


RVM 1 HYDROELECTRIC POWER (PTY) LTD

**RIEMVASMAAK HYDROPOWER PROJECT, ORANGE RIVER,
NORTHERN CAPE PROVINCE, SOUTH AFRICA**

**ENVIRONMENTAL IMPACT ASSESSMENT
VOLUME 6: ADDENDUM TO THE AMENDED ENVIRONMENTAL IMPACT
ASSESSMENT REPORT**

**DEA Reference Number: 14/12/16/3/3/2/600
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Final Report

JUNE 2016



EOH Coastal & Environmental Services

Report Title: Addendum to the Amended Environmental Impact Assessment Report

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Project Number: 279

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TOTAL	30

REPORTS PRODUCED AS PART OF THIS EIA:

Volume 1:	Environmental Scoping Report
Volume 2:	Specialist Reports
Volume 3:	Environmental Impact Assessment Report
Volume 3a:	Appendices to Environmental Impact Assessment Report
Volume 4:	Environmental Management Programme
Volume 5	Comment and Response Report
Volume 6	Addendum to Amended EIA Report

Notes:

- (i) The Environmental Scoping Report was produced by Aurecon and accepted by DEA in October 2013.
- (ii) Volume 2 was compiled by EOH Coastal & Environmental Services.
- (iii) Volumes 3, 4, 5 and 6 were prepared by EOH Coastal & Environmental Services.

FOREWORD TO THE ADDENDUM TO THE AMENDED FINAL EIA REPORT

On 9th December 2015¹ the Department of Environmental Affairs (DEA) wrote to EOH Coastal and Environmental Services (CES) and rejected the September 2015 Environmental Impact Assessment Report for the proposed 40MW Riemvasmaak Hydropower Project on the Orange River near the Augrabies Falls.

The rejection letter, which is reproduced in full in Appendix A of this report, required additional information to be provided to enable the department to make a properly informed decision on the application for environmental authorisation.

The information required by the department falls under five main headings, summarised as follows:

DEA paragraph	Summarised requirement
a) – Rejection Letter page 1	Comments from Birdlife South Africa
b) – Rejection Letter pages 1-2	Justification for the proposed flow rate of 30m ³ /sec
c) – Rejection Letter page 2	Impact of low flows on tourism
d) – Rejection Letter page 2	Employment opportunities
e) to h) - Rejection Letter pages 2-3	Approval of the EIA Report by SANParks

Much of the information required by DEA is already in the Final EIA Report. However, instead of making fragmented and piecemeal revisions to the text of the Final EIA Report, which would almost certainly cause confusion among I&APs rather than clarifying issues, it was considered prudent to prepare an Addendum to the Final EIA Report that focuses on the department's exact requirements.

Accordingly each of the department's requirements tabulated above is addressed in separate chapters 1 to 5 - of this Addendum Report.

However, the final sentence of Paragraph f) – *All matters raised in the acceptance letter dated 30th October 2013 of the final scoping report, must be adhered to in full and must be included in the amended EIAR* – does not relate to the subject of the remainder of the paragraph, and is addressed separately in chapter 6.

At the same time a number of amendments have been made to the text of the Final EIA Report, September 2015, which has been renamed the Amended Final EIA Report, March 2016. To save the reader examining the report to find these revisions they are described in the Foreword to the Amended Final EIA Report, which also includes a copy of the department's Rejection letter, and a summary of the contents of this Addendum report.

With regard to the requirement that the Amended Final EIA Report be submitted to SANParks "to obtain their approval, with or without conditions", it is important to note that, in a letter dated 2nd June 2016 to the applicant, SANParks stated that it "intends not to provide written approval for the development of the weir, canal and a portion of the power line as part of the proposed hydro-power station within the Augrabies Falls National Park ...". The full text of the letter is reproduced in section 5.4 of this report.

Notwithstanding SANParks' refusal to approve the development, the Amended Final EIA Report, this Addendum Report and the Economic Assessment will be submitted to DEA, since it is that department's mandate to assess an application for an environmental authorisation and make a decision to issue an environmental authorisation or to refuse to do so.

¹ The letter was dated 09 / 11 / 2015, but on enquiry by the EAP DEA acknowledged that this was an error, and confirmed that the date of signature was 9th December 2015.

Since the publication of the Draft Addendum report in March 2016 four new appendices have been added, as follows, all of which are self-explanatory:

- Appendix G: Comment and Response Report, June 16, which contains all comments and issues submitted on the Draft Amended Final Environmental Impact Assessment Report, the Draft Addendum to the Draft Amended Final Environmental Impact Assessment Report, and the Economic Analysis.
- Appendix H, which contains copies of the original comments received from IAPs, that were transcribed into the tabular format of Appendix G.
- Appendix I: The final update – 9th May 2015 – of the I&AP database for the project.
- Appendix J; Proofs of delivery of the above reports for comment.

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1 COMMENTS FROM BIRDLIFE SOUTH AFRICA

- a) Comments dated 05 June 2015 from the Department of Environment and Nature Conservation (DENC) indicates that, the proposed development site is located within an Important Bird Area (IBA) as identified by BirdLife South Africa and also falls within the Gariep Centre of Endemism. The Environmental Assessment Practitioner (EAP) managing the application failed to identify BirdLife South Africa as a crucial stakeholder who should comment on this application. Comments from BirdLife South Africa must be obtained and it must be included in the amended EIAR.

The Augrabies Falls National Park (AFNP) is identified as an Important Bird Area (IBA) on page vii of the Executive Summary of the Faunal Impact Assessment Report prepared for the project (Branch, 2015), and also on page 20 of the main text, which is followed in section 6.2 – Important Bird Areas, on page 28 - by a detailed description of the birds likely to be found in the AFNP. References to the AFNP as an IBA are found in the Final EIA Report on pages xvi, 37, 101 and 178.

It is not correct to say that the EAP failed to identify and register BirdLife SA (BLSA) as an interested and affected party (I&AP). The organisation was in fact identified and registered as an I&AP in May 2015, and this is recorded in Items 20 and 21, on pages 19 / 20, of EIA Volume 5: Comment and Response Report, as follows

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
BirdLife South Africa – Simon Gear & Daniel Marnewick			
20.	Dear Kobus, I am copying Simon Gear, our Policy and Advocacy Manager, who will register us as an I&AP as soon as possible. Thank you for bringing this matter to our attention. Kind regards, Daniel Marnewick Manager: Important Bird and Biodiversity Areas and Regional Conservation Programme BirdLife South Africa	Daniel Marnewick, Manager: Important Bird and Biodiversity Areas and Regional Conservation Programme, BirdLife South Africa, comment by e-mail, 29 April 2015.	The message was sent to Mr Kobus van Coppenhagen, who drew Mr Marnewick's attention to the project. Shawn Johnston
21.	Hi Shawn, Please register BirdLife South Africa as an I&AP on this project, using my details below. With thanks, Simon Gear Policy & Advocacy Manager	Simon Gear, Policy & Advocacy Manager, BirdLife South Africa, comment by e-mail, 14 May 2015.	Dear Simon, Thank you of your e-mail. I hereby acknowledge that BirdLife SA has been registered and an interested and affected party on the proposed HydroSA Riemvasmaak run-of-river hydro environmental impact assessment. Sincerely, Shawn Johnston

Despite being aware of the project, and having access to the EIA Report and supporting documents, no comments were received from the organisation by the end of the specified comment period.

However, in response to DEA's request we contacted members of BLSA staff by telephone: Mr Mark Anderson (Chief Executive Officer), Mr Simon Gear (Policy and Advocacy Manager) and Ms Samantha Ralston (Birds and Renewable Energy Manager). We were informed that comments were prepared on the Draft EIA Report, but the comments were not submitted to us because of internal misunderstandings about who was responsible for doing so.

Comments were eventually received from BLSA in a letter dated 22nd March 2016, a copy of which is included in Appendix F of this report, together with a response to the comment from the present EAP, EOH Coastal & Environmental Services.

BLSA included with the 22Mar16 letter their previous comments on the project that were submitted to Aurecon, the EAP for the scoping phase of the assessment, in a letter dated 4th October 2013. A copy of this letter is also included in Appendix F of this report.

It is important to note that these comments were submitted to Aurecon after the Final Scoping Report had been submitted to DEA on 16th September 2013, and as a result they were not included in the FSR, and no responses were prepared to the comments. Unfortunately BLSA's

comments were not passed on to the applicant by Aurecon, nor were they made available to EOH CES on appointment as the new EAP for the project.

Nevertheless, we have prepared detailed responses to BLSA's October 2013 comments, and these are included in Appendix F. We conclude that these comments were all satisfactorily addressed during the EIA phase of the assessment.

2 JUSTIFICATION FOR THE PROPOSED FLOW RATE OF 30m³/sec

- b) The final Environmental Impact Assessment report dated September 2015 indicates that a 30m³/s is seen as an **accepted** flow rate over the Augrabies falls. Please include documentation indicating how this value was arrived at and how it was scientifically proven also taken into consideration the ecological reserve. This must be included in the amended EIAR. This value of 30m³/s is also an important value for SANParks and therefore this department needs proof that this value of 30m³/s was discussed and agreed upon with SANParks as the management authority of Augrabies Falls National Park. This must be included in the amended EIAR.

The most important conclusion reached in responding to this requirement is that, despite detailed descriptions in the Final EIA Report, there is little or no appreciation or understanding among commentators on the implications of diverting water from the river into the hydropower station upstream of the Augrabies Falls. Many commentators spoke or wrote, often at great length and in considerable detail, of the project “drying up the falls”. The reality is that the management of the releases from the upstream impoundments, and the control over abstractions from the river between Vanderkloof Dam and Augrabies, which is the responsibility of the Department of Water and Sanitation, is the principal influence on the flow over the falls, and not the hydropower project.

2.1 Introduction

(This section is adapted from ORASECOM 2007b)

The Orange River Basin is a large and complex water system (Figure 1). The basin is one of the largest river basins south of the Zambezi, with a catchment area of approximately 900 000 square kilometres in four countries.

There are two major storage dams on the Main Orange System in South Africa; Gariep and Vanderkloof dams. They are South Africa’s two largest impounding dams. Water is released directly into the Orange River from the dams to supply all the downstream users along the Orange River from Gariep Dam to the Orange River mouth. These demands include all the irrigation, urban, mining, environmental requirements, evaporation from the open water surface of the river and dams, and operational losses. Large volumes of water are also transferred from the two dams and the mainstem river to neighbouring catchments, including the following:

- The transfer through the Orange-Fish Tunnel from Gariep Dam to the Eastern Cape to support large irrigation developments and some urban and industrial requirements.
- The transfer through the Orange-Riet canal from Vanderkloof Dam to the Riet-Modder catchment, mainly for irrigation purposes.
- The Orange-Vaal transfer from the diversion weir at Marksdrift in the Orange River downstream of Vanderkloof Dam to Douglas Weir in the Lower Vaal River mainly for irrigation.
- The small transfer from the Lower Orange along the common border between the RSA and Namibia to supply water for urban and mining purposes.

The river releases from the two major dams are used to simultaneously generate hydropower for Eskom from the power stations at each of the dam walls. At times when there is surplus water available in the two major dams the surplus is utilised to generate hydropower. When spillage occurs from the dams the maximum possible flow is routed through the turbines to generate electricity.

The system is managed by the Department of Water and Sanitation (DWS). A consortium of consulting companies led by WRP Consulting Engineers (Pty) Ltd carry out regular modelling of the entire Orange River basin for DWS as part of the development of the Orange River Integrated Water Resources Management Plan. The complexity of the water system is illustrated by the schematic diagram of the Lower Orange System (Figure 3.1 below), in which the Augrabies Falls are situated.

The purpose of this brief description of the Orange River Basin and its management in South Africa is to emphasise that any discussion of the river’s flow regime and its impacts must be founded on a clear understanding that the flow in the river is managed almost entirely by releases from the country’s two largest impounding dams, Gariep and Vanderkloof, and that no part of the riverine system can be regarded as natural or unmodified.

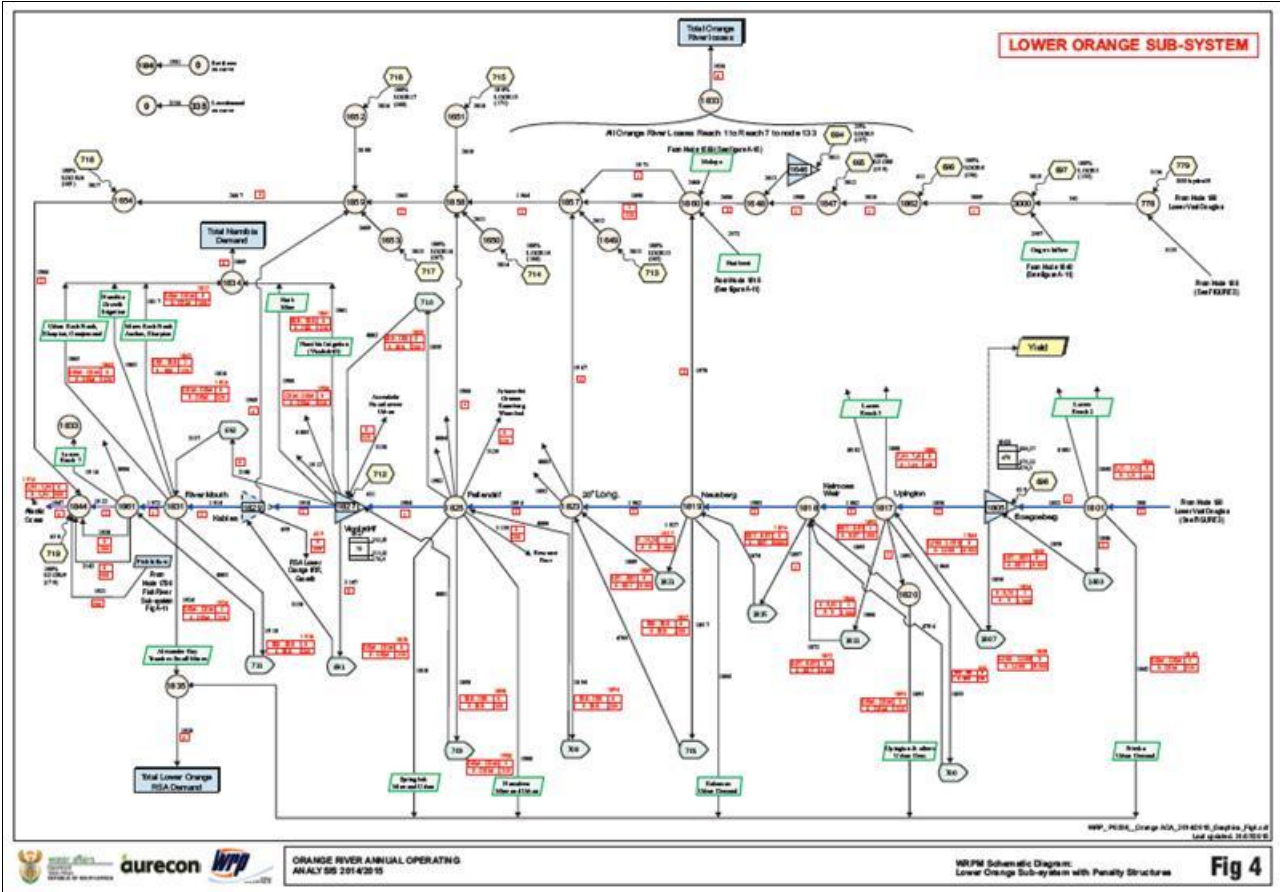


Figure 3.1: Schematic diagram of the Lower Orange System

Source: Pers comm WRP (Pty) Ltd, December 2015

2.2 Flow Rate of 30 cubic metres per second

The flow rate of 30 cubic metres per second (m^3/sec) is not stated in the project documentation as being “an accepted flow rate over the Augrabies falls”.

Neither is it stated that this flow rate represents the entirety of the ecological component of the Reserve (*sensu* section 1(xviii)(b) of the National Water Act, 1998 as amended).

$30m^3/sec$ is proposed in the Final EIA Report as the flow rate in the Orange River, as it approaches the Augrabies Falls, below which there will be no diversion of water from the river to the hydropower project. Diversion of water into the hydropower station will not commence until the flow rate in the river equals $30m^3/sec$.

Accordingly the hydropower project will have no impact on the flow over the falls at flow rates below $30m^3/sec$. This is described in some detail in section 3.3 of the Final EIA Report - Considerations for the Diversion Weir – as follows:

“3.3.1 Flow division

No water will be diverted from the Orange River into the HPP headrace while the flow rate in the river is less than or equal to $30m^3/sec$, which is the flow rate quoted by DWS as the environmental water requirements (EWR) applicable to the lower reaches of the river, where the Orange River becomes the

boundary between South Africa and Namibia. An analysis of previous EWR recommendations is set out in the next section. [Emphasis added – see later note.]

Diversion of water into the headrace will commence when the flow rate in the river exceeds 30m³/sec, and the rate of diversion will increase progressively until the flow rate approaching the weir reaches 90m³/sec, at which time the diverted flow rate will be at its maximum of 38m³/sec, with 52m³/sec flowing over the weir to the Augrabies Falls. This means that, at a total flow rate of 90m³/sec in the river, 42% of the flow in the river will be diverted into the project headrace to generate electricity, and 58% will continue over the weir to the Augrabies Falls. This is the largest proportion of the total river flow that will be diverted into the headrace. When the flow rate in the river exceeds 90m³/sec the radial gates at the upstream ends of the headrace culverts in the offtake structure will be used to regulate discharge into the headrace so that it never exceeds the design discharge of 38m³/sec. The proportion of total river flow diverted into the headrace decreases progressively as the flow rate in the river increases: when the river is flowing at 200m³/sec the proportion of total flow diverted into the headrace will be 19%, for instance, which will decrease to 9.5% when the river is flowing at 400m³/sec, and so on. In case of power failure at the offtake structure or machine shut-down in the power house the radial gates will be lowered completely to prevent flow entering the headrace.

The flow duration curves² in Figure 3.17 compare the flow rate over the falls before and after implementation of the proposed RVM HPP for an average hydrological year. The curves show that:

- *For ±20% of the time no flow will be diverted into the tailrace:

 - *For ±15% of the time (55 days) the river flows at or less than 30m³/sec, so no flow will be diverted into the headrace and the HPP will not operate.*
 - *For ±5% of the time (18 days) the river flows at more than 800m³/sec^{see Note}. At this flow rate it is anticipated that the sediment loads in the river will begin to increase to such an extent that sediment could be drawn into the headrace, and could result in damage to the turbines. No flow will be diverted into the headrace; power generation will be shut down to prevent damage to the turbines.**
- *For ±45% of the time (165 days, or 5.4 months) river flows are between 30m³/sec and 90m³/sec, diverted flow will progressively increase from zero to 38m³/sec, and the power station will operate at less than its installed generating capacity.*
- *For ±35% of the time (128 days, or 4.2 months river flows exceed 90m³/sec but are less than 800m³/sec, diverted flow will be at a maximum of 38m³/sec, and the power station will operate at its full design capacity”*

Note: Further studies on the sediment regime of the river may indicate that it is possible, with minor changes to the design of the offtake structure, to increase the proposed threshold at which the power station is shut down, currently conservatively set at a river flow rate of 800m³/sec, to 1 500m³/sec or even 2 000m³/sec. This would have the advantage of prolonging the generating range of the station by an additional 10 to 14 days in an average year, with minimal environmental or tourism impacts. At these elevated flow rates the impact on the flow over the falls of diverting 38m³/sec to the power station would be negligible (a reduction of 2.5% at 1 500m³/sec and 1.9% at 2 000m³/sec), and the visual impact would be undetectable.

The highlighted section of the first paragraph of the above excerpt is not entirely correct. This issue, and the reasons for the selection of the flow rate of 30m³/sec for the commencement of the diversion of water to the hydropower station, are discussed in the following section.

2.2.1 Selection of a flow rate of 30m³/sec to commence flow diversion

The flow rate of 30m³/sec was raised at a public meeting held in Kakamas on 29th January 2013, where the Draft Basic Assessment Report for the then-proposed two hydropower projects was discussed. At the meeting Mr AG Visser (AV) of the then Department of Water Affairs DWA (since renamed the Department of Water and Sanitation, DWS) was reported as making the following input:

“AV continued that he had not noted the Environmental Flow Requirements (EFR) in the Draft BAR

² A flow duration curve is a graphical plot that shows the percentage of time that the volumetric flow rate in a river or stream is likely to equal or exceed some specified value.

and that it was important that a minimum of at least 30 m³/sec would always flow to the Augrabies falls.”

The remarks are on page 2, paragraph 7, of the notes taken at the meeting, which are appended as Appendix B.

However, Mr Visser subsequently said (*pers comm*, December 2015) he had been misquoted in the meeting notes, inasmuch as it was not his intention to imply that a flow rate of 30m³/sec represented the Environmental Flow Requirements (EFR) – the ecological Reserve of the National Water Act, 1998 as amended - of the reach of river in the vicinity of Kakamas and the Augrabies Falls.

Mr Visser’s statement was intended to indicate that, under normal circumstances, releases from the two upstream impoundments – the Gariiep and Vanderkloof dams – should result in the flow rate at DWS’s Gauging Station (D7H014) at Neusberg Weir never falling below 30m³/sec. This flow rate takes account of estimates of all lawful abstractions from the river between Vanderkloof and Neusberg, and is meant to accommodate all users and uses downstream of Neusberg, including uses in Namibia, as well as satisfying the requirements of the ecological Reserve.

It is therefore not unreasonable to suppose that the minimum flow rate over the Augrabies Falls should be the flow rate at Neusberg, less lawful abstractions from the river between Neusberg and the falls, these being for irrigation and domestic / municipal uses in Kakamas and its environs, including abstractions for use in the Augrabies Falls National Park.

Accordingly, in order to avoid the risk of project-related diversions of water from the river upstream of the falls violating the Department of Water and Sanitation’s minimum flow protocol, the applicant set the flow rate below which the project would have no impact on the falls at 30m³/sec. It is important to note that this is a conservative approach because, as noted above, abstractions from the river between Neusberg and the falls will reduce the flow rate over the falls below the 30m³/sec target at Neusberg. These abstractions have not been taken into account in setting the flow rate for commencement of diversion at 30m³/sec.

2.2.2 Ensuring a minimum flow rate of 30m³/sec before diversion commences

A minimum flow requirement of 30m³/sec down the Augrabies Falls will never be prejudiced by diversion of water to the hydropower project, since the design of the diversion weir is such that it will not be physically possible to divert water to the hydropower station at river flow rates of less than 30m³/sec. As shown in the design of the proposed RVM weir the weir will have “slots” in the crest that govern how much water is allowed to pass the weir and how much is diverted into the hydroelectric project. This is described in section 3.2.1 - Diversion weir – of the Final EIA Report. The general arrangement of the weir (as viewed from upstream) is shown in Figure 3.2

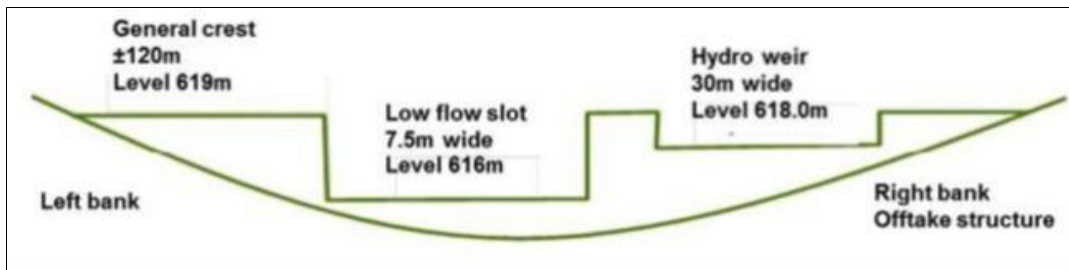


Figure 3.2: Design concept of the diversion weir as viewed from upstream.

The Figure indicates how the “low flow slot” will allow water to pass the weir before water can flow over the “hydro slot” and be diverted into the pipeline for the hydroelectric project. The level at which the “hydro slot” is set will be determined by the agreed minimum flow and will coincide with the level at which water will pass through the “low slot” at the agreed minimum flow rate (that is, 30 m³/sec).

Basic hydraulics states that the volume of flow is proportional to the area through which it passes. As the depth of water increases in both the “low flow slot” and the “hydro slot”, so too does the flow through those slots. The implication of this is that although flow is increasing through the “hydro slot”, so too will it be increasing through the “low flow slot”. At a total river flow of 30m³/s, the flow in the “low slot” is 30m³/s and there is zero flow through the “hydro slot”.

As described in section 3.3.1 - Flow division, of the Final EIA Report, diversion of water to the hydropower station is implemented progressively as the flow rate in the river increases, as follows:

Diversion of water into the headrace will commence when the flow rate in the river exceeds 30m³/s, and the rate of diversion will increase progressively until the flow rate approaching the weir reaches 90m³/s, at which time the diverted flow rate will be at its maximum of 38m³/s, with 52m³/s flowing over the weir to the Augrabies Falls. This means that, at a total flow rate of 90m³/sec in the river, 42% of the flow in the river will be diverted into the project headrace to generate electricity, and 58% will continue over the weir to the Augrabies Falls. This is the largest proportion of the total river flow that will be diverted into the headrace. When the flow rate in the river exceeds 90m³/s the radial gates at the upstream ends of the headrace culverts in the offtake structure will be used to regulate discharge into the headrace so that it never exceeds the design discharge of 38m³/s. The proportion of total river flow diverted into the headrace decreases progressively as the flow rate in the river increases: when the river is flowing at 200m³/s the proportion of total flow diverted into the headrace will be 19%, for instance, which will decrease to 9.5% when the river is flowing at 400m³/s, and so on. In case of power failure at the offtake structure or machine shut-down in the power house the radial gates will be lowered completely to prevent flow entering the headrace.

2.3 Hydrological context

It is important to note that the 20-year record of monthly volumes of flow at Neusberg Weir (October 1994 to September 2014³) shows that the average monthly flow rate was equal to or less than 30m³/sec for 32 months of the 240-month record (14% of the time).

