



HARTENBOS ESTUARY MANAGEMENT PLAN

Minutes of the 2nd Public Participation Meeting
2 February 2016



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Report Prepared by:

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1 DETAILS OF THE MEETING

The objectives of this meeting were to introduce the consultant team responsible for the preparation of the Hartenbos Estuary Management Plan (EMP) and to present and discuss the content of the Draft Hartenbos EMP. It was also important to ensure that all stakeholders understand the steps required in forming the Hartenbos Estuary Management Forum (EMF).

The meeting was held at the Hartenbos Library Hall (Witwatersrand Road, Hartenbos) on 2 February 2016 from 18:00 – 20:30 .

Please note that most contributions were made in Afrikaans and have been translated into English in these minutes. Please note however that contributions are not translated word for word but rather represent the most important points made by each stakeholder that contributed to the discussion.

2 ATTENDANCE

The signed attendance register is included as Annex 1.

Name	Affiliation	Email/Fax	Phone number
Warren Manuel	Mossel Bay Municipality	wmanuel@mosselbay.gov.za	0713451720
John Roberts	Department of Water and Sanitation	RobertsJ@dws.gov.za	0626940295
Philisiwe Mbunquka	Breede-Gouritz CMA	pmbunquka@bgcma.co.za	0793213208
Pumza Buwa	Department of Water and Sanitation	buwap@dws.gov.za	0718977024
Caren George	DEADP: Coastal Management	caren.george@westerncape.gov.za	0214832724
Nyanisa Tshaya	DEADP: Coastal Management	nyanisa.tshaya@westerncape.gov.za	0214835093
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Khuliso Mubva	Breede-Gouritz CMA	kmubva@bgcma.co.za	0716486289
Mornay Beukes	Hartenbos Conservancy	mornayb@atkv.org.za	0828274276
Enrico Gennari	Oceans Research	e.gennari@oceans-research.com	0762153360
Austin Eybers	Birder at Groot Brak	aussie@eybers.co.za	0446202711
Jacobus Van Zyl	BOER (farmer)	jacobusvanzyl@telkomsa.net	0824524041
Vivien Stadler	Pinnacle Conservation	admin@pinnacleconservation.co.za	0832763576
Pieter Daniel van Reenen	Hartenbos Conservancy (BEWARREA) and Resident at the Harterus Retirement Village	pieter.01@vodamail.co.za	0824757500
Ossie Pretorius	Dibiki Holiday Resort	oosie@dibiki.co.za	0827760501
Phillip Vermark	Hartenbos River Resort	hartenbosriverresort@gmail.com	0714541073
JA de Kock	Pensioner		
Kobus Neethling	AFRIFORUM MOSELBAAI-	neethlhj@gmail.com	0829291939

Name	Affiliation	Email/Fax	Phone number
	TAK		
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Anton Dellelijn	Conservancy MidBrak and Great Brak	antondellelijn@gmail.com	0721501823
Jacques Snyman	Angler	jacques.snyman@dcs.gov.za	0844078343
Leon van Dyk	AFRIFORUM MOSSELBAAI-TAK	leonvd@mweb.co.za	0826016228
Hannes van Rensburg	Private Dibiki Holiday	marthan@exite.co.za	0828200467
Martin Horak	Hartenbos BEWAREA		0825103714
Lofty Feurie	Private	loftysiii@gmail.com	0827442130
Gideon van der Watt			0836257819
Marius Horak	Land owner	mh7203@gmail.com	0791407528
Louis Cook	Afriforum Mosselbaai	louis@whalephin.co.za	044 696 6772

3 APOLOGIES

- Vernon Gibbs – Eden District Municipality
- Constant de Kock – Hartenbos Sport
- Caitlin Marshall – Hartenbos Conservancy
- Riaan Grobbelaar - Hartenhengel
- Laurie Barwell – Property owner
- Louis Cook – Afri Forum
- Gail Hanekom – Lakes Bird Club
- Petru Terblanche – Ward Councillor

4 WELCOME AND INTRODUCTION

The meeting was opened at 6:05 pm. Dr Ken Hutchings (KH) introduced himself and his colleague, Vera Massie (VM) from Anchor Environmental Consultants (AEC). He explained that AEC has just completed the Draft Hartenbos Estuary Management Plan and that the purpose of this meeting was to present and discuss this plan with stakeholders and to outline the steps required to form the Hartenbos Estuary Forum.

