed on back then was that flow needs to be spread out, and thus the velocity reduced, and that there is a requirement for a "forebay" to act as sediment trap. I am confident that our proposed solution addresses all the requirements, as well as being low cost and unattractive to vandals or scrap metal enthusiasts.

Working group after meeting, NA, WvW, TP:
rough notes

Neil: understand what is going on, wouldn't have done it this way.

Interim solution, high maintenance, not a highly engineered solution

What kills you is turbulence, plus velocity leads to blockage – the bed load is suspended because of turbulence.

Fine with location.

Would avoid sharp bend. Feather it straight in from the bend. You need about a 1:4 slope. Slow the flow right down. Open up the area to slow the flow down.

You need the length up the canal because you are worried about flooding upstream.

Want people to be able to walk out (after maintenance, or if they fell in) Want to be able to get in with a bobcat.

Instead of gabions, have nets of decreasing mesh size. Or floating wetlands, the plant roots serve as netting. Entire wetland can be removed for maintenance.

Velocity of the water flowing must be small

Floating wetlands t catch floatables.