Analysis of the same 20 years of daily average flows at Neusberg Weir (source as noted in footnote 2) shows that, for the “average” year over the 20-year period, the flow rate at Neusberg was equal to or less than 30m³/sec for 55 days (15% of the time).

It is very important to understand that, even though the Orange River is highly regulated by the two largest impounding dams in the country, the flow in the river is highly variable from year to year. The monthly volume of flow recorded at Neusberg from October 1994 to September 2014 shows a range in total annual discharge from 1 064.73 Mm³ (hydrological year 1994/1995⁴) to 21 352.0 Mm³ (hydrological year 2010/2011), with an average annual discharge of 5 646.5 Mm³.

Information received from Mr Visser of DWS shows the release patterns from Gariep Dam into Vanderkloof Dam, and from Vanderkloof Dam downstream to the Atlantic Ocean (see Appendix B), which shows the intention to release about 2 200 Mm³ in each of the two 12-month periods 2015/16 and 2016/17. It is therefore probable that the flow rate at Neusberg has fallen / will fall below 30m³/sec during this 24-month period.

2.4 Ecological Reserve / Environmental Flow Requirements

Three previous attempts to define an environmental flow regime for the Orange River were discussed in section 3.3.2 of the Final EIA Report. These were:

- ORASECOM 2007a: Review of Surface Hydrology in the Orange River Catchment, WRP Consulting Engineers et al, ORASECOM Report No 002/2007, November 2007
- ORASECOM 2007b: Summary of Water Requirements from the Orange River, WRP Consulting Engineers et al, ORASECOM Report No 006/2007, November 2007
- ORASECOM 2010: Environmental Flow requirements Volume 1, Updated August 2010, Louw

³ Hydrological gauging data acquired from <https://www.dwa.gov.za/Hydrology/hymain.aspx>

⁴ A hydrological year in South Africa runs from 1st October to 30th September

& Koekemoer (Eds), Support to Phase 2 of ORASECOM Basin-wide IWRM Plan

Discussions with Mr Manie Marais of WRP (Pty) Ltd (pers comm, December 2015) indicate that the next revision of the Orange River Basin model will incorporate at least some of the environmental flow requirements (EFR) recommendations from ORASECOM 2010. This report was produced as one of a suite of documents in the development of the Orange-Senqu Basin-Wide Integrated Water Resources Management Plan. The full text of the report is available at: <http://www.orasecom.org/publications>.

The scientific basis of the EFR recommendations in ORASECOM 2010 is set out in the report (page iv) as follows:

- EFRs were determined applying the Intermediate Ecological Reserve Methodology (IERM) (DWAF, 1999). The methodology consists of two different steps:
 - EcoClassification
The EcoClassification process was followed according to the methods of Kleynhans and Louw (2007)
 - EFR quantification for different ecological states
The Habitat Flow Stressor Response method (HFSR) (IWR S2S, 2004; O’Keeffe et al., 2002), a modification of the Building Block Methodology (BBM; King and Louw, 1998) was used to determine the low (base) flow EFRs. This method is one of the methods used to determine EFRs at the intermediate level.
The approach to set high flows is a combination of the Downstream Response to Imposed Flow Transformation (DRIFT; Brown and King, 2001) approach and BBM.

A complete set of References is provided on pages 191-193 of the report.

This section summarises the recommendations from the report for the reach of river in the vicinity of Kakamas and the Augrabies Falls, and draws some conclusions about the impacts on the recommended EFR of commencing diverting water into the hydropower station when the river is running at 30m³/sec. The findings from the EFR study site, designated EFR 03 (Augrabies), on which the recommendations are based, is dealt with in detail on pages 55 to 81 of the report in Chapter 7 (EcoClassification), Chapter 8 (Determination of Stress Indices), and Chapter 9 (Determination of EFR Scenarios).

The location of the study site EFR 03 (Augrabies) is described in Table 3.1, and the results of the eco-classification exercise are set out in Table 3.2, both extracted from the Executive Summary of the report.

Table 3.1: Locality and characteristics of EFR sites

EFR site number	EFR site name	River	Decimal degrees S	Decimal degrees E	EcoRegion (Level II)	Geozone	Altitude (m)	MRU	Quat	Gauge
EFR 03	Augrabies	Orange	-28.4287	19.9983	28.01	Lowland		MRU Orange E	D81B	D7H014

Source: Adapted from ORASECOM page iii

2.4.1 Summary of Ecoclassification Results

Table 3.2: Results of the ecoclassification process for site EFR 03 (Augrabies)

EFR 03 (AUGRABIES)																																																																											
<p>EIS: HIGH Highest scoring metrics are instream and riparian rare /endangered biota, unique instream and riparian biota, taxon richness of riparian biota, diversity of riparian habitat types, critical riparian habitat, refugia, migration corridor, National Park.</p> <p>PES: C Decreased frequency of large floods. Agricultural return flows, agricultural activities and associated water quality impacts. Higher low flows than natural in the dry season, drought and dry periods. Decreased low flows at other times. Presence of alien fish species and barrier effects of dams and alien vegetation. Decreased sedimentation.</p> <p>REC: B Reinstate droughts (i.e., lower flows than present during the drought season).Improved (higher) wet season base flows. Clear vegetation. Improved agricultural practices.</p> <p>AEC: D Increased agriculture with associated impacts on water quality and decreased wet season base flows. Decreased floods. Increased vegetation aliens.</p>	<table border="1"> <thead> <tr> <th>Driver Components</th> <th>PES</th> <th>TREND</th> <th>REC</th> <th>AEC↓</th> </tr> </thead> <tbody> <tr> <td>IHI HYDROLOGY</td> <td>E</td> <td></td> <td></td> <td></td> </tr> <tr> <td>WATER QUALITY</td> <td>C</td> <td></td> <td>C</td> <td>D</td> </tr> <tr> <td>GEOMORPHOLOGY</td> <td>C</td> <td>0</td> <td>C</td> <td>C-</td> </tr> <tr> <td>INSTREAM IHI</td> <td>D</td> <td></td> <td></td> <td></td> </tr> <tr> <td>RIPARIAN IHI</td> <td>C/D</td> <td></td> <td></td> <td></td> </tr> <tr> <th>Response Components</th> <th>PES</th> <th>TREND</th> <th>REC</th> <th>AEC↓</th> </tr> <tr> <td>FISH</td> <td>C</td> <td>0</td> <td>B</td> <td>D</td> </tr> <tr> <td>MACRO INVERTEBRATES</td> <td>C</td> <td>0</td> <td>B</td> <td>D</td> </tr> <tr> <td>INSTREAM</td> <td>C</td> <td>0</td> <td>B</td> <td>D</td> </tr> <tr> <td>RIPARIAN VEGETATION</td> <td>B/C</td> <td>-</td> <td>B</td> <td>C</td> </tr> <tr> <td>RIVERINE FAUNA</td> <td>C</td> <td>0</td> <td>B</td> <td>C</td> </tr> <tr> <td>ECOSTATUS</td> <td>C</td> <td>0</td> <td>B</td> <td>C*</td> </tr> <tr> <td>EIS</td> <td colspan="4" style="text-align: center;">HIGH</td> </tr> </tbody> </table>	Driver Components	PES	TREND	REC	AEC↓	IHI HYDROLOGY	E				WATER QUALITY	C		C	D	GEOMORPHOLOGY	C	0	C	C-	INSTREAM IHI	D				RIPARIAN IHI	C/D				Response Components	PES	TREND	REC	AEC↓	FISH	C	0	B	D	MACRO INVERTEBRATES	C	0	B	D	INSTREAM	C	0	B	D	RIPARIAN VEGETATION	B/C	-	B	C	RIVERINE FAUNA	C	0	B	C	ECOSTATUS	C	0	B	C*	EIS	HIGH							
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* The focus for setting EFRs will be on the instream EC of a D																																																																											

Source: ORASECOM page vi

Notes:

- (i) PES = Present Ecological State
The health or integrity of various biophysical attributes of the river at the time of the assessment compared to the natural (or close to natural) reference condition.
- (ii) REC = Recommended Ecological Category
A realistically attainable / desirable improvement in the ecological state.
- (iii) AEC↓ =Alternative Ecological Category
The probable outcome of, in this case, an increase in agricultural activity, with associated impacts on water quality, decreased base and flood flows, and increase in alien vegetation infestation.
- (iv) Descriptions of Ecological Categories are as follows:
 - A: Natural, unmodified.
 - B: Largely natural with few modifications.
 - C: Moderately modified.
 - D: Largely modified.
 - E: Seriously modified.
 - F: Critically / extremely modified

The EFR site, and therefore the river reach it was taken to represent, was therefore characterised as Category C – Moderately Modified.

The confidence in the results of the ecoclassification process for this EFR site (ORASECOM page ix) varied from the low end of Moderate (2 / 5 for the availability of hydrological information) to the middle of the High range (4.5 / 5 for date on vegetation). Overall, for the 18 factors considered in the assessment, confidence was at an average at the top of the Moderate range – 3.4 / 5.

2.4.2 EFR commendations

A summary of the final flow results is provided in the Executive Summary – the part of the table dealing with study site EFR 03 is reproduced below as Table 3.3 - as a percentage of the natural

mean annual runoff (nMAR), and the annual volumes of water in millions of cubic metres (Mm³) to meet these requirements.

Table 3.3: Summary of results as a percentage of the natural MAR

EFR site	EC	Maintenance low flows		Drought low flows		High flows		Long term mean	
		(%nMAR)	MCM	(%nMAR)	MCM	(%nMAR)	MCM	(% nMAR)	MCM
Virgin MARs									
EFR 03	PES: C	8.4	883.10	2.6	273.34	4.7	494.12	11.9	1251.06
	REC: B	17.6	1850.31	3.4	157.37	4.7	494.12	19.2	2018.52
	AEC↓: D	4.1	431.04	2.2	231.29	4.4	462.58	9	946.18

Source: Adapted from ORASECOM page ix

However, as is pointed out in the Final EIA Report (section 3.3.2 - Previous environmental water requirements recommendations), the natural MAR used in the EFR calculations is stated to be 10 513 Mm³/a. This is considerably more water than has been recorded flowing down the river past Nuesberg Weir in the past 22 years, even during years when very high floods have occurred. This change from a natural, unregulated river is reflected in the characterisation of the hydrology of the river as Category C – Seriously modified – in the ecoclassification of the EFR site.

The EFR data is presented and discussed in considerable detail on pages 69 to 77 of the report, and is summarised in Table 9.7 (pages 77 & 78), Table 9.8 (page 78) and Table 9.9 (pages 78 & 79) for the Present Ecological State (PES):C, the Recommended Ecological Category (REC): B, and the Alternative Ecological Category (AEC): D respectively.

The tables are presented, in modified format, for each scenario below as Table 3.4. Only the recommended Monthly Maintenance Flows are tabulated, as these can be “provided” to the river by releases from Vanderkloof Dam. The recommended High Flows, the peak flows of which range from 150 to 680m³/sec, with event durations of from 6 to 12 day, are as a result of spillage from the overfull dam.

Table 3.4: Details of EFR recommendation for site EFR 03 (Augrabies)

Month	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Present Ecological State (PES), Category C – Maintenance Flow (m³/sec)												
Flow rate	21.3	26.5	28.3	32.8	41.9	40.7	36.8	28.6	23.4	19.7	18.9	19.1
Annual Volume of Maintenance Flow:	886 Mm ³ (8.43% of nMAR)											
Volume of High Flows (Nov to Mar):	493 Mm ³ (4.69% of nMAR)											
Total Annual Volume of Flow:	1 379 Mm ³ (13.12% of nMAR)											
Recommended Ecological Category (REC) Category B – Maintenance Flow (m³/sec)												
Flow rate	30.6	51.0	60.6	80.1	112.7	114.2	95.3	81.8	37.7	23.8	20.3	19.4
Annual Volume of Maintenance Flow:	1 848 Mm ³ (17.6% of nMAR)											
Volume of High Flows (Nov to Mar):	493 Mm ³ (4.7% of nMAR)											
Total Annual Volume of Flow:	2 341 Mm ³ (22.3% of nMAR)											
Alternative Ecological Category (AEC↓) Category D – Maintenance Flow (m³/sec)												
Flow rate	9.5	12.6	13.90	16.7	22.0	21.7	19.1	14.1	10.7	8.5	8.0	8.0
Annual Volume of Maintenance Flow:	431.3 Mm ³ (4.1% of nMAR)											
Volume of High Flows (Nov to Mar):	459 Mm ³ (4.4% of nMAR)											
Total Annual Volume of Flow:	890.2 Mm ³ (8.5% of nMAR)											

Source: adapted from ORASECOM 2010, Tables 9.8, 9.9 and 9.10

2.4.3 Conclusion: comparison of 30m³/sec with recommended EFR flow rates

Conclusions from comparing the proposed flow rate at which diversion of water to the hydropower station with the above EFR scenarios are as follow:

- (i) For the Present Ecological State (PES - C) the recommended Monthly Maintenance Flow rates are less than 30m³/sec for the months May-December. The commencement of diversions to the hydropower station at 30m³/sec will not affect the EFR for these average monthly flows.
- (ii) For ±45% of the time (165 days, or 5.4 months) Natural River flows are between 30m³/s and 90m³/s, diverted flow will progressively increase from zero to 38m³/s, and the power station will operate at less than its installed generating capacity.
- (iii) For ±35% of the time (128 days, or 4.2 months) river flows exceed 90m³/s and the diverted flow to the hydro power scheme will be at its maximum of 38m³/s. For this period the hydro power scheme will be operating at full capacity.
- (iv) For the Recommended Ecological Category (REC – B) the recommended Monthly Maintenance Flow rates are more than 30m³/sec for all months except July, August and September, and the commencement of diversions to the hydropower station at 30m³/sec could be expected to impact on the EFR. However, the total volume of water required for this scenario (an EFR of Category B) is so high in relation to the volumes of water recorded at Neusberg during the past few years, that the possibility of achieving this desired state under present conditions of water availability and demand is so remote as to be reasonably discounted.
- (v) For the Alternative Ecological Category (AEC↓ - D) the recommended Monthly Maintenance Flow rates are less than 30m³/sec for all months of the year. The commencement of diversions to the hydropower station at 30m³/sec will not affect the EFR for this scenario.

2.5 Aquatic Ecological Specialist Report

The aquatic ecological specialist report (Enviross 2015) confirmed the earlier findings in ORASECOM 2010 (see above) that:

- The EcoStatus models all indicated that the river segment within the survey area has suffered various forms of degradation.
- The EcoStatus models ultimately place the system within a C category (Moderately modified).
- The Ecological Importance and Sensitivity of the system remains within a High category.

The significance of the anticipated impacts of the project on the river was either Low or Moderate negative, and all can be reduced to Low negative by implementing recommended mitigation measures.

The specialist concluded that:

“The diversion of water from the main channel of the watercourse will adhere to a strict minimum flow policy, meaning that flow to the main channel (and therefore over the Augrabies Falls) will never fall below an agreed 30 m³/sec due to the operations of the hydro power scheme. This is considered sufficient to maintain the section of the river that will otherwise be deprived of a portion of the flow volume.”

With regard to the impact of the reduced flows in the gorge downstream of the falls the specialist wrote:

“In order for the hydropower scheme to function, a portion of the water will be diverted from the main channel (that flows over the falls) through the canal to the turbines. This will deprive the aquatic habitat of

that portion of water for approximately 10 km.”

It is noted that the river flow rates below 30 m³/sec will see no diversion of water through the scheme, ensuring that the river flow never falls below this set volume as a result of project-related diversions during low flow periods. This is sufficient to ensure ecological functionality of the watercourse. Downstream of the falls sees the watercourse constrict to a narrow gorge, which requires relatively less water volume for maintenance as what the braided channel above the falls requires. Therefore this impact, from an ecological perspective, is not thought to be of major significance. The diverted water is returned to the main channel downstream and therefore the impact of the diversion is thought to be minimal to downstream users of the system. It is noted that a hydropower scheme is a non-consumptive use of the water resource. (Enviross 2015 Table 10, page 30)

2.6 Consultation with SANParks

Three members of SANParks staff – Messrs Tompies, Du Plessis and Van Rooyen were at the January 2013 Kakamas meeting, the notes from which are recorded in Appendix C, when the flow rate of 30m³/sec was discussed.

30m³/sec as the flow rate in the river at which diversion to the hydropower station would commence was described in the May 2015 Draft EIA Report, and in more detail in the September 2015 Final EIA Report.

If SANParks officials read the reports they cannot have been unaware of the proposal, or of the implications of the diversions on the flow over the falls.

The question of diversion of water from the river was addressed by SANParks and DEA in comments and meeting discussions as follows:

2.6.1 SANParks comments in Final EIA Report, Appendix D: Issues Trail - Issues submitted post Scoping Phase for inclusion in the Draft Environmental Impact Assessment Report.

Table 3.5: Notes of a meeting Department of Environmental Affairs, SANParks & Hydro SA Meeting/Site Visit 23 October 2014

Comment	Response
7. Gap in EIA was lack of flow data, short and long term/ and risk of low flows. Must be properly managed as if not can be a fatal flaw. Second largest water fall in Africa.	7. More detailed flow data and analyses are included. See for example Section 3.3 of the EIAR.
8. DEA need assurances from developer that they will not affect the falls. Water availability over the falls over a long term period needs to be investigated. Must consider long term trends especially extended dry periods and also climate change.	8. This has been addressed in the DEIR, the development will not avail itself of any water once the flow is reduced to 30m ³ /sec. This is the environmental flow required and the power plant will be not operated at this level.
9. HydroSA will be able to guarantee 30 cumecs over the falls, based on the weir design.	9. The design of the weir has been approved such that it will guarantee 30 cumecs of water over the falls.
10. Need to look at last 20 to 50 years when there was less than 30 cumecs over the falls. Need to interrogate data and include a more detailed analysis of hydrology and flows in the system.	10. The Hydrological Model looked at the past sixty years (although the banking model will only be based on the last 20 years – as this more accurately reflects the current flow regime – based on controls at Van Der Kloof and Gariep Dams) Over the last 20 years there have been 561 days (out of 7300 days) where the flows have been less than 30m ³ /sec (7.7%) whereas there has been 233 days over the last 10 years (3650 days - 6.4%)
11. HydroSA – the option of designing an additional sluice gate that is under the control of the park and after a protocol is followed they could shut down the plant (over-ride switch). Give them a physical mechanism to control flows and hence guarantee flow.	11. An emergency shutdown procedure is described in Section 3.3.2 of the EIAR.
22. The 30 cumecs figures need to be fully justified. How did HydroSA determine this as the minimum flow required for the falls? Elucidate in the EIA.	22. See section 3.3.1 of the EIAR.

Table 3.6: SANParks Submission (Frans van Rooyen)

Comment	Response
<p>3. Flow of the waterfall – This waterfall is a MAJOR attraction not only in the Northern Cape but also in South Africa. During the 2010/11 floods, people travelled from all over SA to come and see the falls. Once the project is completed then there will be no control over how much water is diverted, the cost of the project and the need to supply electricity will be more important.</p> <p>7. The draft scoping report is silent on the planned volume of water to be diverted during the low flow period; the minimum reserve flow is required to maintain ecosystem integrity whilst an additional amount of volume of water will be required to provide a heightened tourism experience at the falls;</p>	<p>3. The weir is designed with a broad crested profile at level 616.0m, and a 7.5m-wide low-flow slot left of the channel centreline, which will allow the agreed environmental flow of 30m³/sec to pass through the weir structure unimpeded to ensure that to ensure that at least 30m³/sec flows through the low-flow slot before water is diverted into the HPP headrace. See Figure 3.7 and Section 3.3 of the EIAR for further details.</p> <p>7. Please refer to Section 3.2 for details on this. The maximum rate of diversion from the river to the hydropower station will be 38m³/sec. A 7.5m-wide low-flow slot left of the channel centreline, with a broad crested profile at level 616.0m, will allow the agreed environmental flow of 30m³/sec to pass through the weir structure unimpeded</p>

There were no further enquiries about the flow rate of 30m³/sec from SANParks or DEA during consultation on the Draft EIA Report.

2.6.2 SANParks comments in Environmental Impact Assessment Volume 5: Comment and Response Report, September 2015

Table 3.7: Dr. Howard Hendricks and Dr. Hugo Bezuidenhout - South African National Parks Pretoria and Kimberley

Comment	Response
<p>We anticipate that the planned volume of water to be diverted would also have a negative impact outside low flow periods as SANParks requires the minimum reserve flow to maintain ecosystem integrity especially since the choice of the availability of electricity to consumers is likely to supersede the volume of water flowing towards the falls because the provision of electricity will be regarded as a priority; SANParks requires the justification of the figure mentioned of 30 kumec;</p>	<p>The extent to which the flow regime at the Augrabies Falls is set out in the response to Comment 8 above. We are of the opinion that the diversion of a maximum flow rate of 38 m³/sec to the HPP will not significantly affect the visitors' enjoyment of the spectacle of water flowing over the falls. The project will never cause the falls to run dry. Only improper management of the large dams upstream of the falls and abstractions for off-channel use can prejudice the falls to that extent. There is no proposal in the Draft EIA Report, which has been provided to Dr Hendricks for comment, to divert water during the night and during low flow periods.</p> <p>A new section – 3.3.2 Previous environmental water requirements recommendations – has been added to Chapter 3 of the EIA Report, in which the issue of environmental flow regimes in the river is explored.</p>

There were no further enquiries about the flow rate of 30m³/sec from SANParks during consultation on the Final EIA Report.

Although SANParks made relatively few comments or enquiries about the flow rate of 30m³/sec it was clear from their many other comments that they viewed the project in a very negative light. In particular they believe that the project's impact on the flow regime over the falls will be so severe as to dramatically reduce the volumes of tourism to the national park.

2.7 Visual impacts of flow diversion

As discussed previously, the diversion of water into the project will be effected progressively as the flow rate in the river increases. Since there will be no alteration of flow rate below 30m³/sec (and

therefore no reason to suppose that the project will cause the falls to “dry up”) it is improbable that the reduction in flow rate resulting from diversions to the hydropower station will significantly diminish the visual spectacle of the falls. As the pictures below show, the nature of the steeply-sloping channel (a deep and relatively narrow vee-shape) is such that it is difficult for the normal visitor to distinguish the difference in flows between 18 and 44m³/sec, and the flow profile of even a relatively high flow of 181m³/sec is not dramatically different to that at 44m³/sec.

It cannot be overemphasised that, when low flow conditions prevail in the river, the proposed hydro-electric scheme will not be operational, and “natural” flows over falls will take place. Accordingly the project will have no visual impact on the Augrabies Falls during low flow conditions.

The red circle indicates the position of an indentation in the rock that is visible on all photographs. It is highlighted to show the relatively small variation in water surface level over a wide range (approximately 100m³/sec) of flow rates.



Plate 3.1: Flow rate = 18.63m³/sec as measured at Blouputs gauging weir



Plate 3.2: Flow rate = 24.44m³/sec as measured at Blouputs gauging weir



Plate 3.3: Flow rate = 31.66m³/sec as measured at Neusberg gauging weir



Plate 3.4: Flow rate = 44.0m³/sec as measured at Blouputs gauging weir



Plate 3.5: Flow rate = 181m³/sec as measured at Blouputs gauging weir

3 IMPACT OF LOW FLOWS ON TOURISM

- c) The Socio-Economic Impact Assessment report as included in the Environmental Impact Assessment report dated September 2015 concluded that the proposed 40MW Hydropower project will not have a noticeable effect on the falls and tourism during floods. The study failed to indicate the effects of the proposed 40MW Hydropower project during low flow and drought periods (of which it is the case for a large part of the year) on the falls, as well as on the tourism. The Department requires the specialist study to be amended to include the effects of the proposed 40MW Hydropower project on the falls and the tourism during low flow and drought periods as well as the impact this information might have on the economic viability of the proposed development should the flow in the river be low for extended periods as a result of drought conditions. This must be included in the amended EIAR.