KH thanked all for attending the public participation meeting and expressed satisfaction regarding the good representation of various stakeholder groups in this meeting.

5 AGENDA

KH went through the agenda and explained that he and VM would first present the Draft Hartenbos EMP. He emphasised that it was impossible to present the whole EMP in detail in this meeting. He explained that he and VM would present the most important aspects of this management plan and that the presentation would provide a 'road map' to reading and understanding what has been proposed. He explained that after the presentation he hopes that the attendees will voice their main concerns regarding the Hartenbos EMP. However, he also emphasised that he would appreciate comments and advice from the attendants at any time during the presentation. He clarified that although the presentation would be mostly in English, attendees could ask questions in Afrikaans.

No changes to the agenda were proposed.

6 PRESENTATION AND DISCUSSION

KH starts the presentation by outlining the purpose and scope of the Hartenbos EMP. He emphasises that the Draft EMP should be seen as a flexible document that can be altered as required to achieve the overall vision and objectives for the estuary. He goes on explaining who the lead agencies and their strategic partners are and outlines the role of the Hartenbos Estuary Management Forum (HEMF) in future.

VM continued by presenting the vision, management objectives, strategies and key result areas. She explained that it would be impossible to present the whole Hartenbos EMP and that the most important aspects had been selected for this presentation. She urged the attendees to submit detailed written comments that reflect their different views to aid in finalising the EMP. The following contributions were made by stakeholders during this presentation:

SH1 (Please confirm stakeholder) is of the opinion that the Hartebeeskuil Dam is the most important contributor to change. He emphasised that this must be recognised as the problem so that it can be fixed. He continued to say that drafting the Hartenbos EMP is an important initiative but that rehabilitation efforts have been ongoing for years without success. He asked what the purpose of the Hartebeeskuil Dam is and argued that if the dam is the main issue why it cannot be removed.

KH responded that the dam was built to supply the Hartenbos ATKV Holiday Resort with potable water. However, after the dam was commissioned, it was found that the water was too brackish and has since been used for salinity tolerant crops and watering of livestock. He explained that one of the recommended actions of the EMP is to improve flows or releases from the dam. He also clarified that the plan needs to include other aspects of estuary management not only dam management.

SH1 (Please confirm stakeholder) continued to say that there are 120 000 plans in South Africa but the lack of implementation is the problem. He was of the opinion that without sufficient water supply from the higher parts of the river, the health of the estuary will never be restored. He inquired whether removal of the dam could perhaps be investigated or whether the dam could be opened for a couple of days such that it can clean out all the sand in the estuary. He explained that

he has watched for years how the municipality has had problems with the estuary. He knows how dirty the estuary is and how the fish are dying. He emphasised that all that is needed is a decent rain so that the flood can clean the sand out of the estuary which would alleviate other problems such as the dirty water and the miggies. He concluded that for many years people have been trying to fix this problem and maintains that it cannot be fixed without water.

SH 2 (Please confirm stakeholder) contributed by saying that in his view issues are over-complicated in the Hartenbos EMP. He claimed that the Klein Brak and Groot Brak as well as the Breede have dams too and that the water is clean. He referred to illegal mouth opening and stated that under natural conditions the estuary mouth never used to be closed. He emphasised that it must be focused on investigating what the estuary was, what it is now, and how it has changed. In his opinion, the closed mouth condition is the problem and recommends that the mouth must be opened and kept open.

KH responded that it is understood that this system is closed naturally in dry years, but that he agrees that the dam is compounding the issue. However, he also explained that the dam cannot simply be removed as it is now used by people. KH asked whether there are any records supporting the claim that the estuary used to be permanently open. He agreed that the system is probably more often closed than it used to be but he concluded that the Hartenbos is a small catchment, smaller than the Breede, and it is unlikely that this is a permanently open system under natural conditions due to insufficient rainfall in the dry periods.