3.1 Data and Analysis

In order to determine if there is a correlation between the level of flow and the number of visitors to the Park, flow data and visitor numbers between March 2009 and August 2013 were analysed in the preparation of the Socio-Economic Impact Assessment (ACER (Africa) 2014). Findings from the data, illustrated in Figure 4.1 below, show the following:

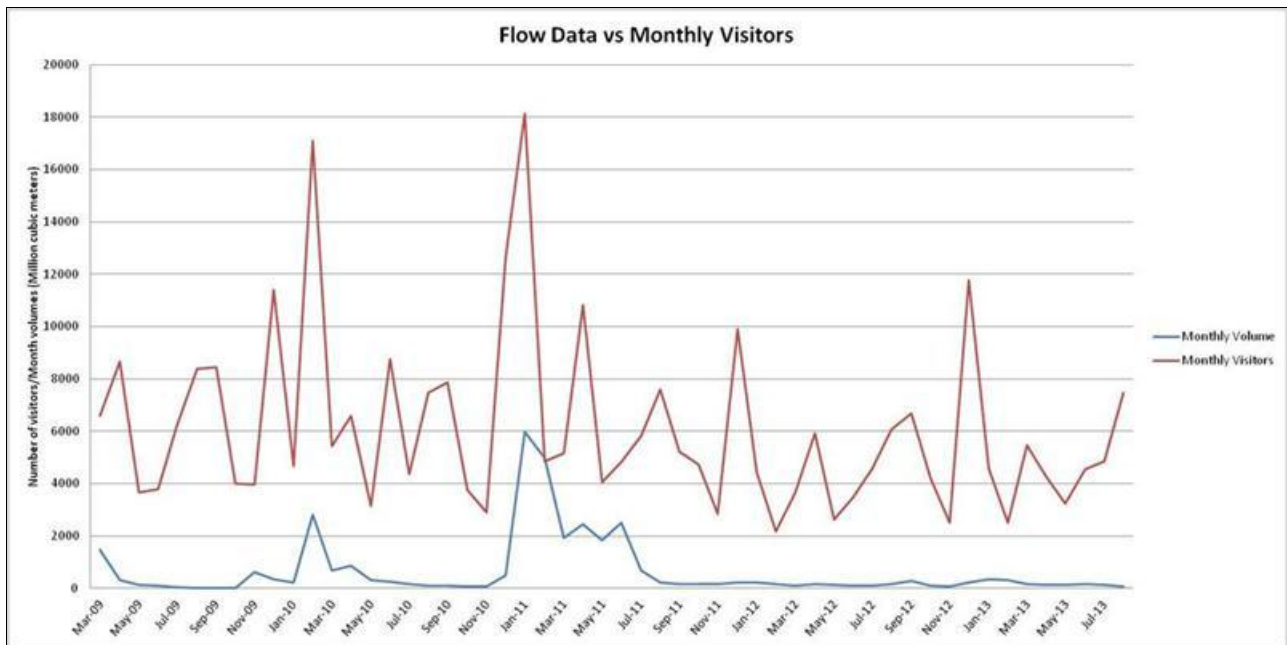


Figure 4.1: Monthly flow data and monthly visitors to AFNP between March 2009 and August 2013 (DWA and AFNP)

Source: Figure 4, page 44, ACER (Africa) 2014

- (i) During periods of very high flow (flood events) there was a noticeable spike in the number of visitors to the Park. The flow during times of floods will not be affected by the proposed hydro scheme, because once the flow in the river exceeds 90m³/sec (a monthly total of 233 million cubic metres if that flow rate is maintained), the hydropower scheme will reach its maximum possible diversion rate of 38m³/sec. For comparison:
 - o The monthly flow volume recorded at DWS’s gauging station at Neusberg in February 2010 (a flood event that saw a significant spike in tourist numbers) was 2 820 million cubic metres.
 - o The monthly flow volume during the period January to June 2011, the most-recent major flood in the river, ranged from 1 853 to 5 995 million cubic metres. The highest daily flow rate in January, when the flood was at its peak, was a little less than 4 000m³/sec (average flow rate during the month was 2 240m³/sec. An average total of 3 300 million cubic metres flowed in the river for a period of six months.
- (ii) Over the period analysed, there are consistent spikes in visitor numbers during the

August/September period, December/January period and to a lesser degree March/April period, regardless of the flow over the falls. This is most noticeable between September 2011 and August 2013 where the flow has remained consistently low but there are clear spikes in visitor numbers during these periods (refer to Figure 4.1). A spike in visitors during the August/September period can be attributed to an increased number of tourists passing through the area en route to view the flowers in Namaqualand, while the spike in visitors during December/January and March/April can be attributed to the Christmas and Easter holiday periods respectively.

3.2 Conclusions

The above analysis suggests that, while there is a significant increase in visitors to the Park during times of flood, visitors continue to visit the Park during times of low or normal flow, with consistently noticeable increases during specific periods of the year regardless of flow volumes.

We are of the opinion that further analysis of the data used to prepare Figure 4.1, focussing on low flow periods, will be a meaningless exercise, particularly in the context of this project, which will not have any effect on low flows in the river. It is essential to understand that, at flows less than 30m³/s (78 million cubic metres per month), the hydropower scheme will have no effect at all on flows over the falls. This is because the project will draw water from the river only once the flow exceeds 30m³/s. When the flow rate in the river reaches 90m³/s the hydropower station will be at full generating capacity, with no further need for diversion of water exceeding 38m³/sec or draw down of water.

It is therefore clear that, the effect of the hydropower scheme on visitor numbers to the falls during low flow periods will be zero.

It is, of course, possible that visitor numbers may be reduced if there is no flow over the falls, but this will be as a result of managing the river system, and not be a consequence of the project.

4 EMPLOYMENT OPPORTUNITIES

- d) The Environmental Impact Assessment report dated September 2015 indicates that the project is anticipated to provide between 150 to 200 temporary job opportunities during the construction phase, whilst between five and ten permanent job opportunities will be created during the project's operational phase. This Department requests proof of the agreement with the local community/ies and other relevant departments with regard to employment opportunities and this proof must be included in the amended final EIA report.

4.1 DoE's REIPPP programme

As this project is to be bid in the Department of Energy's (Renewable Energy Independent Power Producer Procurement (REIPPP) programme, Round 5 window, scheduled for the last quarter of 2016, detailed engagement with the local communities would be premature. Such negotiations could only commence once Preferred Bidder status has been obtained, which in all likelihood will only be in the first quarter of 2017 if the bid is successful.

It is therefore not possible to provide the agreements requested by the Department at this time. Engaging with the Local communities to establish agreements with them with regard to employment opportunities will not only pose a reputational risk for RVM1 Hydroelectric Power (Pty) Ltd, as it will not be able to honour such agreements if it did not obtain Preferred Bidder status, but will also create expectations of employment creation within the local communities that cannot be guaranteed until Preferred Bidder status has been achieved

4.2 REIPPP Economic Development Requirements

In an attempt to provide the Department with certainty in this regard, we have extracted a section from the Introduction of Volume 5 of the Bid Documents which deals with Economic Development Requirements, as below;

“1.1 The Department has developed an REIPP Procurement Programme Economic Development Policy dated 15 March 2011 (“Economic Development Policy”). The Economic Development objectives that the Department intends to pursue are those set out in the Economic Development Policy.

1.2 The Department recognises that the REIPP Procurement Programme is inherently excellent for achieving positive socio-economic outcomes. The Department has compiled a list of Economic Development outputs for the REIPP Procurement Programme, in its Economic Development Policy. The Economic Development Elements and targets are designed to meet the objectives identified in the Economic Development Policy.

1.3 Some of the outputs for the REIPP Procurement Programme, as stated in the Economic Development Policy, are as follows:

1.3.1 job creation; a heavy emphasis has been placed on this element as South Africa is facing an unemployment crisis;

1.3.2 local content through, inter alia, increased local manufacturing;

1.3.3 fostering rural development and involving communities;

1.3.4 education and the development of skills;

1.3.5 enterprise development, through the promotion of and packages for new entrants;

1.3.6 socio-economic development; and

1.3.7 participation by historically disadvantaged Citizens and marginalized regions, in the mainstream of the industrial economy.”

In this regard it is to be noted that, should a Bidder not meet the Department of Energy's threshold(s) in this regard, his bid would be regarded as non-compliant and therefore not be successful. It is also to be noted that the Project Company is compelled to furnish the Department of Energy and NERSA with a quarterly audit of its performances in this regard. Should the Project Company not achieve its targets, Termination Points are awarded, which ultimately could lead to the cancellation of the various agreements between the Project Company and the Department of Energy and/or NERSA. It is therefore in RVM1 Hydroelectric Power (Pty) Ltd's interest to ensure that these thresholds are met and maintained.

4.3 Experience-based Estimates of Employment Opportunities

To illustrate the applicant's commitment, with regard to the statements made regarding employment, an assessment has been carried out of Kakamas Hydro-Electric Project (RF) (Pty) Ltd's quarterly Construction and Operating Measurement Period Economic Development (ED) Reports, which have previously been submitted to the Department of Energy, in order to forecast the number of jobs that would potentially be provided by the RVM 1 Hydroelectric Power Project. The Kakamas Hydro Electric Project (RF) (Pty) Ltd's project was successfully developed by the same developer and reached Commercial Operation in February 2015. As the RVM 1 Hydroelectric Power Project would be more than threefold the installed generating capacity, and more than twice the capital expenditure value of Kakamas Hydro-Electric Project (RF) (Pty) Ltd, it is forecast that the RVM 1 Hydroelectric Power Project would be able to provide for (at a minimum) twice the total number of jobs for citizens from the local community than the Kakamas scheme has managed to provide thus far. In this regard a summary of the performance of this project during construction in 2014 is presented in Table 5.1.

Table 5.1: Kakamas Hydro-Electric Project – Economic development summary, construction period

Economic Development Summary Construction Period January 2014 - December 2014						
		Quarter 1 JAN. - MARCH	Quarter 2 APR. - JUNE	Quarter 3 JULY - SEPT.	Quarter 4 OCT. - DEC.	TOTALS
100 Job Creation						TOTAL PERSON MONTHS
Total Jobs Created						
100-SR	RSA Based Employees			1263,8	617,7	1 881,50
100-RS-01	RSA- Based Employees who are Citizens	610,4	735,3	1169,6	565,5	3 080,80
100-RS-02	RSA- Based Employees who are Black Citizens	532,6	644,7	1036,8	378	2 592,10
100-SR	RSA Based Employees who are Skilled	311	319,7	685,9	365,7	1 682,30
100-RS-03	RSA-Based Employees who are Skilled Black Citizens			498,8	343,9	842,70
100-RS-04	Jobs Created for Local Communities	230,6	344,3	592	203,3	1 370,20
	Employees who are people with Disabilities			0	0	
	Employees who are Women			19,6	14	33,60
	Employees who are Youth			624	315,9	939,90

From the above it can be seen that the project provided 1 370.20 person months in the Local Jobs category and 2 592.10 person months in the Black Citizens category. This would calculate to;

- $1370.20 \div 12 = 114$ Local Jobs per day for 2014 year, and
- $2592.10 \div 12 = 216$ Jobs for Black Citizens per day for 2014 year

If RVM1 Hydroelectric Power (Pty) Ltd is awarded Preferred Bidder Status in the upcoming Bid Window, the following ED benefits would be realised:

- Ownership by Black People in the Project Company, EPC Contractor, and O&M Contractor;
- Black Top Management in the Project Company (Black People who are men in Top Management and Black Women in Top Management);
- Preferential Procurement (Procurement from BBBEE companies, QSEs/EMEs and Women-Owned Vendors);

- Enterprise Development; and
- Socio-Economic Development.
- The total value of spend anticipated in the local Community, over the 20 year Power Purchase Agreement is estimated at in excess of R 1.3 billion⁵.

4.4 Support for the project from the local community

Copies of letters from Die Riemvasmaak Gemeenskap Ontwikkelingstrust (RGO) and three farmers’ associations – Schroder, Blouputs and Rooipad - are included to indicate their understanding that the project is a driver of local economic growth and development. The areas that fall under the jurisdiction of the RGO and the famer’s associations are shown on Figure 5.1.

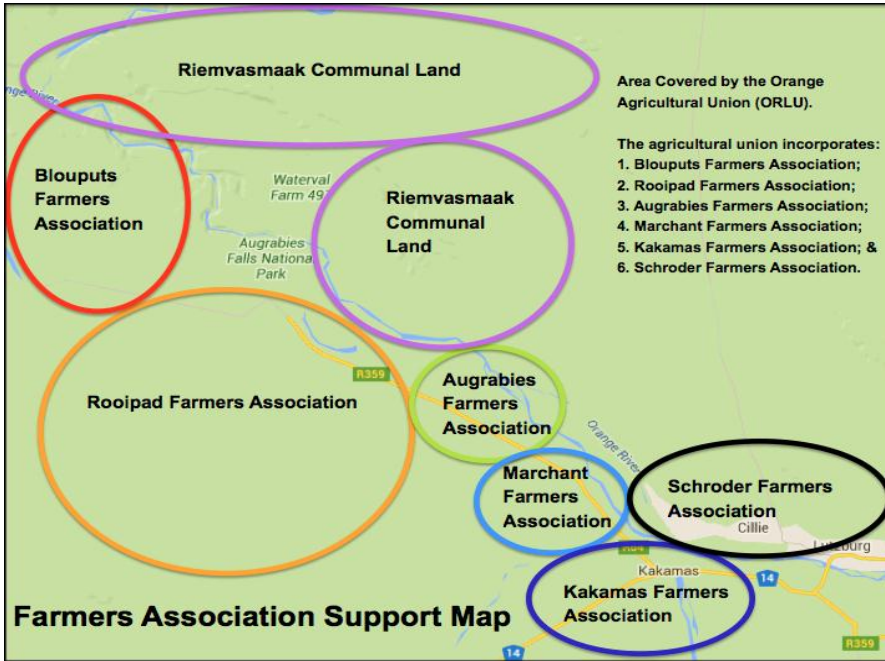


Figure 5.1: Jurisdiction of the RGO and areas of operation of local farmers’ associations

Farmers Association	Number of Commercial and Small Farmers	Remarks
Blouputs Farmers Association	20 farmers	All farmers’ associations have been consulted from the start of the project in 2012, and have received all letters and notifications, the BID, draft and final Scoping and EIA reports and the EMPr.
Rooipad Farmers Association	15 farmers	
Augrabies Farmers Association	25 farmers	
Marchant Farmers Association	40 farmers	
Kakamas Farmers Association	120 farmers	
Schroder Farmers Association	80 farmers	
Kakamas Water User Association (Neusberg to Blouputs)	500 farmers	
Orange Agricultural Union	300 farmers	

⁵ Financial benefits to:

- The RVM Trust – Rental income (R 262mn) and dividend flow (R472mn), and a residual value at the end of the PPA would remain.
- The Broad Based Community trust through dividend flow (R260 mil) as well as the residual value at the end of the PPA.
- The broader community (50km radius) through socio-economic development (SED) spend by the project company (R461 mil).

4.4.1 Riemvasmaak Gemeenskap Ontwikkelingstrust

Sel : 084 520 0531 (Chairperson)
Fax2mail : 086 566 0029
Sel : 083 485 0984 (Secretary)



P.O. Box/Posbus 1561
Upington
8801

14.3.2016

The Directors
Hydro SA (Pty) Ltd
P O Box 428
Tableview
7439

ATTENTION: Mr. Shawn Johnston

Dear Sir

LETTER OF SUPPORT TO HYDROSA (Pty) Ltd

1. We refer you to the above matter as well as our meetings of 18 February 2016 and 8 March 2016 respectively.
2. The abovementioned meetings took place between the Riemvasmaak Gemeenskap Ontwikkelingstrust ("the Trust") and included selected representatives from a range of sectors within the Riemvasmaak Community.
3. The Trust, in its capacity as managers of the Riemvasmaak land and the Melkbosrand Area, hereby formally indicates its support for the intended project. The Trust regards this as a unique opportunity to uplift the extremely poor and marginalized community of Riemvasmaak as well as the whole of the Northern Cape. The Trust is optimistic that this project will make a difference to the lives of many people, both economically and socially. The Trust holds the firm view that this project will also show cast Riemvasmaak as a pioneer in the development and provision of hydro electricity in the country.
3. It is against this background that the Trust implores with you to do whatever it takes to make this project a reality. Our people are in much need of sustainable jobs to end their poverty and misery.
4. I trust you find this in order.

TRUSTEES: A.C. DAMARAH, I.J. VAN NEEL, L. THEUNISSEN, W.F. HIFIKUA, H. MAPANKA, R.E. MATTHEWS,
B BEZUIDENHOUT

1

Sel : 084 520 0531 (Chairperson)
Fax2mail : 086 566 0029
Sel : 083 485 0984 (Secretary)



P.O.Box/Posbus 1561
Uppington
8801

5. Kindly do not hesitate to contact me should you require further clarity or information on any of the matters raised in this letter.

Yours faithfully,

A.C Damarah
Chairperson
Riemvasmaak Trust

TRUSTEES: A.C. DAMARAH, I.J. VAN NEEL, L. THEUNISSEN, W.F. HIFIKUA, H. MAPANKA, R.E. MATTHEWS,
B BEZUIDENHOUT

4.4.2 Schroder Boerevereniging



**SUSTAINABLE
FUTURES ZA**

OMGEWINGSIMPAAKEVALUERINGSPROSES (OIE) VIR DIE VOORGESTELDE
RIEMVASMAAK HIDROELEKTRIESE KRAG PROJIEK

OPENBARE DEELNAME PROSES & BELANGHEBBENDE PARTY REGISTRASIE EN KOMMENTAAR VORM

Voltooi en stuur hierdie vorm aan: Shawn Johnston by Sustainable FuturesZA

Telefoon: 083 325 9965

Faks: 086 510 2537

E-pos: swjohnston@mwweb.co.za

Posadres: Posbus 749, Rondebosch, 7701, Kaapstad

Verskaf asb u korrekte kontakbesonderhede, as 'n belanghebbende party, aan ons:

Naam:

Johan

Van:

Janse van Rensburg

Organisasie & Portefeulje:

Schroder Boerevereniging

Posadres:

Telefoon:

078 645 3660

Selfoon:

Faks:

E-pos:

hanjvr@gmail.com

Is u 'n belanghebbende en geaffekteerde party?

Merk asb die toepaslike antwoord

JA	<input checked="" type="checkbox"/>
NEE	<input type="checkbox"/>

Stel u belang om te registreer as 'n belanghebbende en geaffekteerde party om alle OIE inligting te ontvang?

Merk asb die toepaslike antwoord

JA per e-pos	<input checked="" type="checkbox"/>
JA per pos	<input type="checkbox"/>
NEE	<input type="checkbox"/>

As u 'n boer / plaaseienaar langs die voorgestelde pyplyn deurgang is, verskaf asseblief aan ons u:

Huidige plaasnaam:

Historiese plaasnaam:

Erfnommer/plaasnommer:

Naam van naaste boere- of huiseienaarsvereniging:

Naam van voorsitter:

Kontak besonderhede van boere- of huiseienaarsvereniging:

Schroder BV
Johan Janse van Rensburg
078 645 3660

Verklaar asseblief u belang in hierdie projek en lys u vrae (voel vry om addisionele bladsye by hierdie vorm by te voeg)

Schroder BV ondersteun die projek

Taalkeuse:

Engels

Afrikaans



**SUSTAINABLE
FUTURES ZA**

**OMGEWINGSIMPAAKVALUERINGSPROSES (OIE) VIR DIE VOORGESTELDE
RIEMVASMAAK HIDROELEKTRIESE KRAG PROJEK**

OPENBARE DEELNAME PROSES & BELANGHEBBENDE PARTY REGISTRASIE EN KOMMENTAAR VORM

Voltooi en stuur hierdie vorm aan: Shawn Johnston by Sustainable FuturesZA

Telefoon: 083 325 9965

Faks: 085 510 2537

E-pos: swjohnston@mwweb.co.za

Posadres: Posbus 749, Rondebosch, 7701, Kaapstad

Verskaf asb u korrekte kontakbesonderhede, as 'n belanghebbende party, aan ons:

Naam:

CHRISTOPHER

Van:

IKRIEL

Organisasie & Portefeulje:

SCHRODER BOERE VERENIGING

Posadres:

POSBUS 718 KAKAMAS 7780

Telefoon:

Selfoon:

084 245 3677

Faks:

E-pos:

cbkriel@gmail.com

Is u 'n belanghebbende en geaffekteerde party?

Merk asb die toepaslike antwoord

JA	<input checked="" type="checkbox"/>
NEE	<input type="checkbox"/>

Stel u belang om te registreer as 'n belanghebbende en geaffekteerde party om alle OIE inligting te ontvang?

Merk asb die toepaslike antwoord

JA per e-pos	<input type="checkbox"/>
JA per pos	<input type="checkbox"/>
NEE	<input type="checkbox"/>

As u 'n boer / plaaseienaar langs die voorgestelde pyplyn deurgang is, verskaf asseblief aan ons u:

Huidige plaasnaam:

Historiese plaasnaam:

Erftommer/plaasnommer:

ERF/62.

Naam van naaste boere- of huiseienaarsvereniging:

Naam van voorsitter:

Kontak besonderhede van boere- of huiseienaarsvereniging:

SCHRODER BV.
JOHANN J-O. KENSBURG
Cell: 078 645 3660

Verklaar asseblief u belang in hierdie projek en lys u vrae (voel vry om addisionele bladsye by hierdie vorm by te voeg)

SCHRODER BV ondersteun hierdie projek.

Taalkeuse:

Engels

Afrikaans

<input type="checkbox"/>
<input checked="" type="checkbox"/>

4.4.3 Blouputs Boerevereniging



SUSTAINABLE FUTURES ZA

OMGEWINGSIMPAAKEVALUERINGSPROSES (OIE) VIR DIE VOORGESTELDE RIEMVASMAAK HIDROELEKTRIESE KRAG PROJEK

OPENBARE DEELNAME PROSES & BELANGHEBBENDE PARTY REGISTRASIE EN KOMMENTAAR VORM

Voltooi en stuur hierdie vorm aan: Shawn Johnston by Sustainable FuturesZA

Telefoon: 083 325 9965

Faks: 086 510 2537

E-pos: swjohnston@mweb.co.za

Posadres: Posbus 749, Rondebosch, 7702, Kaapstad

Verskaf asb u korrekte kontakbesonderhede, as 'n belanghebbende party, aan ons:

Naam:	ALTUS
Van:	GAGIANO
Organisasie & Portefeulje:	BLOUPUTS BOEREVERENIGING
Posadres:	POSBUS 316 KAKAMAS 8870
Telefoon:	076 910 8031
Selfoon:	
Faks:	054 454 8801
E-pos:	altusg@karsten.co.za

Is u 'n belanghebbende en geaffekteerde party?

Merk asb die toepaslike antwoord

JA	<input checked="" type="checkbox"/>
NEE	<input type="checkbox"/>

Stel u belang om te registreer as 'n belanghebbende en geaffekteerde party om alle OIE inligting te ontvang?

Merk asb die toepaslike antwoord

JA per e-pos	<input checked="" type="checkbox"/>
JA per pos	<input type="checkbox"/>
NEE	<input type="checkbox"/>

As u 'n boer / plaaseienaar langs die voorgestelde pyllyn deurgang is, verskaf asseblief aan ons u:

Huidige plaasnaam:	
Historiese plaasnaam:	
Erfnommer/plaasnommer:	
Naam van naaste boere- of huiseienaarsvereniging:	
Naam van voorsitter:	
Kontak besonderhede van boere- of huiseienaarsvereniging:	

Verklaar asseblief u belang in hierdie projek en lys u vrae (voel vry om addisionele bladsye by hierdie vorm by te voeg)

DIE BLOUPUTS BOEREVERENIGING ONDERSTEUN DIE RIEMVASMAAK HYDRO ELEKTRIESE PROJEK.

Taalkouse:

Engels	<input type="checkbox"/>
Afrikaans	<input checked="" type="checkbox"/>

A. J. van der Merwe 15/02/16

4.4.4 Rooipad Boerevereniging



OMGEWINGSIMPAKEVALUERINGSPROSES (OIE) VIR DIE VOORGESTELDE RIEMVASMAAK HIDROELEKTRIESE KRAG PROJEEK

SUSTAINABLE FUTURES ZA

OPENBARE DEELNAME PROSES & BELANGHEBBENDE PARTY REGISTRASIE EN KOMMENTAAR VORM

Voltooi en stuur hierdie vorm aan: Shawn Johnston by Sustainable Future sZA

Telefoon: 083 325 9965

Faks: 086 510 2537

E-pos: swjohnston@mweb.co.za

Posadres: Posbus 749, Rondebosch, 7701, Kaapstad

Verskaf asb u korrekte kontakbesonderhede, as 'n belanghebbende party, aan ons:

Naam:	DJ
Van:	STRAUSS
Organisasie & Portefeulje:	ROOIPAD BOEREVERENIGING
Posadres:	POSBUS 234 AUGRABIES 8874
Telefoon:	
Selfoon:	0827277955
Faks:	
E-pos:	dj@rooipad.co.za

Is u 'n belanghebbende en geaffekteerde party?
Merk asb die toepaslike antwoord

JA	<input checked="" type="checkbox"/>
NEE	<input type="checkbox"/>

Stel u belang om te registreer as 'n belanghebbende en geaffekteerde party om alle OIE inligting te ontvang?
Merk asb die toepaslike antwoord

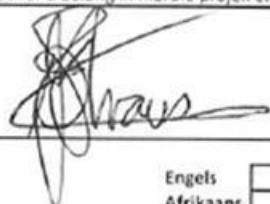
JA per e-pos	<input checked="" type="checkbox"/>
JA per pos	<input type="checkbox"/>
NEE	<input type="checkbox"/>

As u 'n boer / plaaselenaar langs die voorgestelde pyplyn deurgang is, verskaf asseblief aan ons u:

Huidige plaasnaam: _____
 Historiese plaasnaam: _____
 Erfnommer/plaasnommer: _____

Naam van naaste boere- of huiseienaarsvereniging: _____
 Naam van voorsitter: _____
 Kontak besonderhede van boere- of huiseienaarsvereniging: _____

Verklaar asseblief u belang in hierdie projek en lys u vrae (voel vry om addisionele bladsye by hierdie vorm by te voeg)

 Hiermee gee Rooipad Boerevereniging hulle ondersteuning aan Riemvasmaak Hydro projek soos bespreek op 9 Maart 2016.

Taalkeuse:

Engels	<input type="checkbox"/>
Afrikaans	<input checked="" type="checkbox"/>

5 APPROVAL OF EIA REPORT BY SANPARKS

- e) Kindly note that the acceptance letter dated 30 October 2013 of the final scoping report clearly indicated that SANPark's approval in terms of section 50 (5) of the National Environment Management: Protected Areas Act, 2003, is required and must be obtained prior to the submission of the final EIAR.
- f) During the process of compiling the Environmental Impact Assessment Report, the Department responded to an email query on 19 May 2015, and advised that the final EIAR may be submitted prior to obtaining approval from the management authority i.e. SANParks. After receiving several comments in this regard from internal and external stakeholders, the Department has decided that the specific email communication was incorrect and that the acceptance letter takes preference. All matters raised in the acceptance letter dated 30 October 2013 of the final scoping report, must be adhered to in full and must be included in the amended EIAR.
- g) Furthermore, the National Environment Management Act, 1998 (Act No. 107 of 1998) (NEMA) and the EIA Regulations must be read in conjunction with the National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003), which reads as follows:

Section 50: *"Commercial and community activities in a national park, nature reserve and world heritage site"*.

Section 50 (5): *"No development, construction or farming may be permitted in a national park, nature reserve or world heritage site without the prior written approval of the management authority"*.

Comments on the above were obtained from the Branch: Biodiversity and Conservation Management and the Protected Areas Planning, Legislation, Compliance and Monitoring Unit in the Department. Comments dealt specifically with section 86 of the Protected Areas Regulations as stipulated in point (h) below.

- h) The Protected Areas Act, 2003 (Act No. 57 of 2003), Section 86 (Regulations by Minister), stipulates the following under Part 4, Regulation 19 (1) (a) and (b), and (2):

"(1) No development contemplated in section 50(5) of the Act shall be implemented -

(a) In any area other than an area specifically designated for such development in a management plan; and

(b) Before a management authority has indicated in writing the nature and extent of the strategic or environmental impact assessment required for the development.

*(2) No commercial activity or activity contemplated in **section 50** of the Act, which requires an environmental impact assessment to be undertaken, either in terms of subregulation (1)(b) or under any other law, may be implemented before a management authority has approved, with or without conditions, the environmental impact assessment before it is submitted to the relevant authority for approval"*.

In order to adhere to this Regulation, the Department requires that you submit your amended EIAR to the Management Authority for Augrabies Falls National Park, (SANParks, Groenkloof, Pretoria), to obtain their approval, with or without conditions. The amended EIAR to be submitted to this Department must include SANParks approval, signed by the CEO of SANParks, as they are the management Authority for the area in question. The amended EIAR must be circulate for notification to the I&APs for a period of 21 days. The Department will re-evaluate the final EIAR to make a decision on this application once all the above has been concluded.

5.1 Introduction

Note that the final sentence of DEA paragraph f) – All matters raised in the acceptance letter dated 13 October 2013 of the final coping report, must be adhered to in full and must be included in the amended EAIR – is not directly related to the question of SANParks' approval of the Final EIAR. This issue is therefore addressed in Chapter 6 following.

As discussed at the meeting of the 3rd of March 2016 (RVM1 Hydroelectric Power (Pty) Ltd and DEA), our interpretation of the National Environment Management: Protected Areas Act differs to that stated by the Department in the paragraphs quoted above. Accordingly a legal opinion on the issues has been procured from Mr Steven Raney of D'Arcy-Herrman Raney, and Advocate Andrea A Gabriel SC has verified this opinion.

These opinions are included in sections 5.2 and 5.3 respectively. The opinions are included exactly as they were provided by the writers.

In the light of these opinions we request that the Department;

- Retains the ultimate authority over approving or rejecting the EIA Report. In this process the department must consider the views of SANParks, but in so doing must not relinquish its statutory obligation to arrive at its own decision with respect to the project; and
- In applying the conditions of the National Environment Management Act, EIA Regulations and the National Environmental Management: Protected Areas Act, take full cognisance of the conclusions of Advocate Gabriel and Mr Raney's opinions.

5.2 Opinion – Mr Steven Rainey

D' ARCY-HERRMAN RANEY

Attorneys • Notaries • Conveyancers

MEMORANDUM

TO: RVM 1 Hydro Electric Power (Pty) Ltd

FROM: Steve Raney

DATE: 4 March 2016

RE: REJECTION OF ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR) FOR THE PROPOSED 40MW HYDROPOWER STATION ON THE FARM RIEMVASMAAK, THE REMAINDER OF FARM NO. 497 AND PORTION 1 OF FARM NO. 498, ON THE ORANGE RIVER IN THE VICINITY OF AUGRABIES FALLS NATIONAL PARK, GARIB LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE

1. Consultant is RVM 1 Hydro Electric Power (Pty) Ltd.
2. An EIAR was submitted to the appropriate authorities in respect of the proposed 40mw hydropower station on the farm Riemvasmaak, on the Orange River in the vicinity of the Augrabies National Park (the "Project").

The management authority for the Augrabies National Park (the “Park”) is SANParks.

the rejection

3. The response received from the national Department of Environmental Affairs constitutes a rejection of the EIAR, albeit not final.
4. The rejection is based inter alia on the following grounds:
5. *“The Protected Areas Act, 2003 (Act No. 57 of 2003)(the “National Environmental Management: Protected Areas Act” or “NEM:PAA”), Section 86 (Regulations by Minister), stipulates the following under Part 4, Regulation 19(1)(a) and (b), and (2):*

“(1) No development contemplated in section 50(5) of the Act shall be implemented –

(a) in any area other than an area specifically designated for such development in a management plan; and

(b) before a management authority has indicated in writing the nature and extent of the strategic or environmental impact assessment required for the development.

(2) No commercial activity or activity contemplated in section 50 of the Act, which requires an environmental impact assessment to be undertaken, either in terms of subregulation (1)(b) or under any other law, may be implemented before a management authority has approved, with or without conditions, the environmental impact assessment before it is submitted to the relevant authority for approval”.

6. *“In order to adhere to this Regulation, the Department requires that you submit your amended EIAR to the Management Authority for Augrabies Falls National Park, (SANParks, Groenkloof, Pretoria), to obtain their approval, with or without conditions. The amended EIAR to be submitted to this Department must include SANParks approval, signed by the CEO of SANParks, as they are the management authority for the area in question. The amended EIAR must*

be circulated for notification to the I&As for a period of 21 days. The Department will re-evaluate the final EIAR to make a decision on this application once all the above has been concluded.”

the project

7. The Project contemplates the construction of a weir and an underground pipeline to divert water from the Orange River through an off-take structure and delivered via a pipeline by gravity to a powerhouse and returned to the Orange River through a tailrace tunnel. The weir, off-take structure and part of the underground pipeline is inside the Park. The water abstracted would normally have followed the natural watercourse and passed through the Park over the Orange waterfall and down the Orange River. The weir, off-take structure and underground pipeline can be considered the source of the supply of raw material needed to generate electricity through a hydro-electric process. Importantly no water is consumed, it is “borrowed” and returned to the Orange River, albeit lower downstream than the waterfall. Consequently there is no impoundment.
8. The construction of a weir, off-take structure and part of the underground pipeline is designed to supply and deliver raw material to a hydro-electricity generating plant outside the Park. The pipeline in the Park largely follows the same path as an existing road.
9. The “commercial development” occurs outside the Park. The supply and part of the delivery infrastructure is in the Park. It can be compared to a coal fired power station outside a protected area with a raw material conveyor traversing part of the protected area, or a telecommunication line connecting telecommunication hubs, or an irrigation canal that traverses a protected area or supply road feeding a distribution warehouse running through a park. In these instances it cannot be argued that the commercial activity or the development is inside the protected area, even if connected.
10. Protected areas are not islands, removed and cut off from surrounding communities and the needs of neighbours. There are numerous protected areas around the world traversed by oil and gas pipelines. Domestically,

Madikwe is traversed by a water pipeline, there are roads cutting through Addo National Park and Marekele National Park and public roads inside Table Mountain National Park. There are also Eskom power lines and Telkom telecommunication lines traversing through national parks. The management plan for the Park confirms the existence of Eskom servitudes at page 18, *“There are servitudes registered against title deed for secondary (sic) roads and Escom (sic) transition lines traversing the park”*. The park has initiated a process to deregister the servitudes applicable to the secondary (sic) roads.”

– the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003)

11. Section 49 of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) (“NEM:PAA”) states that **“activities in protected areas are regulated or restricted to the extent prescribed by regulations”** made, inter alia, under section 86 of the Act. The Act deals with the granting of rights in respect of activities and the Regulations govern how they are used. Section 86 provides for various aspects or issues in national parks which are regulated in terms of the Regulations. The Regulations were published in Government Notice 1061 in Government Gazette 2818 dated the 28th of October 2005 and are titled: *“Regulations for the Proper Administration of Special Nature Reserves, National Parks and World Heritage Sites”*. They came into operation on 1 November 2005 (the “Regulations”).
12. Section 41 requires the preparation of a management plan by the management authority the object of which is to ensure the protection, conservation and management of the protected area in a manner consistent with the objectives of NEM:PAA and for the purpose the protected area was declared.
13. The thrust of a management plan is the biodiversity management plan and Section 41 (g) which requires a zoning of the area indicating what activities may take place in different sections and the conservation objectives of those areas.

14. The Act therefore requires the management plan to deal with “activities”, not development, farming or construction.
15. The zonation in the Augrabies National Park management plan is limited. This is confirmed on page 13 of the management plan as follows: “*The zoning of AFNP was based on an analysis and mapping of the sensitivity and value of a park’s biophysical, heritage and scenic resources; an assessment of the regional context; and an assessment of the park’s current and planned infrastructure and tourist routes and products; all interpreted in the context of park objectives.*” The assessment is entirely Park centric and the activities provided for in the management plan are all Park dependent.
16. NEM:PAA does not make it obligatory to include in a management plan aspects about “economic opportunities within and adjacent to the protected area in terms of any municipal integrated development plan framework” (section 41(3)). But it may do so. This choice is then contradicted by section 39(4) which determines that “**A management plan must take into account any applicable aspects of the integrated development plan of the municipality in which the protected area is situated**”.
17. The Project would, however, never feature in the management plan as it is neither an activity the management authority would have contemplated nor one typically found in a municipal integrated development plan framework. The Project falls under a national initiative driven by the Department of Energy and specifically the Renewable Energy IPP Procurement Programme.
18. The absence therefore of the Project in the management plan does not prevent its consideration in term of the Regulations simply because it does not appear in the management plan. The management plan cannot prevent development, construction, farming or the Project just because the management plan doesn’t deal with it.
19. A management plan is binding on the management authority and is equivalent to policy. It is persuasive but does not have the same legal status as subordinate legislation. Policy is not legislation A rigid adherence to a management plan is not adaptive management. If a management authority

were to refuse to consider the Project on the grounds that it is not catered for in the management plan “*such a decision would no doubt be challengeable on account of it constituting a rigid adherence to a fixed policy.*” [at para 48 *Magaliesberg Protection Association v MEC of Agriculture & others* (563/2012) [2013] ZASCA 80(30 May 2013)].

20. There is no provision in the existing management plan which prohibits the Project. Besides, the management plan can be amended to cater for the Project as provided by section 40(2), if required.
21. Section 53 is particularly important as to how the management authority approaches the Project. The section reads:

“Section 45, 46, 49, 50, 51 or 52 may not be applied in a manner that would obstruct the resolution of issues relating to land rights dealt with in terms of-

(a) the Restitution of Land Rights Act, 1994 (Act 22 of 1994); and

(b) the provision of essential services and the acquisition of servitudes for that purpose.”
22. On 12 September 1997, by way of a notice published under s 71(8) of the Labour Relations Act, 1995 (Act No. 66 of 1995) the Essential Services Committee declared the “generation, transmission and distribution of power” to be an essential service (Paragraph 1(f) of Government notice No 1216 of 12 September 1997). That declaration still stands.
23. Assuming therefore that section 50 is applicable a management authority cannot apply it in such a manner so as to obstruct the provision of an essential service.

The regulations for the Proper Administration of Special Nature Reserves, National Parks and World Heritage Sites.

24. There is no definition for “*development*”, “*construction*”, or “*farming*” in NEM:PAA.
25. The Regulations define “*development*” to mean:

“any physical intervention, excavation or action, other than that caused by natural forces, which may result in a change in the nature, appearance or physical nature of a site in a national park or influence its stability and future well-being, including-

- (a) the construction, alteration, demolition, removal or change of use of a site or a structure on the site;**
- (b) the carrying out of any works on, over or under the site;**
- (c) the construction or putting up for display of signs or boardings;**
- (d) any change to the natural or existing condition or topography of land; and**
- (e) any removal, clearing or destruction of trees or vegetation or the removal of topsoil.**

26. Site is also not defined. A site is usually an area demarcated for the undertaking of an activity in a particular zonation as determined in a management plan for a protected area. No site could have been demarcated in the management plan for this Project.
27. Having regard to the definition of development in the Regulations and in particular the fact that the definition includes the “*construction*”, of a structure on a site or the carrying out of any works on or under the site or the change to the natural or existing condition or topography of land and the removal, clearing or destruction of trees or vegetation or the removal of topsoil the Project may qualify as a “*development*”, for purposes of the application of the Regulations.
28. In *Moodley v Minister of Education and Culture, House of Delegates (1989 (3) SA 221 (A))* the court held that where a statute states that it includes the regulations made under it, the statute and regulations cannot be treated as a single piece of legislation, and the regulations used as an aid in the interpretation of the statute. A regulation cannot therefore be used to enlarge the meaning of a statute. Such regulations can, however, constitute *contemporanea exposition*. In this instance Regulation 19(1) requires a

development provided for in a management plan and contemplated in section 50(5), not a development contemplated in the Regulations.

29. The Project is not covered by section 50(1), because it is neither a commercial activity nor an activity.
30. Activity is not defined in the Act or the Regulations. It is defined in the Environmental Impact Regulations as being **“an activity identified in any notice published by the Minister or MEC in terms of section 240(1)(a) of the Act as a listed activity or specified activity”**. The Act referred to is the National Environmental Management Act, 1998 (Act No.107 of 1998). The regulations are the Environmental Impact Assessment Regulations, GG No. 33306, No. R 543, 10 June 2010. In the said act activity is defined to mean **“when used in Chapter 5, means, policies, programmes, processes, plans and projects”**. Neither of those definitions is relevant in this situation.
31. This definition is not relevant for section 50 or Regulation 19.
32. Secondly the Project is not a “development” contemplated by section 50(5) because it is not a development to be implemented in an area specially designated for such development in the management plan as required by regulation 19(1)(b).
33. For purposes of section 50 the Project, being the construction of a weir and associated infrastructure, constitutes “construction”.
34. The “activity”, if there is one, is the diversion of water over SANParks managed Park. The water of the Orange River is not under SANParks jurisdiction, does not belong to it and is managed by Water Affairs. The activity of diverting water is not therefore a Park dependent activity.
35. Regulation 19(1) states that no “development” contemplated in section 50(5) of the Act shall be implemented in any area other than an area specifically designated for such development in a management plan (regulation 19(1)(a)) and before a management authority has indicated in writing the nature and extent of the strategic or environmental impact assessment required for the development (regulation 19(1)(b)).

36. The management authority alone compiles the management plan and the management authority would not have designated an area specifically for a development such as the Project as it is neither Park specific nor Park dependent. The raw material required to generate the power the Project expects emanates from outside the Park and merely runs through it.
37. Regulation 19(2) states that no commercial activity or activity contemplated in section 50 of the Act, which requires an environmental impact assessment to be undertaken, either in terms of sub-regulation 19(1)(b) or under any other law, may be implemented before a management authority has approved, with or without conditions, the environmental impact assessment before it is submitted to the competent authority for approval.
38. Regulations 20 to 22 deal with authorised, commercial and communal and other activities. The construction of a weir and associated infrastructure is not one of them.
39. Regulation 20 however deals specifically with **“Activities that may be carried out in terms of Section 50”**. Development, construction, farming and the construction of a weir are not mentioned. This supports the view that development, construction, farming and the construction of a weir are not considered to be activities for the purposes of the Regulations, section 49 or section 86(c)(v) which allows the Minister to make regulations that regulate **“activities that may be carried out in terms of section 50”**.
40. The Minister has made those regulations. There is no ambiguity about Regulation 20 and what constitutes an “authorised activity”. Regulation 20 reads:

“Authorised activities

- (1) A person may not undertake any of the following activities in a special nature reserve, national park or world heritage site except pursuant to a licence, permit or agreement and subject to the payment of the appropriate fees between that person, or some other person, and the management authority:**

- (a) the filing and simultaneous transmitting of photographic images by the use of a webcam or other image recording or transmitting device;**
- (b) the conducting of tours;**
- (c) the conducting of any kind of competition;**
- (d) the selling or hiring of goods or the offering of goods for sale or hire;**
- (e) the provision of, or the offering to provide, any service for a fee or reward;**
- (f) the conducting of speed trials;**
- (g) the conducting of research;**
- (h) an activity of any kind for the purpose of fund raising, personal gain or making a profit;**
- (i) any organised or special event, including sporting or cultural events; or**
- (j) visual imaging of animals for purposes of any virtual hunting or other such activity.”**

41. Development, construction, farming or the construction of a weir do not fall under the general rubric, “activities”. SANParks has no ability to authorise the Project under Regulation 20.
42. It may well be that development, construction, farming or the construction of a weir are activities that people may partake in but they are not activities for the purposes of the Act or the Regulations.
43. Section 50 specifically separates and deals with different concepts namely commercial activities, activities aimed at raising revenue, activities (used in reference to the previous two kinds of activities) and development, construction and farming. They are then also dealt with separately and distinctly in the Regulations.
44. Neither the Act nor the Regulations use a generic term “activity” to cover every conceivable undertaking. Instead the Act and Regulations make reference, deliberately, to different undertakings and activities from aircraft to weir construction. In between there are a range of “activities” and

undertakings.

45. Regulation 30, which deals with prohibitions on land and in airspace, does not prohibit the Project.

46. Regulation 39(1) deals with disturbing the land in general terms. The regulation reads as follows:

“39(1) No person shall, except with the prior written permission of a management authority –

(a) remove from a special nature reserve, national park or world heritage site any –

(i) soil, rock, mineral or similar material;

(ii) wood, mulch or other dead vegetation;

(iii) fossil, archaeological remains or cultural artefacts;

(iv) ritual or spiritual remains;

(v) ...; or

(vi) ...;

(b) dig or intentionally disturb any soil or similar material in a special nature reserve, national park or world heritage site; or

(c) Intentionally disturb any –

(i) wood, mulch, peat or other dead vegetation or animal in a special nature reserve, national park or world heritage site;

(ii) termite mounds;

(iii) fossil, shell midden, archaeological remains or paleontological specimens or meteorites in a special nature reserve, national park or world heritage site; or

(iv) ...; or

(v) any object or material that is or was used for any ritual, spiritual or other practice.”

47. Regulation 39(2) deals with the Project, namely the construction of a weir and by implication, ancillary infrastructure. It reads:
48. **“39(2) No person shall construct an impoundment or weir on any river or river bed or abstract any water from any impoundment or weir on any river or in any river bed within a special nature reserve, a national park or world heritage site, nor abstract any water by means of a pump, pipes, gravitation or any other means, located outside the boundary of a special nature reserve, national park or world heritage site, from any river or river bed forming a boundary with a special nature reserve, national park or world heritage sites without the written permission of a management authority and without conducting an environmental impact assessment.”**
49. With regard to the erection, construction or transformation of buildings, regulation 46 states that no person shall, without the prior written approval of a management authority, erect, construct or transform or cause to be erected, constructed or transformed any building or any other improvement, including but not limited, to a building or structure of any kind, jetty, doc, pier, landing stage, landing float, marker, anchor buoy, raft, fence or any obstruction, bridge, pontoon, road or crossing in respect of any building or other immovable property within a national park. The Project may well fall into a category described as “a structure of any kind ... in respect of any immovable property”. The grouping of interventions relates to buildings, specifically marine developments and obstructions thereto.
50. Applying these provisions to the facts, the Project:
- 50.1. is not hit by the provisions of regulation 19(1), by virtue of the fact that the Project does not constitute a “development” as defined in the Regulations. It constitutes “construction”;
- 50.2. is not hit by the provisions of regulation 19(2), by virtue of the fact that the activity is not a commercial activity or activity contemplated by section

50 read with the Regulations, specifically regulation 20;

50.3. is not hit by regulations 46(1) or 46(3) by virtue of the fact that the Project does not entail the erection, construction or transformation of a building;

50.4. falls within section 50(5) as it will involve “construction”;

50.5. falls squarely within regulation 39(2) as the Project entails the construction of a weir and associated infrastructure.

51. **interpretation**

52. Where legislation deals specifically with a particular activity and a limited subject-matter, such as the construction of a weir, while other aspects of the same legislation are general in nature, the statute or regulation in question needs to be applied and to operate in respect of the subject-matter specifically regulated. It should not be artificially read to include the specific activity under a general catch-all provision, such as the broad concept of “activity”.

53. The “approval” by a management authority of the environmental impact assessment contemplated by regulation 19 is to facilitate a final project approval for Park centric and Park dependent “activities” as defined. It is designed to ensure the inclusiveness of the management authority as a significant “interested & affected” party, actually the most important one, and one singled out in the Regulations to have the last say before the competent authority is called upon to adjudicate the application. It does not mean that the management authority approves the environmental impact assessment as required under the National Environmental Management Act, 1998 (Act No.107 of 1998). If that were so it would be ultra vires that act. This would be consistent with the principle that one should prefer an interpretation which upholds the validity of regulations to one which results in their invalidity (*Arse v Minister of Home Affairs and Others 2012 (4) SA 544 (SCA) at par 19*). Where there is an activity as defined, the management authority gets to “approve” the environmental impact assessment as part of the process to get final approval from the competent authority. This is to ensure that the management authority is not ambushed by an environmental authorisation which does not

meet its park specific objectives. Here the Regulations provide specifically for the Project.

54. Generally legislation is intended to cover events that occur regularly rather than deal with the exceptional instances. This presumption means that legislation is drafted to provide for instances that occur regularly compared to exceptional instances. Devenish, Interpretation of Statutes, Juta, 1996, page 219, writes, *“The presumption is precipitated where an individual endeavours to avoid the general provisions of a statute by pointing out the exceptional circumstances of a particular case. The courts have sometimes been reluctant to apply the presumption. Obviously the position is different where the statute itself directs that a fixed rule shall only be departed from under exceptional circumstances. However, were it does not, the courts do not necessarily adopt a strict interpretation. Where general rules are clearly and definitely formulated the courts are very reluctant to countenance exceptions.”*

55. Regulation 39(2) requires both an environmental impact assessment and the written permission from the management authority. It does not contemplate the procedure provided for in Regulation 19.

the management authority

56. SANParks has two roles to play, one as an interested and affected party in respect of the environmental impact assessment and secondly as the management authority that ultimately gives permission for the Project to proceed after an environmental authorisation is approved.

57. SANParks does not approve the environmental impact assessment in the sense understood in terms of the National Environmental Management Act, the competent authority does.

58. SANParks cannot simply ignore a request for permission for the Project in terms of regulation 39(2) as same would constitute unfair administrative action. In its deliberations SANParks needs to take section 53 seriously.

59. **the rejection letter**

60. The reasoning for obtaining the approval of SANParks in the rejection letter is flawed because it starts from a misreading of regulation 19.
61. It is correct that SANParks must ultimately approve the implementation and undertaking of the Project, but it must do so in terms of regulation 39(2) read with section 50(5), “construction”.
62. Regulation 19 is not about the approval of the Project, it is about the environmental impact assessment process.
63. Regulation 39 (2) deals with the specific Project contemplated, namely the construction of a weir and associated infrastructure. This gives meaning to the Regulations as regulation 39(2) is specific in its terms, rather than trying to fit the Project into a Park dependent activity or a general provision in the Regulations.
64. Activity has a specific meaning and is not a “catch-all” for every conceivable intervention contemplated in the Regulations.
65. In simple terms section 49 determines that activities in protected areas are regulated or restricted to the extent prescribed by regulations under section 86. The regulations prescribe the authorised activities in regulation 22 and elsewhere restricted activities, such as in regulation 38. The only activities for purposes of regulation 19 are those prescribed in the Regulations.
66. The construction of a weir is not an “activity” for the purposes of regulation 19.

5.3 Opinion- Advocate Andrea A Gabriel SC

EX PARTE: RVM 1 HYDRO ELECTRIC POWER (PTY) LTD

**IN RE: REJECTION OF ENVIRONMENTAL IMPACT ASSESSMENT
REPORT FOR THE PROPOSED 40MW HYDROPOWER
STATION, NORTHERN CAPE PROVINCE**

OPINION

A. INTRODUCTION SUMMARY OF SUMMARY OF OPINION

1. Consultant is RVM 1 Hydro Electric Power (Pty) Ltd.
2. Consultant applied for environmental approval for the construction of a 40mw hydropower station on the farm Riemvasmaak, on the Orange River in the vicinity of the Augrabies National Park, managed by SANParks.
3. The National Department of Environmental Affairs (“DEA”) has rejected Consultant’s application, and requires prior environmental approval from SANParks as the management authority for the Augrabies National Park.
4. Those instructing me have provided me with their opinion which concludes that DEA has misdirected itself in rejecting Consultant’s application for an EIA approval, specifically with respect to DEA’s contention that SANParks must first approve the EIA Report before it will consider approving the EIA for the project.
5. In summary, I have analysed the opinion provided to me and agree with the analysis and conclusions in the opinion.

B. SPECIFIC REGULATORY FRAMEWORK

6. I will not repeat the process of analysis and reasoning in the opinion provided to me.

7. Suffice it to say that I am of the view that Regulation 19 has no application to the project proposed to be developed by Consultant and I agree with the views of those instructing me on this issue.
8. Further, Regulation 19 applies specifically to the ambit of Section 50 of the Protected Areas Act which covers commercial and community activities in the national park. The proposed project is not one to be conducted within the national park, but is one which only temporarily diverts biological resources within the park, to be processed outside the park, and with the abstracted water being returned to the river in the park lower downstream.
9. The only portions of the project within the park involve the construction of a weir, off-take structure and part of an underground pipeline which divert and deliver to the hydro-electricity generating plant outside the park.
10. These activities are directly regulated by Regulation 39(2) which deals specifically with the elements of the project falling within the park, namely the weir and infrastructure associated with abstraction from the river.
11. The regulations make specific provision for these elements of the project and it is these that find particular application to the proposed project and not Regulation 19.
12. It is settled law that when drafters of legislation make specific provision for an event or circumstance, then it is those provisions that take precedence over otherwise general sections in laws.⁶

⁶ **Sasol Synthetic Fuels (Pty) Ltd and Others v Lambert and Others 2002 (2) SA 21 (SCA)**, at paragraph 17:

13. Accordingly, I arrive at the same conclusion as those instructing me, albeit in a shorter manner.

14. There is a further matter. It is clear from a consideration of the various statutes, that SANParks has separate and distinct responsibility over the national park while DEA is vested with the obligation to approve EIAs. These two powers must not be confused.