SH3 (Please confirm stakeholder) argued that the dam wall cannot be removed but that it is important to manage the consequences of the dam instead.

KH clarified that the above discussion points all form a large part of the Hartenbos EMP. For example it is a recommended management action in the plan for controlled environmental releases from the dam are implemented to improve water quality in the estuary.

SH3 (Please confirm stakeholder) argued that the condition of the estuary is excellent at the moment and that this can be attributed to a storm in November that opened the mouth. He is also of the opinion that the overpopulation of fish is caused by the lack of game fish in the estuary, which cannot enter the estuary while the mouth is closed. He believes that overpopulation is likely to be the cause of the fish kills.

John Roberts (JR) added to the point provided by SH1 who commented on the dam. JR explained that the sluice of the dam is only a 200 mm pipe, which is permanently running and the DWS is continually putting in water to the system downstream of the dam. He confirmed that there had been a flood from below the dam that reached the estuary in November and added that in the previous two years the dam was overflowing because of very good rains. But overall, the municipal water works is currently putting more water into the system than the dam. I think it is 15 000 ML per day. He is of the opinion that the upstream river is in good condition as a result of the environmental releases.

KH responded that water releases are not the only problem and that all these issues are actually addressed in the EMP. He asked the attendees to please give VM a chance to present what has been proposed.

VM asked all attendees to introduce themselves before providing comment. She explained that the minutes will then be circulated among everyone.

Philip Vermark (PV) suggested starting an email group so that everyone can see each other's comments. Comments should not only be sent to AEC but to everyone.

KH agreed that it will be important for everyone to know what comments have been provided, but that all these will be presented in the stakeholder consultation report that will be compiled as part of this process. He requested to first provide comment to AEC before it is circulated.

Mr JA de Kock (JAdK) said that the conservation of the Hartenbos Estuary has been talked about for a long time, but that no efforts have been successful to date. He informed the attendees that he was one of the founding members of the original Hartenbos River forum and that this forum hit their heads repeatedly against the wall in their attempts to improve management of the estuary. He wished this initiative good luck.

Anton Dellelijn (AD) contributed to the discussion and said that in the last four years since EMPs were developed for the Groot and Klein Brak Estuaries, things have really started to improve. He urged the Hartenbos Stakeholders to give this process a chance. He ensured that this process opens new doors to solve many of the problems that they were experiencing. He explained that collaboration with people from the Department of Water and Sanitation (DWS) and Department of Environmental Affairs (DEA) ensures big successes. He offered his support and expressed assurance that this would be a successful undertaking.

SH3 asked AEC whether this process would allow for the opening of the mouth.

Pieter van Reenen (PvR) said that the Hartenbos Situation Assessment Report (SAR) contains pictures showing the mouth state from 1930s onwards. He asked whether anyone could tell him when the dam was built. Several people responded that it was built in the 1960s/1970s. PvR continued and made the point that the mouth was closed in the 1930s before the dam was built, which demonstrates that it is not only the dam that causes the mouth to close.

KH agreed with this comment and referred to three pictures pre-dating the dam construction out of which two show a closed state. He conceded though that these pictures were only snapshots in time.

Kobus Neethling (KN) contributed by saying that the sand distribution has shifted in the Hartenbos River mouth. He believes that this was caused by the construction of the Mossel Bay harbour break water, which sheltered the Hartenbos Estuary from the waves and thereby causing sand build up. He pointed out that the Groot Brak River mouth stays open all the time despite the Robertson Dam and concluded that it is not the Hartebeeskuil Dam alone that causes the mouth to close. He suggested that the status of the pipeline must be inspected to bring water from Robertson Dam to Mossel Bay as the pipe is in bad condition and bits are broken. He argued that if the Robertson Dam can be brought on the water network then more water can be available for the Hartenbos River system. He continues to point out several issues regarding water supply in Mossel Bay and refers to several other dams.