15. I agree with those instructing me that SANPark's role in the EIA consideration process is from the perspective of managing the territory within its jurisdiction, that is, the national park. That, however, does not detract from the statutory obligation vesting in DEA (and ultimately the Minister) to consider and accept or reject the EIA report provided to it by Consultant. DEA may not abdicate its duties in this regard

[17] A closely related principle, *generalia specialibus non derogant* (general words (rules) do not derogate from special ones), leads to the same result. The matter is put thus in *R v Gwantshu* 1931 EDL 29 at 31:

' "When the Legislature has given attention to a separate subject and made provision for it the presumption is that a subsequent general enactment is not intended to interfere with the special provision, unless it manifests that intention very clearly. Each enactment must be construed in that respect according to its own subject-matter and its own terms. This case is a peculiarly strong one for application of the general maxim" per Lord Hobhouse delivering the judgment of the Privy Council in *Barker v Edger* ([1898] AC at 754). "Where general words in a later Act are capable of reasonable and sensible application without extending them to subjects specially dealt with by earlier legislation, that earlier and special legislation is not to be held indirectly . . . altered . . . merely by force of such general words, without any indication of a particular intention to do so." In such cases it is presumed to have only general cases in view and not particular cases which have been already otherwise provided for by the special Act. Having already given its attention to the particular subject and provided for it, the Legislature is reasonably presumed not to alter that special provision by a subsequent general enactment unless that intention be manifested in explicit language . . . (Maxwell Interpretation of Statutes 7th ed at 153).'

See also *Khumalo v Director-General of Co-operation and Development and Others* 1991 (1) SA 158 (A) at 164C - 165D and *Consolidated Employers Medical Aid Society and Others v Leveton* 1999 (2) SA 32 (SCA) at 40H - 41B."

by handing over ultimate authority on the EIA Report to SANParks, nor may DEA simply rubber-stamp what SANParks may decide with respect to the EIA report.

16. Stated simply, I am of the view that DEA retains ultimate authority over approving or rejecting the EIA report. In this process it must consider the views of SANParks, but in so doing, must not relinquish its statutory obligation to arrive at its own decision with respect to the project.

C. CONCLUSION

17. I therefore agree with the analysis and conclusions in the opinion provided to me by those instructing me.
18. I am available to answer queries with respect to this opinion.

Andrea A Gabriel SC

Chambers, 6 Durban Club Place, Durban

15 March 2016

(sent electronically)

TO: D'ARCY-HERRMAN RANEY

per email

5.4 Letter from SANParks to the applicant

In the letter reproduced below, sent to the applicant on 2nd June 2016, SANParks:

- (i) Supports renewable energy generation traditionally provided by technologies such as hydro, solar and biogas; (page 1, para a)
- (ii) Does not support the construction of the weir, canal and portion of the power line within the Augrabies Falls National Park (page 1, para b)
- (iii) Intends not to provide written approval for the development of the weir, canal and portion of the power line within the Augrabies Falls National Park (page 2; para e)
- (iv) Does not support the development of the proposed hydro power station at this specific location as it would impact on the flow of the water over the falls which would have a negative impact visitor's experience and sense of place of the Augrabies Falls National Park. (page 3, first paragraph).

To develop and manage a system of national parks that represents the biodiversity, landscapes, and associated heritage assets of South Africa for the sustainable use and benefit of all.



Ref#: 16/1/4

16 May 2016

MR JCD THERON

Director: RVM 1 Hydro Electric Power (Pty) Ltd
STELLENBOSCH

7600

Tel.: 021 934 5501

Fax: 086 520 8648

Email: niel@hydro-sa.com

Dear Mr Theron,

THE PROPOSED AUGRABIES HYDRO POWER STATION PROJECT

Your letter dated 29 April 2016 refers.

In respect of SANParks response below, your proposed meeting request has reference:-

1.1 SANParks is of the view that the RVM 1 Hydro Electric Power (Pty) Ltd and its representatives could meet with SANParks Executive Management.

1.2 The outcomes of the above would determine the necessity of a possible meeting with the SANParks Board.

1.3 A date for such a meeting between the RVM 1 Hydro Electric Power (Pty) Ltd and its representatives and SANParks Managing Executive should be agreed between the parties.

As in the same Riemvasmaak Gemeenskap Ontwikkelingstrust, I hereto submit in respect of SANParks position to this effect:-

- a. SANParks supports renewable energy generation traditionally provided by technologies such as hydro, wind, solar and biogas;
- b. Insofar this project, SANParks does not support the construction of the weir, canal and a portion of the power line within the Augrabies Falls National Park;

oddo elephant

agulhas

augrabies falls

kroonbek

golden gate highlands

karoo

kgalagadi transfrontier

krusna lake area

kruger

mapungubwe

marakele

mountain zebra

namaqua

table mountain

tsrkwana-karoo

tsitsikamma

[-ai-]ais/richtersveld

vaalkop

west coast

wilderness

643 Leyds Street
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- c. For example, the area of the park through which the canal is planned is currently zoned Remote and falls in the special management area category. The Remote zone according to the zonation plan of the Augrabies Falls National Park is the zone providing the highest form of protection. This is an area retaining an intrinsically wild appearance and character, or capable of being restored to such and which is undeveloped. There are no permanent improvements or any form of human habitation. It provides outstanding opportunities for solitude with awe inspiring natural characteristics. If present at all, sight and sound of human habitation and activities are barely discernable and at a far distance. The zone also serves to protect sensitive environments from development impacts and tourism pressure. The conservation objective is to maintain the zone in as near to a natural state as possible with no impact on biodiversity pattern or processes. Existing impacts on biodiversity, either from historical usage or originating from outside the zone should be mitigated. It must be noted that amendments to the management plan and zoning have to be approved by the Minister of the Department of Environment Affairs. The revision of an approved Park Management Plan is the prerogative of the Minister in accordance to NEM:PAA Section 40 (2). Any the change of a particular zone within a National Park is subject to Section 41 (g) of the same Act compelling SANParks to change such zones with predetermined conservation objectives and activities for all the national parks in the country to allow for the proposed project. Further to this, the proposal to divert a sizable portion of the river's flow from the Augrabies waterfall would have a negative impact on the visitor experience to the falls, especially during the low flow periods;
- d. SANParks communicated its concerns through the public meetings and correspondence to the previous environmental consultants and to EOH Coastal & Environmental Services timeously. Section 50 (2) of the National Environmental Management: Protected Areas Act No. 57 of 2003 confirms that "An activity allowed in terms of subsection (1) (a) or (b) may not negatively affect the survival of any species in or significantly disrupt the integrity of the ecological systems of the national parks, nature reserve or world heritage site.";
- e. For this reason, and not limited to the above only, SANParks intends not to provide written approval for the development of the of the weir, canal and a portion of the power-line as part of the proposed hydro power station within the Augrabies Falls National Park in accordance to Section 50 (5) of the National Environmental Management: Protected Areas Act No. 57 of 2003 which stipulates "No development, construction or farming may be permitted in a national park, nature reserve or world heritage site without the prior written approval of the management authority". SANParks furthermore does

not support the development of the proposed hydro power station at this specific location as it would impact on the flow of water over the falls which would have a negative impact visitor's experience and sense of the place of the Augrabies Fall National Park.

In anticipation that this letter is received in order, it will allow SANParks to optimally manage Augrabies Falls National Parks for its unique representative part of the South African landscape and biodiversity conservation for the benefit and enjoyment of future generations.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Fundisile Mketeni', written over a faint, stylized fish-like graphic.

Mr Fundisile Mketeni
Chief Executive Officer
South African National Parks

2 June 2016

Cc: Mr. Sibusiso Mthembu, Director: Integrated Environmental Authorisations
SLMthembu@environment.gov.za

Dr. Geoff Cowan, Director: Protected Areas and Planning
gcowan@environment.gov.za

6 FINAL SCOPING REPORT ACCEPTANCE LETTER

The final sentence of paragraph f) of DEA's December 2015 rejection letter reads as follows:

All matters raised in in the acceptance letter dated 30th October 2013 of the final scoping report, must be adhered to in full and must be included in the amended EIAR

The full text of the 30th October 2013 letter is included as Appendix D.

This chapter addresses the above requirement, since it is not directly related to the content of paragraphs e) to h), which were discussed in the previous chapter.

However, the sentence reproduced above gives the impression that the matters raised in the October 2013 letter have not been adhered to in the Final EIA Report, but this is not the case. Responses to the majority of the issues raised in the letter are provided in the Foreword to the Final EIA Report (pages vii to xii), where responses to each section of the letter indicate how the requirement has been satisfied. This Foreword is also included in the Amended Final EIA Report, March 2016, on pages xiii to xviii.

It is, however, clear that some of these responses have either not been fully interrogated by the department, or have not proved to be sufficient to satisfy the department that the requirements have been properly addressed. Where this is evident additional responses are provided here.

6.1 Comments from relevant stakeholders

All entities listed on pages 1&2 of the DEA 20Oct13 letter were registered as I&APs and received all relevant project-related documentation. The full list of registered I&APs is included in the Amended Final EIA Report as Appendix C. Copies of correspondence, notifications, advertisements and notices are included in Appendices B&E of the Amended FEIAR.

6.2 Application reference numbers:

NEAS Reference Number added to report cover pages.

6.3 Activities applied for:

Revised application form submitted 17th September 2013. Receipt acknowledged and application accepted by DEA by letter dated 25th October 2013.

6.4 Need and desirability:

Eskom does not issue letters confirming electricity shortages. Stated previously on page vii of the FEIAR. See page xiii of the Amended FEIAR.

6.5 Activity position:

The coordinates of all infrastructure elements have been provided to the department in shapefiles included with the submission of the Final EIAR in September 2015. The format of the shapefiles is in accordance with DEA's requirements set out on page 5 of the 20Oct13 acceptance letter.

6.6 Site plans / facility illustrations:

All issues listed in pages 2&3 of DEA's 20Oct13 letter are addressed in the Foreword to the Amended FEIAR, page xiv. Additional detail is provided here as follows:

- **Internal roads and access roads**

The layout of internal roads is shown on figures as follows:

- Figure 2.10: Hydropower station infrastructure and property boundaries (diversion weir north-west to power station, and part of road south-east to spoil disposal site)
- Figure 3.2: General layout of project infrastructure from diversion weir to tailrace outfall (complete layout)
- Figure 3.3: Layout of weir and offtake structure (access to weir site from Rhino Gate. Among others)
- Figure 3.4: Layout of headpond, underground power chamber, tailrace tunnel and outfall (new road from existing road to headpond, and options for access to tailrace outfall)

All roads will be up to 6m wide to accommodate construction traffic.

With the exception of a 780-metre length of road from an existing track to the site of the head pond and power station, the remaining 11km of roads will follow the routes of existing tracks, which will have to be upgraded.

The length of the access road from the headpond / power station site to the tailrace outfall will be either 1.8km (Option 1) or 2.9km (Option 2).

- **Drainage lines and rivers**

Drainage lines and rivers are shown on the following figures:

- Figure 2.1: Digital terrain model of the project area
- Figure 2.9: Locations of the aquatic survey sites/areas.
- Figure 2.10: Hydropower station infrastructure and property boundaries
- Figure 3.2: General layout of project infrastructure from diversion weir to tailrace outfall
- Figure 3.3: Layout of weir and offtake structure
- Figure 3.5: Location of the substation and proposed area for surplus spoil deposition

- **Environmentally sensitive areas and buffer zones**

The above areas are shown on the following figures:

- Figure 2.5. Location of the Garipe Centre (GC) of endemism.
- Figure 2.6: Map illustrating the spatial distribution of the Critical Biodiversity Areas (CBA) affected by the project infrastructure
- Figure 2.7: Map illustrating the spatial distribution of the threatened ecosystems affected by the project infrastructure
- Figure 2.9a: Augrabies Falls National Park Buffer Zones

Riverine habitats are also regarded as sensitive areas (see previous heading).

- **Current land use and use zoning**

Current land zoning is discussed in detail in section 2.6 of the Amended FEIAR - Land Ownership, Land Management and Zoning.

The present use of the project area for conservation is identified in a number of places in the Amended FEIAR, notably in section 2.6 of the Amended FEIAR as above.

Figure 2 in the Agricultural Specialist report - Land type classification in the project area – identifies the project area as Ag2 or Ia1 (both Land capability Class 7 - Non-arable, low-potential grazing land) or Ic3 (Land Capability Class 8 – Non-utilisable wilderness).

- **No-Go areas**

The No-Go option, from the point of view of not proceeding with the project is identified in all

specialist studies, assessed for impact significance, and the impacts are summarised in all impact tables.

There are no areas explicitly identified as No-Go areas, but the sensitivity of the area as a whole is acknowledged in numerous recommendations to minimise the extent of disturbance, and to effect remediation of disturbance after the completion of construction.

6.7 Locality map:

Given the size of the project area (approximately 6km from diversion weir to tailrace outfall), and approximately 12km from tailrace outfall to grid connection) it is not practical to include all required information on a single locality map.

Figure 1.1 – Project Locality – shows

- The positions / routes of all infrastructural elements, clearly labelled: (tailrace) outfall; headpond and powerhouse, headrace; (diversion) weir; spoil heap; substation and route of 32kV power line.
- The boundaries of the two registered portions of land affected by the major infrastructural elements (diversion weir to tailrace outfall).
- The boundaries of the Augrabies Falls National Park (although some of the areas, including Portion 1 of Farm 498 has been excised from the Park since the topographical map was prepared – noted in the figure title).
- The map has a North point,

The vegetation of the site is shown on Figure 2.4: Portion of the Vegetation Map of South Africa, Lesotho and Swaziland (Mucina et al., 2005), and vegetation types are illustrated in Plates 2.1 to 2.5. Section 2.2.2 of the Amended FEIAR discusses the vegetation of the site in some detail.

6.8 Specialist studies:

All specialist studies required by the department and conducted by the EAP are listed on page xv of the Amended FEIAR.

6.9 Cumulative impact assessment:

Cumulative impacts are discussed at some length in section 7.6 of the Amended FEIAR.

The question of the flow regime of the Orange River being impacted by the RVM project combined with other similar power-generating projects, existing or planned, is addressed in section 7.6.2. It is explained that the non-consumptive nature of the project is such that it will not be affected by any of the other projects, which in turn will not be affected by the project, and the flow regime of the river will be influenced only for the approximately 11km reach of river between the diversion weir and the return of the discharge from the power station into the mainstem river.

The RVM HPP will not affect the flow regime at the mouth of the Orange River in any way.

6.10 Public participation process:

We were not able to provide the department with minutes of the 28Aug13 meeting because the then Case Officer for the department did not prepare them, as she undertook in writing to do. This is addressed on pages xv and xvi of the Amended FEIAR.

Copies of advertisements are included in Appendix B of the Amended FEIAR.

6.11 Additional information requirements:

All issues listed on page 4 of DEA's 20Oct13 letter are addressed in the Foreword to the Amended

FEIAR, pages xvi and xvii Additional detail is provided here as follows:

- **Water use licence**

A copy of the application for a water use licence (MBB Consulting Engineers, 22May15) and DWS's acknowledgement of receipt, which includes a non-binding confirmation of the availability of water for the project (08Jul15) are included in Appendix E of this report.

- **Possible impacts and effects of the development on the vegetation ecology with regard to lowland-highland interface in the locality should be indicated**

The specialist consultant Dr David McDonald and the EAP Dr Ted Avis discussed this comment. There is no lowland-highland interface in the study area, and we are not clear of the meaning of this comment. The only difference in the vegetation, based on the topographical gradient in the study area low, is the riparian zone along the drainage lines (dominated by Lower Gariep Alluvial Vegetation on the recently deposited alluvial sediments along the Orange (Gariep) River) and the 'upland zone' away from the riparian and canyon zones, dominated by Bushmanland Arid Grassland and Lower Gariep Broken Veld.

- **Possible impacts and effects of the development on the surrounding areas and aquatic ecosystem should be indicated**

The river and its riparian zones as an aquatic ecosystem and the impacts of the development on the ecosystem are addressed in the specialist report (Enviross 2015), and summarised in the Amended FEIAR in sections 2.5, 6.2, 7.1.2, 7.2.2, 7.3.2, 7.4.2, 7.5.2 and 7.6.2.

- **Environmental costs and benefits and economic viability**

With regard to economic viability it was indicated, in a previous response to the request (see page xvi of the Foreword to the Final EIA Report in the Amended Final EIA Report), that information on the economic viability of the project exists. However, it was stated that information of this nature was the applicant's intellectual property, and part of his competitive advantage in the field. Since this information would have to be made available to the public before it was submitted to the department it would no longer be confidential.

To overcome the problem of confidentiality, whilst at the same time providing the department with the information it required, the applicant commissioned the preparation of an additional specialist study by an independent practitioner, Imani Development (SA) (Pty) Ltd of Umhlanga Rocks. Preparation of this report - Proposed Hydropower Station on the Farm Riemvasmaak (Remainder of Farm No. 497 and Portion of Farm No. 498) on the Orange River, Northern Cape - Economic Impact Assessment – was commenced in 2015 and was completed in its final form in March 2016.

Note that additional information on employment opportunities is provided in Chapter 4 of this report, and also in a new specialist report Economic Impact Assessment – which was finalised by Imani Development (SA) (Pty) Ltd in February 2016, and which is submitted with this report and the Amended EIA Report.

- **Construction phase EMPr**

A CEMPr and an OEMPr were submitted with the Final EIA Report, which include mitigation and monitoring measures for all impacts identified, including blasting during construction, rehabilitation after construction, and measures to manage water pollution during all phases. Detailed management plans for these issues must be developed by the contractor appointed for the project.

Responses to the remaining five bullet points on pages 4&5 of the department's 30Oct13 letter, which express the department's concerns over -

- The location of the development in a conservation area,
- The balance of positive and negative impacts,
- The impacts on sensitive alluvial vegetation,

- The potential impacts on downstream users and the Ramsar site at the river mouth, and
 - The consideration of alternative sites for the development.
- are provided on pages 95 and 96 in the Amended FEIAR.

7 REFERENCES

ACER (Africa) 2014: Proposed Hydropower Station On The Farm Riemvasmaak (Remainder Of Farm No. 497 And Portion Of Farm No. 498) On The Orange River In The Augrabies Falls National Park, Northern Cape - Socio-Economic Impact Assessment, Specialist Study Report (Revision 1), ACER (Africa) Environmental Management Consultants, January 2014.

Branch 2015: Riemvasmaak Hydro-electric Project, Northern Cape, South Africa. Faunal Impact Assessment Report, Branch WR for Coastal & Environmental Services (CES), Grahamstown, March 2015.

Enviross 2015: Proposed Riemvasmaak Hydro Electric Power (RVMHEP) Development, Orange River, Augrabies, Northern Cape: Aquatic Baseline Ecological Integrity & Potential Impact Surveys, Enviross cc 2015.

Imani 2016: Proposed Hydropower Station on the Farm Riemvasmaak (Remainder of Farm No. 497 and Portion of Farm No. 498) on the Orange River, Northern Cape, Economic Impact Assessment, Specialist Study Report, Imani Development (SA) (Pty) Ltd, Umhlanga Rocks, 2016.

ORASECOM 2007b: Summary of Water Requirements from the Orange River, WRP Consulting Engineers *et al*, ORASECOM Report No 006/2007, November 2007

ORASECOM 2010: Environmental Flow requirements Volume 1, Updated August 2010, Louw & Koekemoer (Eds), Support to Phase 2 of ORASECOM Basin-wide IWRM Plan

APPENDIX A: REJECTION LETTER FROM DEA



environmental affairs

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6140

Telephone number: (046) 622 2364
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PER EMAIL / MAIL

Dear Dr Avis

REJECTION OF ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR) FOR THE PROPOSED 40MW HYDROPOWER STATION ON THE FARM RIEMVASMAAK, THE REMAINDER OF FARM NO 497 AND PORTION 1 OF FARM NO 498, ON THE ORANGE RIVER IN THE VICINITY OF AUGRABIES FALLS NATIONAL PARK, GARIB LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE

The final Environmental Impact Assessment Report (EIAR) dated September 2015 and received by the Department on 05 October 2015, refers.

Based on a review of the final Environmental Impact Assessment Report (EIAR) dated September 2015, please be advised that this Department, in terms of Regulation 34 (2) (b), is not able to make an informed decision on the abovementioned application and an amended EIAR needs to be submitted.

This Department draw your attention to the following comments and issues that must be addressed in the amended EIAR prior to decision making:

- a) Comments dated 05 June 2015 from the Department of Environment and Nature Conservation (DENC) indicates that, the proposed development site is located within an Important Bird Area (IBA) as identified by BirdLife South Africa and also falls within the Gariep Centre of Endemism. The Environmental Assessment Practitioner (EAP) managing the application failed to identify BirdLife South Africa as a crucial stakeholder who should comment on this application. Comments from BirdLife South Africa must be obtained and it must be included in the amended EIAR.
- b) The final Environmental Impact Assessment report dated September 2015 indicates that a **30m³/s** is seen as an **accepted** flow rate over the Augrabies falls. Please include documentation indicating how this value was arrived at and how it was scientifically proven also taken into consideration the ecological reserve. This must be included in the amended EIAR. This value of **30m³/s** is also an important value for SANParks and therefore this department needs proof that this value of **30m³/s** was discussed and agreed

upon with SANParks as the management authority of Augrabies Falls National Park. This must be included in the amended EIAR.

- c) The Socio-Economic Impact Assessment report as included in the Environmental Impact Assessment report dated September 2015 concluded that the proposed 40MW Hydropower project will not have a noticeable effect on the falls and tourism during floods. The study failed to indicate the effects of the proposed 40MW Hydropower project during low flow and drought periods (of which it is the case for a large part of the year) on the falls, as well as on the tourism. The Department requires the specialist study to be amended to include the effects of the proposed 40MW Hydropower project on the falls and the tourism during low flow and drought periods as well as the impact this information might have on the economic viability of the proposed development should the flow in the river be low for extended periods as a result of drought conditions. This must be included in the amended EIAR.
- d) The Environmental Impact Assessment report dated September 2015 indicates that the project is anticipated to provide between 150 to 200 temporary job opportunities during the construction phase, whilst between five and ten permanent job opportunities will be created during the project's operational phase. This Department requests proof of the agreement with the local community/ies and other relevant departments with regard to employment opportunities and this proof must be included in the amended final EIA report.
- e) Kindly note that the acceptance letter dated 30 October 2013 of the final scoping report clearly indicated that SANPark's approval in terms of section 50 (5) of the National Environment Management: Protected Areas Act, 2003, is required and must be obtained prior to the submission of the final EIAR.
- f) During the process of compiling the Environmental Impact Assessment Report, the Department responded to an email query on 19 May 2015, and advised that the final EIAR may be submitted prior to obtaining approval from the management authority i.e. SANParks. After receiving several comments in this regard from internal and external stakeholders, the Department has decided that the specific email communication was incorrect and that the acceptance letter takes preference. All matters raised in the acceptance letter dated 30 October 2013 of the final scoping report, must be adhered to in full and must be included in the amended EIAR.
- g) Furthermore, the National Environment Management Act, 1998 (Act No. 107 of 1998) (NEMA) and the EIA Regulations must be read in conjunction with the National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003), which reads as follows:

Section 50: *"Commercial and community activities in a national park, nature reserve and world heritage site".*

Section 50 (5): *"No development, construction or farming may be permitted in a national park, nature reserve or world heritage site without the prior written approval of the management authority".*

Comments on the above were obtained from the Branch: Biodiversity and Conservation Management and the Protected Areas Planning, Legislation, Compliance and Monitoring Unit in the Department. Comments dealt specifically with section 86 of the Protected Areas Regulations as stipulated in point (h) below.

- h) The Protected Areas Act, 2003 (Act No. 57 of 2003), Section 86 (Regulations by Minister), stipulates the following under Part 4, Regulation 19 (1) (a) and (b), and (2):

"(1) No development contemplated in section 50(5) of the Act shall be implemented -

(a) In any area other than an area specifically designated for such development in a management plan; and

(b) Before a management authority has indicated in writing the nature and extent of the strategic or environmental impact assessment required for the development.

(2) No commercial activity or activity contemplated in **section 50** of the Act, which requires an environmental impact assessment to be undertaken, either in terms of subregulation (1)(b) or under any other law, may be implemented before a management authority has approved, with or without conditions, the environmental impact assessment before it is submitted to the relevant authority for approval".

In order to adhere to this Regulation, the Department requires that you submit your amended EIAR to the Management Authority for Augrabies Falls National Park, (SANParks, Groenkloof, Pretoria), to obtain their approval, with or without conditions. The amended EIAR to be submitted to this Department must include SANParks approval, signed by the CEO of SANParks, as they are the management Authority for the area in question. The amended EIAR must be circulate for notification to the I&APs for a period of 21 days. The Department will re-evaluate the final EIAR to make a decision on this application once all the above has been concluded.

This Department further advises that according to Regulation 67 of the EIA Regulations, 2010, an application in terms of the EIA Regulations lapses if the applicant, after having submitted the application, fails for a period of six (6) months to comply with a requirement in terms of the EIA Regulations relating to the consideration of the application.

You are hereby reminded of Section 24F of the National Environmental Management Act 1998 (Act No. 107 of 1998), as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.

Yours sincerely



Mr Sabelo Malaza

**Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs**

Letter signed by: Mr Danie Smit

Designation: Deputy Director: Integrated Environmental Authorisations: Protected Areas

Date: 09/11/2015

Cc:

Jacobus Christiaan Daniel Theron
Ms Anga Yaphi
Mr Fundisile Mketeni
Ms Lize McCourt
Mr Paul Daphne
Dr H. Hendricks
Mr Lucius Moolman
Mr. Frans van Rooyen
The municipal manager
Dr Geoff Cowan

RVM 1 Hydro Electric Power (Pty) Ltd
NCDEANC
SANParks CEO, Head Office, Groenkloof, PTA
SANParks COO, Head Office, Groenkloof, PTA
SANParks, Head Office, Groenkloof, Pretoria
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APPENDIX B: NOTES OF PUBLIC MEETING HELD AT KAKAMAS GATEWAY HOTEL, KAKAMAS, 28 JANUARY 2013, 17H30-19H00



PROPOSED HYDROPOWER STATIONS ON THE FARM RIEMVASMAAK (REMAINDER OF FARM NO. 497 AND PORTION 1 OF FARM NO. 498), ON THE ORANGE RIVER IN THE VICINITY OF AUGRABIES. NORTHERN CAPE:
NOTES OF PUBLIC MEETING
Kakamas Gateway Hotel, Kakamas, 28 January 2013, 17h30-19h00

1. Attendees

S Tompies (SANParks)	ST
N du Plessis (SANParks)	NP
F van Rooyen (SANParks)	FR
G van Niekerk (Kakamas Water Users Association (KWUA))	GN
C Williams (KWUA)	CW
AG Visser (Department of Water Affairs (DWA))	AV
CB Kriel (KWUA)	CK
J Kriel	JK
O Visser (Augrabies Boerevereeniging)	OV
AD Malan (Augrabies Boerevereeniging)	AM
O Thebe (DWA)	OT

Project team:

N Theron (RVM 1 Hydro Electric Power)	NT
N West (Entura)	NW
B Whittaker (Milkwood Communications)	BW
N Smith (Smith, Ndlovu and Associates)	NS
L Corbett (Aurecon South Africa)	LC

2. Welcome

B Whittaker (BW) welcomed attendees to the public meeting and explained that the purpose of the meeting was to:

- provide a brief description of the proposed project;
- present contents of the Draft Basic Assessment Report (BAR) for the proposed hydropower stations; and
- provide an opportunity for Interested and Affected Parties (I&APs) to comment on the Draft BAR.

BW explained that portions of the presentation would be presented in English and portions would be presented in Afrikaans, but that it would be projected in both languages. Should anyone have trouble understanding a section, BW continued, they were to note this and it would be presented in the second language. BW stated that questions and comments should be made in the language of choice of the participant.

A copy of the presentation is included in Annexure 1 of these meeting notes.



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3. Summary of discussion

F van Rooyen (FR) asked if there had been any consultation with the people of the Riemvasmaak Trust regarding the proposed projects. N Theron (NT) responded that he had given a presentation of the projects to the people of the Riemvasmaak Trust and that they were aware of the project.

A Visser (AV) queried whether the landowners of the farms crossed by the above-ground power line had been notified of the line and project. LC noted that this was a requirement of the National Environmental Management Act (No. 107 of 1998) and that the landowners were aware of the proposed projects.

AV noted that the Riemvasmaak Trust land was managed by SANParks. LC agreed that this was the case.

FR queried what was meant by 'mitigation'. LC responded that mitigation was recommendations put forward to reduce negative impacts or improve positive impacts for example burying infrastructure to minimise visual impacts.

AV wondered if the impact of the weir on upstream agriculture had been calculated. NW responded that the weir would be small (less than 5 m high from the river substrate). The weir would be sized such that any flooding upstream would be limited to below the nearest upstream branch in the river as any flooding more than this would result in the water being lost down the side branch. As such no impact on agriculture was anticipated.

AV indicated that he was concerned about the effects of the weir during flooding and whether the weir would hamper the subsurface drainage at the Rhenosterkop Island upriver. He indicated that DWA would not consider a Water Use Licence for the proposed projects until this had been considered. NW noted that the project team wished to work with DWA to ensure that these concerns were addressed. He noted that detailed contour information had recently been obtained and that hydraulic modelling of the effects of the weir would be undertaken.

AV continued that he had not noted the Environmental Flow Requirements (EFR) in the Draft BAR and that it was important that a minimum of at least 30 m³/s would always flow to the Augrabies falls. LC responded that tables indicating the EFR for a Present Ecological State of B and C were included in the impact section in Annexure F of the Draft BAR as well as in the aquatic ecology study. NT added that he would engage with SANParks to come to an agreement as to how much water should flow over the falls, although the EFR would be taken as a minimum requirement.

AV asked where and how the through flow would be measured and by whom as DWA would not take on this responsibility. NW responded that the water flowing through the hydropower stations would be measured but that no provision had been made for measuring the flow through the weir as the two gauges upstream at Kakamas and Neus would be used to estimate the flow. AV noted that large volumes of water were abstracted between Kakamas and the proposed weir site and that SANParks should be able to see the flow volume and shut down the hydropower stations if the flow was too low. LC noted that this would be investigated further.

FR noted that SANParks had not yet commented on the Draft BAR and asked if there had been

any consultation with SANParks prior to the Draft BAR being published. NT noted that he had consulted with SANParks previously and that Dr Hendricks of SANParks had indicated that he would consider the matter. Dr Hendricks noted that SANParks would engage in the Basic Assessment process and provide comments in that process.

FR queried why the impact on tourism was considered to be low (positive) as he disagreed with this assessment as the water flowing over the falls would decrease. LC noted that the socio-economic study had considered hydropower stations globally and it had found that tourists were attracted to the stations to understand the working of the stations. The proposed projects would allow tourists to view the hydropower stations, should the Riemvasmaak Trust and SANParks allow this. LC continued that the flow over the falls was highly variable and that the proposed diversion of some of the flow would effectively shift the falls volume a month closer to the winter flow volume (i.e. a month early) and would delay the spring flow volume by a month i.e. the low flow period would be slightly longer than currently experienced but would still be within the existing variable flow of the falls.

N du Plessis (NP) queried if there would be diversion of greater volumes of water at night time, as he was concerned about the visual impacts of this as the falls were lit at night time. NT noted that this was not currently proposed.

O Visser (OV) indicated that he was concerned that the weir would negatively impact on the drainage of Rhenosterkop Island and wondered if a gate could be built in the weir. This gate could then be opened if drainage became an issue. NW noted that the design of the weir was still at an early stage but that gates could be considered. He continued that gates had a number of disadvantages such as increasing the likelihood of failure of the weir but that this option would be looked at in more detail.

A Malan (AM) noted that all the route alternatives were within the 1 in 20 year flood line of the Orange River. He wondered what the effect of floods would be on the hydropower stations and pipes. NW noted that the powerhouses would be kept above the flood line. He continued that the pipes would be buried and the ground level would be restored to its original level and therefore floods would pass over the pipes without any effect.

FR noted that all the proposed alternatives were within the park's visual buffer zones and queried how this had been taken into account. LC noted that the visual study had considered this and had weighted impacts according to the sensitivity of the viewers e.g. tourists within the park were considered to be more sensitive viewers and hence the impact on park users was weighted more. The study had found that the visual impacts would be higher during the construction phase but that these impacts could be mitigated to an acceptable level.

FR questioned whether the park management plan had been considered. LC noted that the site fell within the 'Primitive' and 'Rural' zones of the park management plan and that these zones did not allow for structures such as hydropower stations. LC continued that the Draft BAR noted this and noted that the issue of the zoning of the sites would need to be considered in a separate process whereby application would need to be made to revise the management plan or similar.

NP wondered if any construction would take place at night as this may be heard at the park's rest

camp. NT noted that concrete may be poured at night but that only the weir and forebay required concrete. NT continued that should the contractor be delayed and needed to work at night approval could be sought from SANParks to undertake night time work. LC noted that the noise screening study had indicated that no noise impacts were expected.

AV queried why application should be made to revise the park's management plan if the plan was in place to protect the park from developments not suited to the park's purpose. N Smith noted that the Primitive zone allowed for the inclusion of areas originally degraded but rehabilitated and as such consideration could be made for an area that would be briefly impacted then rehabilitated within such zoning. NS continued that it would need to be determined if the plan could be revised and could allow for the proposed developments. FR noted that if the management plan needed revision the Minister of the Department of Environmental Affairs would need to approve the revision.

FR questioned what other projects similar to that proposed were operating elsewhere in the world and whether these projects were successful. NW noted that Hydrotas in Tasmania, Australia operated 14 hydropower stations similar to those proposed and that three of these were within world heritage sites. NP noted that the proposed projects were however the first in South Africa to be within a national park.

AV wondered why photovoltaic panels could not be installed on all the roofs in Kakamas to supply power hence removing the requirement for hydropower. NT responded that it was not currently possible to feed power produced by an individual into the grid. Furthermore, South Africa has set a target to obtain 120 MW of energy from hydropower stations in order to improve the mix of generation facilities. NT added that hydropower was also the cheapest renewable power and that it was baseload power, meaning it could operate 24 hours a day, seven days a week, which solar panels could not do without storage.

4. Conclusion

BW thanked the participants for their valuable input and encouraged I&APs to submit comments so that issues could be responded to and informed decisions could be made by the authorities. She noted that I&APs had until 13 February 2013 to submit comments on the Draft BAR and that there would be a 21 day comment period on the Final BAR.

The meeting closed at 19h00.

APPENDIX C: ORANGE RIVER RELEASE TABLES 2015/2016 & 2016/2017

Releases 2015/2016 Gariep & VDK

Month	Gariep Dam		Vanderkloof Dam	
	(million m ³)	(m ³ /s)	(million m ³)	(m ³ /s)
May 15	191.3	71.423	85.1	31.785
Jun 15	186.5	71.952	91.4	35.277
Jul 15	217.5	81.205	117.6	43.888
Aug 15	226.1	84.426	165.7	61.873
Sep 15	202.1	77.971	220.6	85.096
Oct 15	187.9	70.144	245.9	91.800
Nov 15	99.5	38.375	252.2	97.316
Dec 15	76.6	28.613	263.8	98.494
Jan 16	82.3	30.733	251.2	93.785
Feb 16	105.8	43.355	213.4	87.413
Mar 16	149.2	55.699	197.6	73.772
Apr 16	198.6	76.604	110.5	42.629
Annual	1 923.38		2 214.97	70.19
2014/15	2 105.09		2 182.83	

WATER IS LIFE - SANITATION IS DIGNITY Toll Free: 0800 200 200 www.dwa.gov.za

Releases 2016/2017 Gariep & VDK

Month	Gariep Dam		Vanderkloof Dam	
	(million m ³)	(m ³ /s)	(million m ³)	(m ³ /s)
May 16	186.3	69.545	85.4	31.867
Jun 16	191.1	73.724	91.7	35.368
Jul 16	199.9	74.616	117.9	44.001
Aug 16	190.3	71.049	166.1	62.033
Sep 16	161.6	62.358	221.1	85.315
Oct 16	149.7	55.888	246.5	92.036
Nov 16	83.7	32.294	252.9	97.567
Dec 16	64.5	24.079	264.5	98.747
Jan 17	69.3	25.863	251.8	94.026
Feb 17	89.1	36.485	213.9	87.638
Mar 17	125.5	46.874	198.1	73.962
Apr 17	167.1	64.466	110.8	42.738
Annual	1678.00	53.17	2220.67	70.37

WATER IS LIFE - SANITATION IS DIGNITY Toll Free: 0800 200 200 www.dwa.gov.za

Source: Mr AG Visser, Chief Engineer: Central Operations, DWS Kimberley

APPENDIX D: DEA'S ACCEPTANCE OF SCOPING REPORT



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Federe Building · 315 Pretorius Street · PRETORIA
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

NEAS Reference: DEA/EIA/0002124/2013

DEA Reference: 14/12/16/3/3/2/600

Enquiries: Ms Mpho Monyai

Telephone: 012-310-3938 Fax: 012-320-7539 E-mail: mmonyai@environment.gov.za

Miss Louise Corbett
Aurecon (Pty) Ltd
P.O Box 494
CAPE TOWN
8001

Fax No: (021) 526 9500
Tel No: (021) 526 6013

PER FACSIMILE / MAIL

Dear Miss Corbett

ACCEPTANCE OF SCOPING REPORT FOR THE PROPOSED 40MW HYDROPOWER STATION ON THE FARM RIEMVASMAAK, THE RAINDER OF FARM NO 497 AND PORTION 1 OF FARM NO 498, ON THE ORANGE RIVER IN THE VICINITY OF AUGRABIES FALLS NATIONAL PARK, GARIB LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE.

The Final Scoping Report (FSR) and Plan of Study for Environmental Impact Assessment dated September 2013 and received by the Department on 16 September 2013 refer.

The Department has evaluated the submitted FSR and the Plan of Study for Environmental Impact Assessment dated September 2013 and is satisfied that the documents comply with the minimum requirements of the Environmental Impact Assessment (EIA) Regulations, 2010. The FSR is hereby accepted by the Department in terms of regulation 30(1) (a) of the EIA Regulations, 2010.

You may proceed with the environmental impact assessment process in accordance with the tasks contemplated in the Plan of Study for Environmental Impact Assessment as required in terms of the EIA Regulations, 2010.

Please ensure that comments from all relevant stakeholders are submitted to the Department with the Final Environmental Impact Report (EIR). This includes but is not limited to:

- Northern Cape Department of Environmental Affairs and Nature Conservation.
- National Department of Water Affairs: Water Quality and Conservation section.
- Provincial Department of Water Affairs: Water Quality and Conservation section.
- Department of Agriculture, Forestry and Fisheries.
- All Northern Cape Agricultural Bodies and Farmers that fall within the proposed development jurisdiction.
- The Riemvasmaak Community Trust.
- SAHRA.

- Eskom.
- South Africa National Parks (SANParks), both the Augrabies Falls National Park as well as the SANParks Head Office in Groenkloof Pretoria, Dr Howard Hendriks.
- Both the local and district municipalities within whose jurisdiction the proposed development falls.

Proof of correspondence with the various stakeholders must be included in the Final EIR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments.

Application reference Numbers:

Please note that the reference number for this project has been changed from 14/12/16/3/3/1/681 to 14/12/16/3/3/2/600 and NEAS number from DEA/EIA/0001403/2012 to DEA/EIA/0002013/2013 due to the upgrade of the process from BAR to Scoping/EIR. Please quote these reference numbers for any future correspondence relating to this project. Also note that previous application 14/12/16/3/3/1/681 (BAR process) has been withdrawn and the file has been closed.

Activities applied for:

Please ensure that all relevant listing notice activities applied for, are specific and that it can be linked to the development activity or infrastructure as described in the project description. The application form needs to be amended to specify the relevant activities, please omit the activities which are not applicable to the project.

Need and desirability:

Confirmation of electricity shortage in the Northern Cape must be obtained from ESKOM in order for the Department to be able to determine the need and desirability of the activity, including the demand for the activity and the desirability of the project in line with the current land use regime of the area. This must be included in the EIR.

Activity Position

Please provide the co-ordinates for the center point of each structure and/or infrastructure, note that for linear activities such as roads, channels and pipeline, the start, middle and end point of each must usually be provided. In this case, due to the sensitive nature of the receiving environment, the department requests you to provide the exact co-ordinates of the linear activities.

Site Plans/ facility illustrations:

You are required to provide the Department with the final site plans and/or facility illustrations, on A3 format and in colour, which must clearly indicate the following:

- Project associated infrastructures;
- Foundation footprint of the infrastructures;
- Construction period;
- Laydown footprint;
- Internal roads and access roads indicating width and length of the roads;
- Drainage lines and rivers;
- Borrow pits;
- Spoil heaps (Location, size and extent);
- Temporary storage of topsoil and subsoil during construction (Location, size and extent);
- Closest towns;
- Environmental sensitive features and buffer areas;

- Current land use and land use zoning; and
- All "no-go" areas.

Locality Map

Please ensure that the Final EIR includes at least one A3 regional map of the area. The locality maps included in the final EIR must illustrate the different proposed alignments. The maps must be of an acceptable quality and as a minimum, must have the following attributes:

- Project site;
- Alternatives;
- Cardinal points;
- Co-ordinates;
- Legible legends;
- Latest land cover;
- Vegetation types of the study area.
- Borders of the Augrabies Falls National Park and other protected areas.

Specialist studies

The Scoping Report proposed to undertake the following specialist studies during the EIA phase:

- Visual Impact Assessment Study;
- Fauna Impact Assessment;
- Botanical Assessment;
- Cultural and Heritage Impact Assessment Study;
- Aquatic and Hydrological Impact Assessment;
- Socio-Economic and Tourism Assessment;

The Department agrees with the proposal, however, with the addition of:

- Agricultural Impact Assessment;

The specialist studies must be completed and included in the Final EIR in order for the Department to make an informed decision on this proposed project.

Please note that in terms of Regulation 17 of the EIA Regulations, 2010; GNR 543 as corrected by Correction Notice 2 of 10 December 2010, GN No. R. 1159, an EAP or person compiling a specialist report or undertaking a specialised process, appointed in terms of regulation 16(1) , must be independent; and perform the work relating to the application in an objective manner, even if these results in views and findings which are not favourable to the applicant.

Also note that the internal data, information or an internal study can be used, attached and referred to in the EIR, provided that it is not referred to as a specialist study. Alternatively, if internal specialists within the same company with the EAP undertaking the EIA process need to be used to compile the specialist studies, the reports must be sent for independent review if pre- agreed upon by the Competent Authority. The external specialist's findings and recommendations must be provided to the Department.

Cumulative Impact Assessment:

Please describe the cumulative impacts in terms of other similar or diverse activities as a result of the proposed project and indicate how it will be managed and mitigated. It should be noted that Orange River is an international water resource bodies, and cumulative impacts must be considered both locally and internationally. The impact of the possible change in the flow regime in the Orange River on the RAMSAR site at the mouth of the Orange River must also be assessed in detail.

Public Participation process:

Meeting held on 28 August 2013 at Augrabies Falls National Park refers, please note that the minutes of this meeting are not attached and must form part of the Draft and Final EIR.

The project must be advertised locally, provincially and nationally.

In addition, the following amendments and additional information are required for the EIR:

- a) Details of the future plans for the site and infrastructure after decommissioning and the possibility of upgrading the proposed infrastructure to more advanced technologies.
- b) The total footprint of the proposed development should be indicated. Exact locations of the structures and associated infrastructure should be mapped at an appropriate scale.
- c) A Water Use License will be required; and the proof of application for a license needs to be submitted to DEA.
- d) Possible impacts and effects of the development on the vegetation ecology with regard to lowland-highland interface in the locality should be indicated.
- e) Possible impacts and effects of the development on the surrounding areas and aquatic ecosystem should be indicated.
- f) The EIR should include information on the following:
 - Environmental costs vs benefits of the hydropower activity; and
 - Economic viability of the facility to the surrounding area and how the local community will benefit.
- g) Information on services required on the site, e.g. sewage and refuse removal.
- h) A construction and operational phase EMP to include mitigation and monitoring measures.
- i) Should blasting be required, appropriate mitigation measures should be provided.
- j) The EIR must also include the rehabilitation plan and water pollution contingency plan.

You are further advised in terms of regulation 30 (2), of certain matters that may prejudice the success of the application. **Therefore the Department requires you to note the following:**

- The proposed development falls within a National Critical Biodiversity Area, Gariiep Centre of Endemism, Priority Conservation Action Areas, and National Protected Areas Expansion Strategy.
- The proposed development is not consistent with the Augrabies Falls National Park objectives of protecting the hydrological uniqueness, geology and the environment, and the National Protected Areas Expansion Strategy, 2008. Certain infrastructure of the development is located within the Augrabies Falls National Park and on the buffer zone of the park, therefore; Management Authority viz; SANParks' approval in terms of with NEMPAA, 2003, section 50 (5) of National Environmental Management: Protected Areas Act, 2003, is required and must be obtained, prior to the submission of final EIR.

- At this stage the Department is concerned that development will have more negative impacts on the environment as compared to its economic and social value, looking at impacts on the biodiversity of the area, impacts on the Augrabies Falls National Park and its scenic value of the water fall, impacts on water resource and its aquatic ecosystem.
- The alluvial vegetation where the pipeline infrastructure is proposed to be placed is listed as endangered or threatened and the overall area is highly sensitive for both biodiversity and avifaunal species.
- It should be noted that there is already environmental concerns regarding the flow regime which has downstream impacts on the Orange River Mouth estuary, a Ramsar site, and the Agricultural irrigation schemes downstream.
- The Department suggest that other alternative sites, which do not fall inside or close to the Augrabies Falls National Park and that might not impact on the water flow of the waterfall, be considered.

Shapefiles

A shapefile of the preferred development layout/footprint must be submitted to this Department. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shape file must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 (please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title.

The shape file must be submitted to:

Postal Address:

Department of Environmental Affairs
Private Bag X447
Pretoria
0001

Physical address:

Department of Environmental Affairs
Fedsure Forum Building (corner of Pretorius and Lillian Ngoyi Streets)
4th Floor South Tower
315 Pretorius Street
Pretoria
0002

For Attention: Muhammad Essop

Integrated Environmental Authorisations: Strategic Infrastructure Developments

Telephone Number: (012) 395 1734

Fax Number: (012) 395 7539

Email Address: MEssop@environment.gov.za

Please note that for further clarity on shapefiles, you may call or email Mr. Muhammad Essop using the contacts above.

General

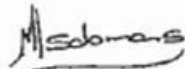
The applicant is hereby reminded to comply with the requirements of regulation 67 with regard to the time period allowed for complying with the requirements of the Regulations, and regulations 56 and 57 with regard to the allowance of a comment period for interested and affected parties on all reports submitted to the competent authority for decision-making. The reports referred to are listed in regulation 56(3a-3h).

Further, it must be reiterated that, should an application for Environmental Authorisation be subject to the provisions of Chapter II, Section 38 of the National Heritage Resources Act, Act 25 of 1999, then this Department will not be able to make nor issue a decision in terms of your application for Environmental Authorisation pending a letter from the pertinent heritage authority categorically stating that the application fulfils the requirements of the relevant heritage resources authority as described in Chapter II, Section 38(8) of the National Heritage Resources Act, Act 25 of 1999.

You are requested to submit two (2) copies of the Environmental Impact Report (EIR) to the Department and at least one electronic copy (CD/DVD) of the complete final report with the hard copy documents.

You are hereby reminded of Section 24F of the National Environmental Management Act, Act No 107 of 1998, as amended, that no activity may commence prior to an environmental authorisation being granted by the Department.

Yours faithfully



Mr. Ishaam Abader

Deputy Director-General: Legal, Authorisations, Compliance and Enforcement

Department of Environmental Affairs

Signed by: Ms. Milicent Solomons

Designation: Director: Integrated Environmental Authorisations

Date: 20/10/2013.

CC:	JCD Theron	RVM 1 Hydro Electric Power (Pty) Ltd	Tel: 021 927 5501	Fax: 086 6356 809
	Park Manager	Augrabies Falls National Park, SANParks	Tel: 054 4529 200	Fax: 054 451 5003
	Dr H Hendricks	SANParks	Tel: 012 4265 165	Fax: 012 343 2832
	Ms E Swart & N Uys	Northern Cape Department of Environment & Nature Conservation	Tel: 053 807 7300	Fax: 053 8077 328
	The Municipal Manager	Kal! Garib Local Municipality	Tel: 054 431 6300	Fax: 086 5765 114

APPENDIX E: WATER USE LICENCE APPLICATION AND LETTER OF ACKNOWLEDGEMENT

OUR REF: M1473 3015



P O Box 12051, Dorpspruit, 3206
165 Boom Street, Pietermaritzburg, 3201
Tel: +27 (0)33 345 3530, Fax: +27 (0)33 342 7728
E-mail: info@mbbpmb.co.za
Website: www.mbb.co.za

Civil, Agricultural, Structural and Environmental Engineering
Consulting Engineers (Pmb)

14 May 2015

Department of Water and Sanitation
Louis Vale Road
Uppington
8801

ATTENTION: Ms Melinda Meyer

Dear Madam

WATER USE LICENCE APPLICATION FOR RVM HYDRO ELECTRIC POWER PROJECT

MBB Consulting Engineers has been appointed by RVM 1 Hydro Electric Power (Pty) Ltd to assist them with a Water Use Licence Application (WULA). RVM 1 Hydro Electric Power (Pty) Ltd, would like to apply for a water use licence in terms of Section 21(a), (b), (c), (e), (g), (h) and (i) of the National Water Act, 1998 (Act 36 of 1998) for the construction of a hydropower facility with an approximate capacity of 40 Megawatts on the Orange River, near the Augrabies Falls.

The applicant is aware that the water use license application will not be fully processed until preferred bidder status has been awarded under the Department of Energy's Renewable Energy Independent Power Producer Procurement Program (REIPPPP). However, to become a preferred bidder the applicant requires the Department of Water and Sanitation to provide proof that a water use licence application has been prepared for the project. This proof is in the form of a receipt for the application fee and a non-binding letter stating that there is sufficient water available in the resource for the proposed scheme. The bid for the RVM hydro power scheme will be submitted in Round 5 of the REIPPPP, in August 2015.

The following documents are attached as part of the water use licence application:

- Pre-Feasibility Report (and memo regarding increase to a 40 MW scheme)
- Draft Environmental Impact Report
- DW 758 Company Form (including certified copy of identity document and company registration certificate)
- DW 760 Section 21 (a) Taking water from a water resource
- DW 762 Section 21 (b) Storing water (and DW 793 Classification)
- DW 763 Section 21 (c) Impeding or diverting flow
- DW 765 Section 21 (e) Engaging in a controlled activity
- DW 905 Section 21 (g) Disposing of waste with detrimental impacts
- DW 780 Section 21 (h) Disposing in any manner of waste from power generation



Directors
R D Heinsohn, P Moodley, A G Rennie, D Schaefer, M C Udell, M Zartmann (Managing)

MBB Services International, holding company of
MBB Consulting Services (Eastern Cape) (Pty) Ltd, MBB Consulting Services (Nelspruit) (Pty) Ltd,
MBB Consulting Services (Pmb) (Pty) Ltd, MBB Consulting Services (South) (Pty) Ltd,
ACER (Africa) Environmental Management Consultants, MBB Namibia

Registered Firm: MBB Consulting Services (Pmb) (Pty) Ltd Reg. No. 2005/009119/07
T/A MBB Consulting Engineers

Member of Consulting Engineers of South Africa



2

- DW 768 Section 21 (i) Altering the bed, banks or characteristics of a watercourse
- DW 788 Supplementary form for power generation
- DW 901 Property Information (including title deeds for each property and a letter of support from the RVM Community Development Trust)
- DW 781 Section 21 (c) and (i) Supplementary Form
- Appendix A – Locality Map
- Appendix B – Site Layout Plans
- Appendix C – Engineering Design Drawings
- Appendix D – Peak Inundation Map (1:100 year)
- Appendix E – Draft Construction Method Statement
- Appendix F – Environmental Management Programme
- Appendix G – Specialist reports for the EIA
- Appendix H – Storm Water Management Plan

We trust that this information is as required and should you require further information please contact us.