VM continues with the presentation.

Martin Horak (MH) from the Hartenbos Conservancy said that regular meetings of the Hartenbos conservancy took place in Mossel Bay and that records must be available. He recommended that these records should be retrieved and looked at to find out what kind of management issues arose and were dealt with in the past.

KH requested a contact person, but unfortunately the person was unknown.

Austin Eybers (AE) raised concern that without monitoring and measurements conclusions cannot be made regarding the state of the river mouth. He said that he had read the Hartenbos SAR and the EMP carefully and is of the opinion that water quality measurements are currently not done in the right places at the right time. He is of the opinion that currently the data is insufficient for analysis and that it can't be measured against a standard. He added that monitoring stations along the whole river need to be set up. He then asked whether anyone from the Mossel Bay Municipality was present.

He also added that he loves the Hartenbos Regional Waste Water Treatment Works (WWTW) for birding. He shared his observations he had made the last few times he had visited the plant. He said that the first big dam had contained solids and at the same time much fewer birds had been present on the dam. He said that he would like to know what the water quality is at the WWTW and described the layout of the WWTP. He thinks that it is a very good idea to keep the lower ponds of the WWTP in the estuarine functional zone and the plans.

JR explained that the Hartebeeskuil Dam's original purpose had been to provide drinking water to the Hartenbos ATKV, but that the water is currently used primarily for agriculture. He also mentioned that legislation applicable at the time when the dam was built, did not make allowances for the ecosystem functioning downstream of the dam. Under the old legislation water that went to the sea was considered wasted. New legislation changed this and an environmental reserve must now be calculated. However, no allocations have been calculated and allocated for agriculture or ecological needs. There are no written agreements and no formal systems are currently in place for allocation of water from the dam. He said that the current capacity of the dam is 3.3 ML and that the dam has limited outlet structure with a maximum discharge capacity of 450 l/sec. Consequently, if no abstraction takes place and the whole system is already wetted, a release of 300 000 cubic metres will take approximately three days to reach the estuary. If the system is dry it could take 10 days to reach estuary. This dam with its existing infrastructure does not have the capacity to scour the estuary.

He emphasised that water allocations for the environment will have to be managed carefully, as more water for the environment means less water available to agriculture. He also pointed out that the dams in the Breede River or Klein Brak are not used to open the estuary mouth.

He further mentioned that there are currently no water use licences in this catchment, only water rights from the previous government.

JR introduced the Breede-Gouritz Catchment Management Agency (BG CMA). In next three years the BG CMA will need to document how many water rights are legal/valid and identify point sources of pollution. He pointed out that the Draft Hartenbos EMP only addresses monitoring in the estuary, but he recommends that measurements need to be taken in the upper reaches of the river to

identify water quantity and quality problems. He agrees that the WWTW has an impact on water quality. Since 1987, the WWTW has been releasing 7-8 cubic metres on a daily basis into this estuary. Before the plant was built the estuary never received this much fresh water and in the same breath the WWTP daily throughput capacity has recently been expanded to 15 cubic metres. Although they may be discharging water that is compliant with the GA by the DWS, the nutrients are being buried in the sediments of the estuary and it has a big impact on the biological oxygen demand and as a result on the fish. He is of the opinion all municipalities dealing with WWTW should look at alternative uses for treating sewage. He mentioned how 95% compliance works and pointed out that this means that 5% of the time the WWTP is not compliant. While a WWTW may get blue or green drop certification, it does not mean that they are doing right by the environment.

He continued that Working for Waters is no longer run by the DWS, but is now the mandate of the DEA implemented through the expanded public works programme (EPWP). There are currently programmes active in the area, but any new programmes need to be applied for at the EPWP.

He also recommended that a bathymetry survey should be conducted in order to ascertain the capacity of the estuary, so that the municipality can be certain that an environmental release of a certain size is not going to flood property. He also emphasised that the flood lines are not really useful for this purpose, as a lot of people that have already built within the flood zone.