Yours faithfully

MBB CONSULTING ENGINEERS (PMB)

Edwin Jenkins



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Northern Cape Region
Lower Orange Water Management Area
Private Bag X5912, Upington, 8800
Tel: (054) 338-5800, Fax: (054) 334-0205, www.dwa.gov.za

Enquiries: **Shibambu C.S**

E-mail: Shibambu@dwa.gov.za

The Project Manager

RVM 1 Hydro Electric Power (PTY) Ltd

PO Box 428

Tableview

7439

ATTENTION: Mr. N. Theron

Dear Sir

CONFIRMATION OF WATER AVAILABILITY FOR THE PROPOSED 40 MW HYDROPOWER FACILITY: RVM HYDROELECTRIC (PTY) LTD NEAR AUGRABIES IN THE ORANGE PROTO-CMA, NORTHERN CAPE OPERATIONS.

The Department of Water and Sanitation hereby acknowledge receipt of your correspondence dated 22 May 2015 detailing the intention for the establishment of 40 MW hydroelectric generating facilities and associated infrastructure near Augrabies Falls in the Khai Garib Municipality in the Northern Cape.

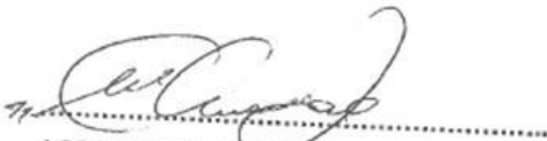
Following due considerations of the water resource availability in the relevant catchment area, it was determined that sufficient water is available to meet the water requirements of the proposed project, requiring approximately 98 550 m³ during the 36 month duration of the construction phase and 38 m³/s during the operational phase of 20 year long duration, which is a non-consumptive water use.

This Department wish to confirm that a full assessment of the application for water use authorization by the applicant will only be undertaken in the event that the project proponent has been appointed as

a preferred bidder under the Department of Energy expanded and accelerated renewable independent power producer procurement program scheduled for 2015 or round 5 bid submission scheduled for 2016.

This letter of confirmation is non-binding and should not be construed as authorisation to engage in any water use as defined in Section 21 of the National Water Act, 1998 (Act No. 36 of 1998) or that a water use license will necessarily be granted nor does it grant exemption from the requirements of any other applicable act, ordinance, regulation or by-law.

Yours faithfully




ACTING CEO: ORANGE PROTO-CMA

Date: 8/7/2015



APPENDIX F: COMMENTS FROM BIRDLIFE SOUTH AFRICA AND EAP'S RESPONSES

Comments dated 22nd March 2016



BirdLife
SOUTH AFRICA
Giving Conservation Wings

BirdLife South Africa is a partner of BirdLife International, a global partnership of nature conservation organisations.
Member of IUCN (International Union for Conservation of Nature).
Reg No: 001 – 298 NPO
PBO Exemption No: 930004518

22 March 2016

Shawn Johnston
Process Specialist
Sustainable Futures ZA
P.O. Box 749 Rondebosch 7701
Cape Town, South Africa

E-mail: swjohnston@mweb.co.za

Dear Shawn,

Re: BirdLife South Africa Riemvasmaak Run-of-River Hydro EIA Comments.

Regarding the proposed development of a Run-of-River Hydro within the boundary of the Augrabies National Park as described, BirdLife South Africa remains opposed. Our technical objections have not changed since our initial comments made in 2013 (please find attached).

For BirdLife South Africa, the assessment of the landscape as being so worthy of protection as to be accorded South African law's highest conservation status, that of a National Park, is a principle that must be upheld.




Across the country, protected areas of all legal classes are under constant threat of development. These areas are declared following extensive thought and engagement. For their status to be undermined through the EIA process significantly weakens South Africa's ability to conserve the environments that have been identified as worthy of the highest level of protection, as well as the country's ability to deliver on a large range of environmentally related multi-lateral agreements to which South Africa is a signatory, including, but not limited to the Convention on Biological Diversity, Convention Concerning the Protection of the World Cultural and Natural Heritage and the Convention on the Conservation of Migratory Species of Wild Animals.

To this end we support our colleagues at the South African National Parks in their continued objection to this project and encourage the Department of Environmental Affairs to continue to uphold the conservation status of landscapes that fall within Protected Areas.

Yours sincerely

Simon Gear
Policy & Advocacy Manager

Idell House, 17 Hume Road
Dunkeld West, Gauteng 2196
Private Bag X5000, Parklands
Johannesburg, Gauteng 2121, South Africa
Tel: +27 (0)11 789 1122
Fax: +27 (0)11 789 5188
Email: info@birdlife.org.za
www.birdlife.org.za



Honorary Patron: Mrs Gaynor Ripart, Dr Pierre van Middelkoop, Mr Mark Shuttleworth

EAP's Responses BLSA letter dated 22nd March 2016

This letter, from the Policy & Advocacy Manager, concludes that “... *we support our colleagues at the South African National Parks in their continued objection to this project and encourage the Department of Environmental Affairs to continue to uphold the conservation status of landscapes that fall within Protected Areas*”.

It is difficult to respond to a general objection of this nature, in which there is no indication that the commentator has read the EIA Report and supporting document in order to determine if the objections have been considered and satisfactorily addressed.

Accordingly we note the comments. The EIA process in its entirety, and the reports prepared as part of this process, is our response.

Comments dated 4th October 2016



Member of IUCN, International Union for Conservation of Nature and Natural Resources
Reg No: 001 - 298 NPO
PBO Exemption No: 930004519

4 October 2013

Mr Nelis Bezuidenhout
Aurecon
P.O. Box 494
Cape Town
8000

By e-mail: nelis.bezuidenhout@aurecongroup.com
By phone: 021 526 6031
By fax: 021 526 9500

Dear Mr Bezuidenhout

Proposed RVM 1 Hydro power station at Augrabies Falls National Park

We have just been made aware of the proposed RVM 1 Hydro Electric Power (Pty) Ltd 40 Megawatt (MW) hydropower station on the Orange River at Augrabies Falls National Park (AFNP) by an IP.

BirdLife South Africa supports renewable energy generation provided by technologies such as hydro, wind and solar. However, these developments can cause the loss of habitat for and displacement of bird species, particularly threatened, endemic and range-restricted species. Therefore, the siting of these projects is important and protected areas, Important Bird and Biodiversity Areas (IBAs), bird migration routes and Critical Biodiversity Areas (CBAs) should be avoided to properly conserve our country's biodiversity, ensure water security and maintain ecosystem functioning and services.

We note that this development will affect part of the AFNP and its buffer zone, on land owned by SANParks and the Riemvasmaak community and managed by SANParks for conservation. Besides being a National Park (under the National Environmental Management: Protected Areas Act (57 of 2003)), it is also a global IBA (SA029). Developments that cause habitat loss should not be allowed within such protected areas which are important for the conservation of our biodiversity. The Orange River ecosystem is a CBA and threatened ecosystem (listed as Endangered). We note that alternative sites listed are Neusberg and Boegoeberg. Furthermore, that the applicant has found that, of the sites assessed, only Neusberg Weir, Augrabies Falls and Boegoeberg Weir are sites that might offer a financially viable



Member of IUCN, International Union for Conservation of Nature and Natural Resources
Reg No: 001 - 298 NPO
PR O Examination No: 930004518

project under the REIPPP program. Therefore, we are of the opinion that it would be better for the maintenance of ecological integrity and conservation of our biodiversity to expand the proposed Boegoeberg hydro project and/or Neusberg to limit such disturbance to one focal area and reduce cumulative impacts on the Orange River system. The alternatives of expanding these two developments should be thoroughly assessed so that the best practicable environmental option is selected. If it is considered feasible to upgrade the current application from 10 MW to 40 MW, it should also be feasible to do the same at the other two sites.

An avifauna specialist should do the specialist study instead of bird impacts only being incorporated in a general ecological report by an ecologist, due to the threatened status of this ecosystem and its status as an IBA. Specialist knowledge is needed on the birds and seasonal bird monitoring for the EIA to determine the various possible impacts. Of the issues to be investigated are the following:

- The possible flooding of nesting sites in sections where the water level will be permanently raised. Flooding is highly controlled because of the dams upstream and so the river does not flood annually as part of a natural cycle.
- An assessment is needed of the impact this development will have on the IBA as a whole.
- A list of all the threatened and protected bird species under the National Environmental Management: Biodiversity Act (NEM:BA) and NCNCA (?) legislation needs to be compiled and impacts on these populations assessed.
- It is stated in the CRR that the powerhouse, pipeline and powerline will be buried. This is an important mitigation measure, especially for the powerline as it will impact on birds located right next to the river. Bird diverters and flappers, while reducing impacts of bird collisions with powerlines, are not that effective in wetland areas especially in bird migration corridors.

Cumulative impacts of all renewable energy projects along the lower Orange River system should be assessed. Few intact, natural stretches of the Orange River remain and slowly these are being whittled away by various greenfields developments and activities which include agricultural expansion, solar energy projects, mining, alien plant invasion due to land degradation from poor land management, regulated water flow due to dams and weirs, and so on.

South African National Parks (SANParks) have emphasised that "The Augrabies Falls National Park, with its magnificent falls pressing through a narrow rock ravine, remains the main attraction of the Northern Cape." A thorough study is needed as part of the EIA on the effects of the project on tourists and tourism with input from SANParks specialists.

SANParks also have a large number of specialists in their employment and their inputs should be decisive in the final outcome.



EAP's Responses to BLSA letter dated 4th October 2013

Comment:

Birdlife note that "Developments that cause habitat loss should not be allowed within such protected areas, which are important for the conservation of our biodiversity. The Orange River ecosystem is a CBA and threatened ecosystem (listed as Endangered)."

Response:

These aspects received careful consideration during the EIA process, and strongly influenced the assessment of the significance of potential impacts and the mitigation measures proposed to address the impacts.

Comment:

They note further that "that alternative sites listed are Neusberg and Boegoeberg. Furthermore, that the applicant has found that, of the sites assessed, only Neusberg Weir, Augrabies Falls and Boegoeberg Weir are sites that might offer a financially viable project under the REIPPP program. Therefore, we are of the opinion that it would be better for the maintenance of ecological integrity and conservation of our biodiversity to expand the proposed Boegoeberg hydro project and/or Neusberg to limit such disturbance to one focal area and reduce cumulative impacts on the Orange River system. The alternatives of expanding these two developments should be thoroughly assessed so that the best practicable environmental option is selected. If it is considered feasible to upgrade the current application from 10 MW to 40 MW, it should also be feasible to do the same at the other two sites."

Response:

When the Neusberg and Boegoeberg projects were being developed (the Neusberg HPP is now operational) the upper limit for the generating capacity of a hydroelectric power project in terms of the Department of Energy's REIPPP programme was 10MW. The maximum potential installed capacity at the two sites, in terms of available head and limitations on the quantities of water that can be diverted from the river into the power station without unreasonably impacting on the ecological functioning of the river between the diversion point and the tailrace outfall, is about 13MW at Neusberg and a little more than 12MW at Boegoeberg. Notwithstanding the REIPPP limitation of 10MW it is therefore not possible to "upgrade" either of the projects to 40MW.

Comment:

Birdlife note that: *“An avifauna specialist should do the specialist study instead of bird impacts only being incorporated in a general ecological report by an ecologist, due to the threatened status of this ecosystem and its status as an IBA.”*

Response:

The specialist selected to undertake a faunal study was Professor William Branch, who is currently Honorary Curator Emeritus at the Port Elizabeth Museum and a well-regarded herpetologists and ecologist with considerably knowledge of African avifauna.

Comment:

The following are issues to be investigated (a bulleted list follows in BLSA’s letter):

Comment 1: The possible flooding of nesting sites in sections where the water level will be permanently raised. Flooding is highly controlled because of the dams upstream and so the river does not flood annually as part of a natural cycle.

Response 1: The faunal study did not consider this to be a significant impact, and it was therefore not assessed as a separate impact. In Issue 1: Loss of Biodiversity the specialist stated that *“For some species, however, this (localized changes in water flow dynamics) will probably be offset by increased breeding habitat associated with the existence of the head pond and also increased water flow via the discharge tunnel into the lower ‘palaeochannel’. Similarly, increased bird numbers and diversity can be expected in the more vegetated riverine habitats in the lower ‘palaeochannel’.* Essentially the discharge of water into the paleochannel creates additional habitat for birds reliant on aquatic habitats, and thus mitigates any negative impacts. As stated by the specialist *“Due to an increase in well-vegetated riverine habitats along the lower ‘palaeochannel’ changes negative impacts on faunal diversity in the region can be expected to be self-mitigated.”* This is also assessed in the operational phase in Impact 2: Impacts due to changes in hydrology (page 43) as follows *“At low water levels the weir will retain water in a greater area of the upstream braided channels. In general this will be a positive or insignificant impact”.* And further *“The head pond will form a substantial new water body that would provide increased access to water for large mammals, birds and amphibians. This will have a generally positive impact on the fauna, although increased mortality from animals passing into the power tunnel can also be expected and should be mitigated”.*

Comment 2: An assessment is needed of the impact this development will have on the IBA as a whole.

Response 2: The AFNP (IBA ZA022) forms the nearest IBA to the project area. Further detail is provided in Section 6.2: Important Bird Areas (page 28). Impact 4 – Threats to Animal Movement (page 41) deals with this concern, where it is stated that *“The Orange River forms an important flight path for many birds, particularly water birds moving along the Orange River (e.g. Black Stork, NT), or for birds migrating between important IBAs such as the Orange River Mouth Wetlands (IBA ZA030), the AFNP (IBA ZA022) and inland seasonal wetlands, e.g. Kamfers Dam, Kimberley (IBA ZA032), e.g. Greater and Lesser flamingo (NT). As noted earlier overhead power lines form a well-documented threat to birds, particularly large threatened species such as raptors, storks and bustards.”* This impact deals with the threats to birds from powerlines, and rates the impact after mitigation as moderate, since bird flappers must be installed, and the routing from the powerhouse to the substation, and hence within the AFNP will be buried. There is no general comment on how the proposed development will affect the IBA in general terms, but it is considered unlikely that it will affect the IBA “as a whole”.

Comment 3: A list of all the threatened and protected bird species under the National Environmental Management: Biodiversity Act (NEM:BA) and NCNCA (?) legislation needs to be compiled and impacts on these populations assessed.

Response 3: Appendix 3 provides a list of bird species, including SA Red Data species, IUCN listed species and Near Endemic, restricted and migrant species. Fourteen of the possible 247 bird species in the region are threatened or near threatened globally or regionally. The most significant avian SCC recorded on site included Kori Bustard (VU), Black Stork (NT), Openbill Stork (NT), Lanner Falcon (NT), Rosy-faced Lovebird (NE), Karoo Lark (NE), Karoo Long-billed lark (NE), Black-eared Sparrowlark (NE) and Namaqua Warbler (NE). The most sensitive habitat for birds is the riparian vegetation along the Orange River and its palaeochannels. Fifteen bird species are regional or biome endemics. Impact 2: Loss of Species of Conservation Concern concludes (on page 40) that *the primary impact on SCC will be mainly related to the section of above-ground power transmission, particularly the crossing of the Orange River to connect to the existing Eskom transmission network near Augrabies.* The impact is rated as being of moderate significance. Impact 5: Loss of Species of Conservation Concern (page 35) is rated as low.

Comment 4: It is stated in the CRR that the powerhouse, pipeline and powerline will be buried. This is an important mitigation measure, especially for the powerline as it will impact on birds located right next to the river. Bird diverters and flappers, while reducing impacts of bird collisions with powerlines, are not that effective in wetland areas especially in bird migration corridors.

Response 4: See earlier responses. The power line will be underground across portions 1/497 and Rem 498 (approximately 7.5 km), but will be overhead across the river, over the Orange River and private land to the connection point (approximately 8 km).

Comment:

Cumulative impacts of all renewable energy projects along the lower Orange River system should be assessed

Response:

These are covered in Section 7.6 of the EIAR.

Comment:

A thorough study is needed as part of the EIA on the effects of the project on tourists and tourism with input from SANParks specialists.

Response:

A Socio-economic and Tourism specialist report was prepared and summarised in the Final EIA Report. Sections 7.3.7; 7.4.7, 7.5.7 and 7.6.7 deal with impacts on tourism, and tourism related impacts. Chapter 8, section 8.1 provides an extensive (two page) synopsis of the project's impacts on the socio-economic and tourism environments.

The more-recent specialist Economic Assessment (Imani 2016) found that most of the potential impacts could not be satisfactorily quantified, especially in the absence of co-operation in the study from SANParks, but that there may be a moderate positive economic benefit in the requirement for local accommodation during construction. No impact is expected on visitor numbers to the national park.

APPENDIX G: COMMENT AND RESPONSE REPORT JUNE 2016

Comments & Issues submitted on the Draft Amended Final Environmental Impact Assessment Report & the Addendum to the Draft Amended Final Environmental Impact Assessment Report, March 2016

Notes on the public review process

- On 7th April 2016 a letter was sent to all registered I&APs notifying them of the availability of the March 2016 Amended Final Environmental Impact Assessment Report (AFEIR) and the March 2016 Addendum Report for public review.
- The AFEIR and the Addendum report were clearly marked DRAFT FOR PUBLIC REVIEW.
- Two other documents – the letter from DEA informing the applicant that the September Final EIAR had been rejected, and a February 2015 Economic Assessment – were included in the package of documents for review.
- These reports had previously been submitted to DEA on 6th April 2016, and their receipt was acknowledged by letter dated 20th April 2016.
- The notification listed seven places in the Kakamas area where hard copies of the documents could be inspected, and also gave the web address of EOH CES's website, where the documents were also available.
- The review period was 7th to 28th April 2016 – 21 days as specified by DEA in the rejection letter.

Notes on the Comment and Response Report

- Issues submitted are listed in alphabetical order of the surname of the person that submitted the comment.
- Some comments were submitted by I&APs in PDF format and had to be retyped by Sustainable FuturesZA (SFZA). Minor typing errors may have occurred.
- For some comments, headings were added or words highlighted to make it easier for the reader to identify the focus of that issue.
- The response from the EAP refers to a response from the EAP team, which includes SFZA.
- For the purposes of the Comment and Response Report, any comments submitted in Afrikaans were translated to English. The original issues submitted are included in Appendix H following.

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
Kobus van Copenhagen's Comments on the Draft AFEIR			
	<p>Sir</p> <p>Your e-mail below and voice message and our telecon of 6 April 2016 refers;</p> <p>According to the voice message you wanted to deliver documents to us and according to the telecon we had, you indicated that DEA somehow "waived" the requirement for the applicants to (firstly consult with SANParks in order to obtain their instructions re. the establishment of the proper ToR for the EIA and to subsequently) obtain SANParks consent for this activity before, submission of the AFEIAR to DEA and the IAP's, for comments and final decision, thus a kind of parallel process.</p> <p>We have requested in the past that the minutes of all meetings between DEA and the applicants be recorded and forwarded to us, which DEA agreed to. We need a copy of the minutes of this meeting or of the correspondence which resulted in this outcome. It must also be noted that although your e-mail states that the Amended Final EIAR is available, we have only seen a draft document on the website, which is obviously not right.</p> <p>The rejection letter states certain requirements</p> <p>Page 3 of the rejection letter states: "The amended EIAR must be circulate(d) for notification to the I&APs for a period of 21 days."</p> <p>And also quotes from Regulation 19:</p> <p>"(1) No development contemplated in section 50(5) of the Act shall be implemented-</p> <p>(a) In any area other than an area specifically set aside for such development in a management plan; and</p> <p>(b) Before a management authority has indicated in writing the nature and extent of the strategic or environmental impact assessment required for the development."</p> <p>This requirement is also to inform the IAPs of SANParks decision regarding its exclusive mandate and obligation, to ensure that our National Parks are maintained unspoiled by activities unrelated to conservation and tourism, for the benefit of future generations. Thus; your effort to circulate this "amended" FEIAR without providing the required documented proof of SANParks consent at the same time and how the Park Management Plan has already been changed to enable them to consider it and to arrive at a positive outcome for the applicants, would be pre-emptive, since regulation</p>	<p>Kobus & Hannecke van Copenhagen, comment by e-mail, 07 April 2016</p>	<p>Shawn Johnston: Dear Mr. Kobus van Copenhagen, Thank you for your e-mail response. If you gave me the opportunity to clarify about the delivery of documents you would have known what I was trying to clarify. Instead you became highly emotional and insulted me over the telephone and indicated that you did want to talk to me any further. At that point I thanked you for the insult and we ended the telephone call. I really feel aggrieved about your attitude and insults towards me. At this point I regard it as water under the bridge. Sir, your comments and attachment in this e-mail dated 07 April 2016, at 12:29:37 PM SAST are noted for the record. Your e-mail will be processed into the final documents at the end of the 21-day comment period. Sincerely, Shawn Johnston Process Specialist Sustainable Futures ZA</p> <hr/> <p>EAP response: The commentator is mistaken in suggesting that there was an attempt to circumvent the process set out in the NEMA EIA Regulations and the NEM: PAA and its Regulations. The process of review specified by DEA in the rejection letter (with which the commentator is recommended to familiarise himself) can be summarised as follows:</p> <ul style="list-style-type: none"> • Making draft documents available for public review and comment.(Completed) • Making necessary changes to the documents as a result of valid public

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No.	Issue	Raised by	Response from CES EIA team or Hydro SA
	<p>19 quoted above clearly states the sequence (pre-conditions) on which the determinations can be made, i.e.</p> <p>Firstly the management plan MUST allow for the proposed activity and ONLY THEN</p> <p>Secondly can the management authority instruct the applicant regarding the extent of the EIA ((b) above) AND THEN FINALLY</p> <p>Thirdly should the management authority decide on whether it will approve the proposed activity, AFTER WHICH you should submit this application to DEA and the IAP's for comments and final consideration.</p> <p>We have laid the above out in considerable detail, with an example, in previous correspondence but it seems as if the applicants are intent on circumventing the additional legally required procedures, as far as NATIONAL PARKS are concerned, when listed activities which are unrelated to the business of SANParks are proposed. Page 2 of rejection letter appended.</p>		<p>comments. (In progress).</p> <ul style="list-style-type: none"> Submitting the documents to SANParks for consideration – approval or disapproval. Submitting the documents to DEA for a decision on the environmental authorisation. <p>We are aware of the requirements of the legislation and the regulations. The process set out in these regulatory instruments has been followed exactly as specified by DEA thus far, and it will be followed as specified until it is completed.</p>
	<p>The e-mail below was sent inadvertently before it was finalised and the added words are written in bold before sending a second time.</p> <p>On 07 Apr 2016, at 12:29 nm., Kobus van Copenhagen <kobusvc@gmail.com> wrote:</p> <p>Sir</p> <p>Your e-mail below and voice message and our telecon of 6 April 2016 refers;</p> <p>According to the voice message you wanted to deliver documents to us and according to the telecon we had, you indicated that DEA somehow "waived" the requirement for the applicants to (firstly consult with SANParks in order to obtain their instructions re. the establishment of the proper ToR for the EIA and to subsequently) obtain SANParks consent for this activity, before submission of the AFEIAR to DEA and the IAP's, for comments and final decision, thus a kind of parallel process.</p> <p>We have requested in the past that the minutes of all meetings between DEA and the applicants be recorded and forwarded to us, which DEA agreed to. We need a copy of the minutes of this meeting or of the correspondence which resulted in this outcome. It must also be noted that although your e-mail states that the Amended Final EIAR is available, we have only seen a draft document on the website, which is obviously not right.</p> <p>The rejection letter states certain administrative requirements;</p>	<p>Kobus & Hannecke van Copenhagen, comment by e-mail, 07 April 2016</p>	<p>Shawn Johnston: Dear Mr. Kobus van Copenhagen, I hereby acknowledge receiving your second e-mail submission. I will pass it on to the EAP to include it in the final submission to the Department of Environmental Affairs. Sincerely, Shawn Johnston Process Specialist</p> <hr/> <p>EAP response: The section of this comment in normal font is identical to that in Comment No 1 above, and has been responded to. With regard to the section in bold text:</p> <ul style="list-style-type: none"> We are aware of the SANParks publications relating to management plans. Our response is set out in paragraphs 11 to 20 of Mr Steve Rainey's legal opinion (Addendum Report, Chapter 5, section 5.2). Paragraph 18 summarises this section - 18. <i>The absence, therefore, of the</i>

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
	<p>Page 3 of the rejection letter states: "The amended EIAR must be circulate(d) for notification to the I&APs for a period of 21 days."</p> <p>And also quotes from Regulation 19:</p> <p>"(1) No development contemplated in section 50(5) of the Act shall be implemented-</p> <p>(a) In any area other than an area specifically set aside for such development in a management plan; and</p> <p>(b) Before a management authority has indicated in writing the nature and extent of the strategic or environmental impact assessment required for the development."</p> <p>This requirement is also to inform the IAPs of SANParks decision regarding its exclusive mandate and obligation to manage the National Park in accordance with the publicly agreed management plan, in order to ensure that our National Parks are maintained unspoiled by activities unrelated to conservation and tourism, for the benefit of future generations. Thus; your effort to circulate this "amended" FEIAR without providing the required documented proof of SANParks consent at the same time and how the Park Management Plan has already been changed to enable them to consider it and to arrive at a positive outcome for the applicants, would be pre-emptive, since regulation 19 quoted above clearly states the sequence (pre-conditions) on which the determinations can be made, i.e.</p> <p>Firstly the management plan MUST allow for the proposed activity and ONLY THEN</p> <p>Secondly can the management authority instruct the applicant regarding the extent of the EIA ((b) above) AND THEN FINALLY</p> <p>Thirdly should the management authority decide on whether it will approve the proposed activity, AFTER WHICH you should submit this application to DEA and the IAP's for comments and final consideration.</p> <p>We have laid the above out in considerable detail, with an example, in previous correspondence but it seems as if the applicants are intent on circumventing the additional legally required procedures, as far as NATIONAL PARKS are concerned, when listed activities which are unrelated to the business of SANParks are proposed.</p> <p>We have also drawn the attention of the applicants to the following SANParks publications relating to management plans, in our comments for the Draft Scoping Report on 27/8/2013:</p>		<p><i>Project in the management plan does not prevent its consideration in term of the Regulations simply because it does not appear in the management plan.</i></p> <ul style="list-style-type: none"> The commentator has raised the relationship between Hydro SA and Hydro Tasmania in previous comments (Comment and Response report submitted with the Final EIAR in September 2015, as well as Comments and Response Reports 1 and 2 of Aurecon's September 2013 Scoping Report). <p>The applicant is free to choose his partners and advisers on this project, and if the commentator is of the opinion that there is something improper or unlawful in Hydro SA's relationship with Hydro Tasmania he should pursue the matter with the relevant authorities.</p>