He went on to talk about the Hartenbos Water User Associations (WUA). The DWA/DWS discussed a policy to ban the water use associations and replace them with CMAs. However, it was then recognised that WUAs are very useful and that they need to be restructured rather than abolished. It was decided that the paperwork and documentation already in place should be kept. There will be a WUA upstream of the estuary that can help regulate water abstraction and uses.

KH clarified that the EMP cannot extend outside the boundaries of the estuary and that monitoring in the entire catchment is not really within the mandate of the EMP. He agreed that collaboration with other bodies to implement such monitoring is however, crucial.

JR suggested that a member of the WUA should be part of the EMF.

JR then introduced recently appointed members of the Breede-Gouritz CMA. He explained that their functions include water quality monitoring, water use monitoring and water allocations. The general public can inquire information from the CMA. He mentioned that the CMA members are currently attending all the EMF meetings in their area of jurisdiction. The CMA's role is to issue water use licenses for abstractions from a dam (and the catchment in general) and the DWS operates the dam according to these allocations. He emphasised that the municipality needs to acknowledge that environmental releases for the Hartenbos Estuary will cost money. Currently the Hartebeeskuil Dam is a liability to the DWS, as it costs money to manage it while water users are not paying. He went on to explain how data is recorded at the dam and that most of the data is publically available. He stressed once more that the water quality monitoring programme must be extended to the dam as it is important to know what the water quality is in the dam.

He agreed with previous comments and recommended that the plan should not be too complicated and that it should focus on the hard issues and to let the soft issues fall into place.

VM then recommended that everyone should look at the action plans in the Draft EMP in detail after the meeting and provide comment on the aspects that interests them.

Enrico Gennari (EG) was concerned that the budget allocated to the various action plans does not match the vision and management objectives. He said that although rehabilitation of the estuary appears to be the priority, the budget is not reflecting this. He is of the opinion that R12 000 will be too little to maintain the Hartenbos EMF which will be a very important institution to improve the health of the estuary.

Warren Manuel (WM) responded by saying that the content of report is currently more important than exact financial figures and emphasised that the Hartenbos EMP is a flexible document and that priorities and available finances will be revised at a later stage.

KH presented the draft zonation plan and mouth management protocol.

JR contributed that he is of the opinion that the properties on the north eastern side (e.g. Dibiki Holiday Resort) are under higher flood risk than the Riviera Hotel on the Western Bank as the former are situated on the flood plain. He re-visited the need for a bathymetry survey.

KH responded that it is likely that the cost of a bathymetry survey is too high and that it may be necessary to take a conservative approach when learning by doing.

JR maintained that he thinks it is too risky without knowing the capacity of the estuary as it is impossible to suddenly stop water levels from rising as water is still in the system. He was not convinced that the warning system as proposed in the draft mouth management protocol will work.

Des Marais (DM) agreed with JR, that there is no flood risk to the western bank under normal conditions as the lagoon drains naturally. Flooding is only a problem when floods occur often associated with in cut-off low conditions. He said that the mouth opened in the past 2-3 months and that under normal conditions the estuary drains before threatening property.

KH said that flood risk was previously emphasised as the main problem leading to the artificial opening of the estuary and was surprised at the outcome of this discussion. He suggested that planned artificial breaches would therefore be more important to water quality management, but that the emergency mouth management protocol would be more important to manage flood risk.

Jacque Snyman (JS) contributed to the discussion by saying that the river is in a poor state. He said that he thinks that the Municipality is making a mistake by opening the mouth on the eastern bank and that the estuary should be opened on the western bank instead, where he thinks that the estuary would open naturally. He said that rock under these dunes would help the mouth to stay open for longer. He recommended that the dunes in the west should be dug out as the river mouth used to open naturally there. He said that they were able to pump prawns all the way up to the bridge back then.

JR made the point that the mouth should be opened where it is scientifically best suited and not necessarily where it is practical and best suitable for machinery. He emphasised that if the mouth is opened in the wrong place the system changes and the mouth is likely to close more frequently.

EG added that the response of reef fish and reef habitat should be monitored after artificial breaching events.

KH responded that this is very important indeed, but that monitoring the marine environment is possibly outside the management scope of the EMP and collaboration with other research institutions would be necessary for such monitoring.

Kobus Nethling (KN) expressed concern that alien fish species could be introduced into the estuary through environmental releases from the dam.

KH clarified that any alien fish species would already have been introduced into the system through the outlet pipe from the dam.

KH presented the way forward and steps for formation of an EMF.

JR suggested that a different approach should perhaps be followed where the forum is first formed by nominating representatives of each stakeholder group and that a government official should not be automatically chosen as the chair. He emphasised that the Hartenbos EMF should be self-sufficient without the presence of government officials. He suggested to first hold a few meetings among the nominated representatives so that people can get to know each other and learn who is the most passionate. A chair and secretariat should be elected at a later stage.

KH agreed that this is an interesting suggestion, but that he would recommend that there should be an interim chair who can coordinate the beginning stages of the Hartenbos EMF.

VM suggested that Vernon Gibbs has indicated that he would be willing to chair this forum at least in the interim.

JS suggested that the decision to open the estuary mouth should be taken now. He urged that the water in the estuary is in a very bad state and that the mouth should be opened at the next spring tide, which should not harm the estuary. He was concerned that waiting for another meeting and yet another meeting would not help the estuary and that a solution for this problem is urgently needed.

KH responded that his understanding is that the municipality cannot breach an estuary mouth unless it is in terms of disaster risk (i.e. flooding) or an approved mouth management protocol is in place.

JS (Please confirm stakeholder here) asked whether it would be possible to measure the water quality and show that it is bad enough to open the mouth for improving water quality.

WM responded that the Mossel Bay Municipality cannot open the mouth without environmental authorisation. He described the process that needs to be followed to open the mouth artificially. He explained that in part, this EMP has the purpose to get this process started.

JR stressed that there is enough information to demonstrate that the estuary is in a deteriorating state and that this could be used to negotiate for an emergency breach with DEA. He added that the frequency and location of monitoring of water quality will be determined as part of the Hartenbos EMP. The monitoring plan should also include the monitoring at night time (when dissolved oxygen

levels are lowest). He emphasised that there is enough information in the SAR to start a preliminary monitoring programme.

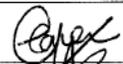
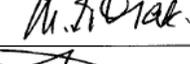
EG informed the attendees that plans to monitor water quality in all estuaries around Mossel Bay area are currently being made and include the use of permanent recorders.

MB informed the attendees that there is an ongoing water quality monitoring programme in the Hartenbos conducted by the Hartenbos Conservancy. He expressed concern that an independent body should continue to undertake the water quality monitoring rather than the government, as otherwise results always appear to be adequate.

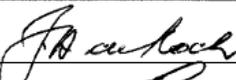
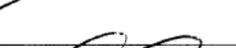
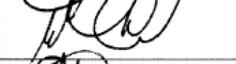
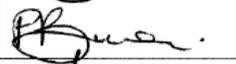
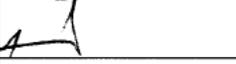
PvR recommended that Mr. Laurie Bowell, previously employed by the CSIR, should be consulted to improve the breaching protocol.

KH closed the meeting at 8:30 pm and encouraged attendees to submit comments in writing to Anchor Environmental Consultants.

7 APPENDIX – ATTENDANCE REGISTER

HARTENBOS EMP – Stakeholder registration 2 February 2016				
NAME	ORGANISATION	EMAIL ADDRESS	PHONE	SIGNATURE
Caren George	DEADP: Coastal Man.	caren.george@westerncape.gov.za	021 483 2724	
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MARTIN HORAK	H Bos Bewaring	Martin Rivier@ewet	0825103714	
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GIDEON VAN NAST	PRIVAAT		0836257819	
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M. Horak (Marius)	Land owner	mh7203@gmail.com	0791407528	

HARTENBOS EMP – Stakeholder registration 2 February 2016

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