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
	<p>Page 3, para 2; "SANParks publications: A Framework For Developing And Implementing Management Plans For South African National Parks (April 2008). Stakeholder Participation In Support Of Developing And Implementing Management Plans For South African National Parks (December 2009)." The full document (no 9) was also forwarded for the attention of the new consultants as part of our comments on the DEIR.</p> <p>It would also be prudent to remind the applicant, SANParks and DEA at this stage that Hydro Tasmania does not have a long term commitment to its South African business and a recent quote from the Minister of Energy, Mr Groom should be enlightening:</p> <p>"In relation to the South African one, the position of government had been to encourage the business to exit those arrangements, but that will happen over time." (Tasmanian Government Business Scrutiny Committee Meeting; 3 December 2015, page 28 last 2 paragraphs). All this relates to Hydro Tasmania's total investment of only AU \$ 3,559 million for its 25% share of the Kakamas HEP, the published cost of which is ZAR 581 million according to the IDC website, thus a substantially discounted price. We have always stated that they are only interested in creating jobs for their own staff, which should rather be stated as the purpose of the applications.</p> <p>This lack of commitment should also be seen against the background of "promises" made by Malcolm Green (HT representative) to the community in a public meeting i.r.o the establishment of a "young engineers training programme" in Riemvasmaak and to which we have referred to in previous comments (DEIR p 10).</p> <p>We need urgent clarification from the DEA regarding this deviation from the letter of rejection.</p> <p>Regards</p> <p>Kobus & Hannecke van Coppenhagen</p>		
	<p>Sir</p> <p>I find your comment interesting and understand that the truth might have hurt you. I merely stated the following; we have sent several e-mails to you which remain</p>	<p>Kobus & Hannecke van Coppenhagen, comment by e-mail, 07 April 2016</p>	<p>Shawn Johnston: Dear Mr. Kobus van Coppenhagen, Wow! I'm glad I took a set of personal notes just after our telephone call yesterday.</p>

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No.	Issue	Raised by	Response from CES EIA team or Hydro SA
	<p>unanswered, one of which was a response from a specialist which you did not pass on to us, right?</p> <p>I also said that you are supposed to be the facilitator of the project, which places a certain duty upon you towards the IAPs (re clarification of administrative issues) and that you should not be a "promoter" of the project.</p> <p>When I asked you about the correct procedure which has been laid out in the rejection letter you became vague.</p> <p>Subsequently I said that there is nothing which I want to discuss with you any further since you are of no assistance to me. We are not participating in this process because it is of any amusement value, but only because the survival of our system of National Parks is of vital importance to us.</p> <p>Regards Kobus van Coppenhagen.</p>		<p>Your behaviour over the telephone was so unbecoming. Why don't you tell every person who you have copied in on this e-mail the truth and how you behaved over the telephone and what you said. You accused me of being an ineffective facilitator, promoting the project and being in the pocket of the developer.</p> <p>I was never vague in my clarification, you never provided me with the opportunity to clarify the delivery of the Amended FIEAR and the Addendum Report to your home. Instead you spoke at the top of your voice, you were so charged up and extremely emotional and you rejected everything I said. There was no listening from your side and at the same time making assumptions about what I was saying. The more I was trying to tell you that the DEA Rejection Letter was responded to within the Addendum Report you just rejected everything I said and took your position.</p> <p>Mr. Kobus van Coppenhagen, I look forward to receiving your comments on the Amended FEIAR and the Addendum report and processing it into the Final submissions to the Department of Environmental Affairs in Pretoria.</p> <p>Sincerely, Shawn Johnston Process Specialist</p> <hr/> <p>EAP Response: We have no comment on this exchange of views.</p> <hr/>

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
Kobus & Hannecke van Copenhagen's Comments to the Department of Environmental Affairs			
	<p>Sir</p> <p>I) The publication of a new "Amended Draft Final EIAR" is perplexing, since the applicants have already been instructed some time ago, to proceed with the Final EIAR which they have published in 2015. The new documents are also "overprinted" with the words "DRAFT FOR PUBLIC REVIEW" in a dark shade which makes it very difficult to read. Please clarify the situation at the Competent Authority as far as the procedural milestones are concerned and whether this new Amended Draft FEIAR represents a legitimate step in the process?</p> <p>II) We also object to the serving of legal documents during the public participation process, which is an administrative process and definitively not the correct forum or timing for those "specialist inputs" which we find intimidating and it will prevent us from participating any further in this deeply flawed process. We believe that the applicant should submit those legal papers directly to the Competent Authority. We need urgent feedback from the Competent Authority in this regard.</p> <p>III) The legal documents only serve to confirm what the EAP has already told us told us during the public meeting for the DEIR in Kakamas. His response at that time, in relation to questions regarding the instruction of Oct 2013 (Appendix A) that SANParks' written authorisation was required before submission of the FEIR ; "***Frankly, we are not going to do that, because otherwise we are not going to be able to submit the Final EIA."... "We do not have to get SANParks or anybody else's permission to submit the FEIR" ... "I don't think it is a legitimate instruction" ... "I receive lots of instructions ***ultra vires" ... "It is a very large engineering project". These statements precede the above mentioned legal opinions of March 2016 by almost one year. The facilitator has an audio record of that public meeting for your information. All this relates to the application of NEM:PAA (the Act) section 50(5). It is important to recognise that this "additional" requirement originates in NEM:PAA, because it relates specifically to developments inside National Parks and thus enjoy preference according to Section 6 of the Act: "Conflicts with other legislation" "(1) In the event of any conflict between a section of this Act and- (a) other national legislation, the section of this act prevails if the conflict specifically concerns the management or development of protected areas; ," (bold and underlining added) Thus the notion that the instruction of DEA is "ultra vires", just because it is not dealt with directly in NEMA, is fatally flawed and must be rejected. (****audio record of DEIR public meeting in Kakamas. See IV for our suggested solution.</p>	<p>Kobus & Hannecke van Copenhagen, comment by e-mail, 13 April 2016</p>	<p>Shawn Johnston: The following comments, which were headed <i>Procedural matters: RVM1 Hydroscheme application DEA Ref. No. 14/12/16/3/3/2/600</i>, were addressed to Messrs Vincent Chauke and Danie Smit of the Department of Environmental Affairs in Pretoria, and also to me. The e-mail was Cc'd to Howard Hendricks, Lucius Moolman, Frans van Rooyen and Hugo Bezuidenhout (all of SANParks), Kallie Naudé and Thivhulawi Nethononda (DEA), A B Abrahams (DWS), Mark D. Anderson and Dr. Hanneline Smit-Robinson (BordLife SA), Bill Rowlston (EOH CES), Peter Bradshaw (NMMU), and Riaan Wolhuter, Lea Visser, Gerhard Smit, Samantha Braid, Angus Tanner, Pieter van der Walt and Thinus Oosthuizen (all unidentified affiliations) We do not know if the department (DEA) has responded to Mr Van Copenhagen, but if so the response has not been copied to us.</p> <hr/> <p>EAP Response:</p> <ul style="list-style-type: none"> • The commentator's remarks are directed to Messrs Chauke and Smit, and enquire if " ... <i>this new Amended Draft FEIAR represents a legitimate step in the process?</i>" • In this regard, as stated previously in the response to Comment 1, we have acted entirely in accordance with the department's instructions. Accordingly the Amended FEIAR, the Addendum Report and the Economic Assessment are appropriate responses to the department's request for additional information and

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
	<p>IV) There is a practical reason why SANParks' approval of EIA's is required, as suggested in the Act; Example: "Screening Noise Report"(part of EIA) states in its executive summary (p2, para 1); "This assessment however could not identify receptors living within 2000 meters from the proposed development (excluding powerline). Being a baseline assessment, it cannot comment on the potential risk of a noise impact on the natural environment."(bold and underlining added).</p> <p>It is clear from the above that this report is grossly inadequate for the purposes of SANParks as far as decision making is concerned (and the specialist is aware of it) because there are many wild creatures, some of which are endangered, which would be seriously affected by noise and the regulations (the Act) forbid the making of noise, anyway. The fact is that the applicants submitted the FEIAR **admitting that it cannot be approved by SANParks (it would be rejected due to inadequate assessment), which probably constitutes an offence. The solution to this and other examples of inadequate impact assessment as it relates to the requirements of a protected area, would be to reject it on the basis that NEM:PAA has not been complied with, which is an offence and notice of non-compliance should be served. It is interesting to note that Chapter 8 of NEM:PAA section 89 deals with offences and penalties regarding non-compliance with specific provisions;</p> <p>89. "Offences and penalties</p> <p>(1) A person is guilty of an offence if that person –</p> <p>(a) contravenes or fails to comply with a provision of section 45(1), 46(1), 47(2), (3) or (3A), 48(1), 49A(5)(b), 50(5) or 55(2)(fA);.....</p> <p>.....</p> <p>(2) A person convicted of an offence in terms of subsection (1) is liable, in the case of a first conviction, to a fine not exceeding R5 million or imprisonment for a period not exceeding five years and, in the case of a second or subsequent conviction, to a fine not exceeding R10 million or imprisonment for a period not exceeding ten years or in both instances to both a fine and such imprisonment."</p> <p>V) Legal Opinion</p> <p>Even in our layman's view, the legal opinion is based on the wrong premise, eg.:</p> <p>Essential services</p>		<p>clarification.</p> <ul style="list-style-type: none"> • Our experience with this commentator indicates that he does not attribute any value to anything we write or say, and we will leave it to the department to respond to this enquiry. • With regard to the commentator's dismissal of the validity and value of the legal opinions included in the Addendum Report, our view is that these opinions are a legitimate response to the department's requirement, in the December 2015 rejection letter, that we must adhere to the requirements of the NEM: PAA Regulations in respect of submitting the Final EIAR to SANParks for approval before it is submitted to DEA for a decision on the environmental authorisation.

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
	<p>Paragraph 21 of legal opinion: The context in which the legal opinion quotes and interprets "essential services" are based on the wrong proposition. The Labour Relations Act deals with labour relations and it is incongruous with ESKOM or any other party's application for the acquisition of a right, to generate power inside a National Park and thus doesn't place a duty on SANParks in any way, to authorise the proposal for a hydroscheme. The opinions expressed in 22, 23 and 58 are flawed and does not in any way, offer a solution in terms of the preceding paragraph 21 as if it would be applicable to section 53(b) of the Act and should be rejected.</p> <p>Management plans</p> <p>Paragraph 36 of legal opinion; "The management authority alone compiles the management plan and the management authority would not have designated an area specifically for a development such as the Project as it is neither Park specific nor Park dependent. The raw material required to generate the power the Project expects emanates from outside the Park and merely runs through it." (bold and underlining added)</p> <p>This is conclusive proof that our comments were never considered because we have referred to the applicable SANParks documents relating to the compilation of management plans during the scoping process and other occasions. However, we can state for the record that SANParks did conduct a transparent and consultative public participation process for the amendment of the Augrabies Falls National Park Management Plan (2013-2023) and presented it to the public before adoption. The applicants chose not to participate, as we have commented previously. We have referred to this in detail in other correspondence, together with an example. In this case we do suggest that DEA should reject all paragraphs in the legal opinion which refer to management plans, because it is based on the wrong premise; 12,13, 14, 15, 16, 17, 18, 19, 20, 26, 28, 32, 35 and 36. The opinion of the senior counsel is based on analysis of the same opinion and agreement with it, without identifying the fatal flaw regarding management plans, which should also render it useless as a solution for the dilemma of the applicants.</p> <p>We urgently need to know for how long DEA will allow the applicants to continue to act in breach of instructions of October 2013. It is clear that the applicants will not allow the prescribed administrative process to reach finality, by "litigating" in the wrong forum.</p> <p>Regards</p> <p>Kobus & Hannecke van Copenhagen, Augrabies.</p>		

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Kobus & Hannecke van Copenhagen's Comments to the Department of Water and Sanitation			
	<p>Sir The e-mail below is for your information/action; Please take note that the Department of Water and Sanitation's letter, which "confirms" the availability of 3,2 MCM/day, for diversion from inside the National Park is in breach of NEM:PAA sections 6 and 50(5); because it relates to a development inside the National Park, where conservation legislation prevails.</p> <p>We suggest that the Department cancel this letter, due to a lack of the required level of assessment as prescribed in NEM:PAA section 50(5); proof of which we have requested from you, to no avail and to prevent DWS from becoming embroiled in what seems to be the start of litigation by the applicants.</p> <p>Regards</p> <p>Kobus and Hannecke van Copenhagen</p>	<p>Kobus & Hannecke van Copenhagen, comment by e-mail, 14 April 2016</p>	<p>Shawn Johnston: The following comments, which were headed Procedural matters: RVM1 Hydroscheme application DEA Ref. No. 14/12/16/3/3/2/600, were addressed to Messrs Moses Mahunonyane and Steven Shibambu (DWS), and Cc'd to me, AB Abrahams (DWS), Vincent Chauke and Danie Smit (DEA), and Howard Hendricks (SANParks).</p> <p>We do not know if the department (DWS) has responded to Mr Van Copenhagen, but if so the response has not been copied to us</p> <p>_____</p> <p>EAP Response: Since the comment was addressed to DWS officials, and copied to us for information, it would be presumptuous for us to respond on the department's behalf.</p> <p>_____</p>
Marie-Louise Kellett - African Paddling Association & Gravity Adventures Comments			
	<p>Dear Shawn</p> <p>I have had a look at the Amended Final EIA for the Augrabies Falls Hydro Power project (incorrectly called the 'Riemvasmaak' project).</p> <p>Thank you, Marie-Louise Kellett African Paddling Association & Gravity Adventures</p>	<p>Marie-Louise Kellett, African Paddling Association & Gravity Adventures, comment by e-mail, 22 April 2016.</p>	<p>Dear Mrs Marie-Louise Kellett, Thank you for your e-mail and attached comments. I hereby acknowledge receiving your comments on the AFEIR. I have forwarded it onto EAP for a response and it will be sent onto the Department of Environmental Affairs in Pretoria.</p> <p>Sincerely, Shawn Johnston</p> <p>_____</p>
	<p>I have the following grave concerns (my comments are in italics):</p> <ol style="list-style-type: none"> 1. Comments on the Public Consultation section of the EIA <ol style="list-style-type: none"> a. The comments submitted by myself on behalf of the African Paddling Association do not seem to have been included, despite my re-submitting them to you after you 	<p>Marie-Louise Kellett, African Paddling Association & Gravity Adventures, comment by e-mail, 22 April 2016.</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> • Item 1a: The commentator submitted comments to Mr Johnston on 4th May 2015. They are included in the Comment and Response Report (Volume

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	<p>took over from Aurecon and despite you acknowledging my mail. If I am incorrect, please advise me of where they are in your report. If you did receive them, then why are they not included in the findings of the Specialist Reports – there is no mention of the intrinsic value of Wilderness and the permanent loss of the sense of place except in the most superficial terms. If they HAVE been omitted, how many other peoples comments have also been left out?</p> <p>b. Despite my recommending to you that all registered I&APs be contacted after you took over and be explicitly requested to resubmit their comments (i.e. the comments already submitted to Aurecon), this does not seem to have been done. Your consultative process is therefore fatally flawed from the start.</p> <p>c. Notification and consultation seems to have been done on a local level only – no notices were placed in national publications and no meaningful consultations were done on a regional or national level, despite this project having an impact on a resource that belongs to all the people of the country. For example, I do not see organisations such as WWF, BirdLife SA, Peace Parks Foundation etc on the list of I&APs. I also do not see any comments from Kalahari Outventures, whose rafting concession above the falls will be severely compromised.</p>		<p>5 of the Environmental Impact Assessment Report, dated September 15) as comments 1 to 16 on pages 1 to 17. Responses were provided to all comments submitted by Ms Kellett, as well as to all other comments.</p> <ul style="list-style-type: none"> • The absence of changes to any of the specialist reports does not mean that the comments were not carefully considered. It does mean that, after careful consideration of the comments, nothing was found in the comments that warranted any changes to any of the specialist reports. • With regard to the value of wilderness and sense of place we are of the opinion that this project can be developed and operated with minimal effects on the nature of the park and its surroundings, and with minimal effect on the Augrabies Falls as a tourist attraction, or on the Orange River as a whole. • With regard to the impact of the project on the Augrabies Falls the commentator is referred to section 3.3 of the Amended Final EIAR, as well as section 2.2 of the Addendum Report, where she can inform herself about the extent to which the project will alter the flow regime over the falls. • Item 1b: The commentator was informed of the continuation of the assessment process by e-mail on 13th March 2015, re-registered as an I&AP, and provided with a copy of the BID. • Similarly, all I&APs who were registered for the Scoping phase of the assessment were also informed of the continuation of the assessment process. • Item 1c: The availability of the Draft EIAR was advertised nationally, provincially and

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			<p>locally in the Sunday Times (25th April), and Die Burger, Die Gemsbok and Die Volksblad (29th April), all as required by DEA. The Draft Amended Final EIAR and the Draft Addendum Report were made available to all registered IAPs, as required by the Regulations and as explicitly instructed by DEA. Despite the commentator’s reservations we are of the firm opinion we have conducted a consultation process that provides an opportunity to comment on the proposed project to anyone who wishes to do so.</p> <ul style="list-style-type: none"> • The commentator is referred to Chapter 1 of the Addendum Report, which details our interactions with Birdlife SA. • Evidently WWF and the Peace Park Foundation did not register as IAPs with the previous EAP. We do not know why. However, for completeness we will make the final documents available to these organisations, with a request that they contact us if they have any queries about the project, and that they submit their comments directly to DEA, and copied to us for our responses. • With regard to Kalahari Outventures we refer the commentator to Comments Nos 23 to 34 in the September 2015 Comment & Response Report , pages 21 to 36, which were submitted by Mr Eksteen on 5th May 2015. Subsequently Mr Eksteen has reconsidered his view of the project, and wrote as follows (emphasis added): <i>Dear Mr Johnston, I refer to my earlier submissions regarding the proposed RVM Hydro Power facility. Further study of the information provided by EOH CES in the Draft Environmental Impact Assessment has given me new insight regarding the</i>

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
			<p><i>project.</i> <i>The technology to be used and the construction method proposed, does not appear to be as invasive or destructive as I initially was led to believe.</i> <i>Furthermore, since it is now clear to me that the facility doesn't use or pollute water, I cannot see it having any negative impacts on my business on the Orange River. South Africa needs electricity generation and why not from a renewable source.</i> <u><i>I therefore retract my negative comments and wish to advise that although a portion of the construction will be in a sensitive area, if managed carefully, the overall impact will be beneficial to the region and the country.</i></u> <i>I hope and trust that you will find this in order.</i> <i>If you have any questions or queries, please do not hesitate to contact me.</i> <i>Yours Sincerely</i> <i>Craig B. Eksteen,(Owner/Director)</i></p>
	<p>2. Comments on the original Socio-Economic Impact Assessment</p> <p>Augrabies Falls National Park “The waterfall is approximately 56 m high and is awe-inspiring when the river is in flood.”</p> <p>Correction - The falls and the gorge below are awe inspiring at all times of the year due to their pristine wilderness character, not only when the river is in flood.</p> <p>This short paragraph completely underplays the significance of the falls and the park itself. This is a National Park which represents the highest form of protection available. South Africa is an arid country and climate change seems set to intensify this. The Orange River is already a heavily utilised and altered river course and less than 10% of its course can be considered pristine. The recent permission granted for the Rooikat project will exacerbate this further. If this development is allowed to go ahead, we will</p>	<p>Marie-Louise Kellett, African Paddling Association & Gravity Adventures, comment by e-mail, 22 April 2016.</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> • We note the commentator’s remarks about the falls being awe inspiring at all times of the year, and we do not disagree. However, this does not alter the truth of the quoted statement from the September 2015 Final EIAR. • We disagree that the statement “ ... <i>completely underplays the significance of the falls and the park itself.</i> The results of the impact assessment take account of the nature of the areas that will be affected by the project, from both environmental and socio-economic standpoints. We are confident that DEA

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
	<p>lose yet more pristine wilderness area. In addition, this will open the door to increased development in all of our National Parks.</p> <p>There is huge concern that the cumulative effects of this and all the other projects proposed for the Orange will damage the river system irretrievably. We believe that all proposed projects should be put on hold until a SEA is done of the entire river. Already, we have seen that your client's current project at the Neus Weir has resulted in a high levels of fish deaths and resultant pollution of the river due to rotting fish that have died in the weir intakes. It has also damaged the fishing potential of the area as the water is now murky and smelly.</p>		<p>will assess this project on its merits. We cannot comment on the relationship between this project and the commentator's concerns about the potential for "increased development in all of our National Parks."</p> <ul style="list-style-type: none"> The impact of this project on the Augrabies Falls is addressed in detail in section 3.3 of the Amended Final EIAR and section 2.2 of the Addendum Report. Cumulative impacts of this and all other existing, or planned HPP on the highly regulated Orange River are addressed in section 7.6.2 of the Amended Final EIAR. As stated previously, we recommend that the commentator should read these sections. We are not able to comment on the alleged fish deaths at the Neusberg Weir, nor of their possible causes.
	<p>Social Impacts Pre Construction and Construction</p> <p>Sense of place.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Increased noise. <input type="checkbox"/> Without mitigation – Medium. <input type="checkbox"/> With mitigation – Low. <input type="checkbox"/> Aesthetic impacts. <input type="checkbox"/> Without mitigation – Low. <input type="checkbox"/> With mitigation – Very low. <p>Operational Phase</p> <p>Sense of place.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Increased noise. <input type="checkbox"/> Without mitigation – Low. <input type="checkbox"/> With mitigation – Very low. <input type="checkbox"/> Aesthetic impacts. 	<p>Marie-Louise Kellett, African Paddling Association & Gravity Adventures, comment by e-mail, 22 April 2016.</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> The results of the assessment were based on a careful analysis of the activities likely to be undertaken during the construction and operational phases of the project. Sense of place is a human perception, and the results of the assessment considered who is likely to be affected by the activities. Given the varied history of human occupation and use of the area, and the present total exclusion of all except SANParks staff from the area, we regard the assessment as fair and reasonable.

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	<p> <input type="checkbox"/> Without mitigation – Low. <input type="checkbox"/> With mitigation – Very low. </p> <p>My comments apply to all of the above potential impacts: Surely, given the wilderness character of this place, these impacts can only be classed as High or Very High? From no noise or human impact to a construction site with dust, explosions, trucks etc surely cannot be classed as “Medium” , no amount of mitigation can affect the incredible impact that the construction phase will have on the sense of place. It will, without a doubt, no longer be pristine or wilderness in character and this change will be permanent and irreversible. This cannot be considered a “low’ or ‘medium’ impact.</p>		
	<p>Comments on the Second Economic Assessment Report</p> <p>It is obvious that this report was compiled hastily and with little research or understanding. The entire Tourism ‘report’ is based on the 8 guest lodges near the park and, of these, only 2 were actually interviewed. And these two derive a great portion of their income from people who do not even visit the park – the vehicle testing groups! This surely cannot be seen as a credible representation of the entire region’s tourism sector! Anecdotal evidence suggests that most nature based tourism enterprises are against this project. Similarly, the survey that was done at the park did not properly describe the effect of the construction and visual disturbance that would result from the project. It had a narrow focus on the potential of reduced flow at the falls to affect the visitor experience.</p> <p>In addition, the “non cooperation of SanParks” is referred to. The report does not acknowledge that the views of the park manager have been documented in detail in the Issues and Response Trail and that he has very serious concerns about the project and is not in favour of it.</p> <p>This report does not even mention the loss of sense of place and wilderness that will occur permanently. Finally, there is no mention at all of the tourism businesses that will be directly affected by this project – The Augrabies Rush rafting trips, for example, will no longer be feasible.</p>	<p>Marie-Louise Kellett, African Paddling Association & Gravity Adventures, comment by e-mail, 22 April 2016.</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> • Section 5.2 of the report is quite clear on the number of lodge operators who were interviewed (two of a total of eight between Augrabies and Dundi Lodge), and that these two were taken as a representative sample. • The report is equally clear that these two interviewees were of the opinion that, after the construction period was over, the project would have minimal effect on tourism, especially during the operational phase. One interviewee observed that “<i>As long as the area under SANParks jurisdiction remains controlled, it would remain off the tourist map.</i>” We understand this to mean that access to the area is restricted to SANParks staff, and is not accessible to tourists.. • The report’s remarks about lack of co-operation from the AFNP refer to approaches for information by the report compilers. The fact that the park manager has submitted written comments on the project is not disputed, and neither is the fact that he is opposed to the project, either in the Economics report or elsewhere. • Wilderness and sense of place have been addressed in the Heritage and Socio-Economic specialist reports, and were not

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
			<p>part of the brief for the Economic Assessment.</p> <ul style="list-style-type: none"> It will be helpful if the commentator could concretise the anecdotal evidence, that “<i>most nature based tourism enterprises are against this project</i>” referred to in the comment, and submit this evidence to DEA (copied to us) as a comment on the final documents As we understand it the Augrabies Rush is run by Mr Craig Eksteen, whose revised views on the project are reported against Comment 7 above, and who evidently does not share the commentator’s views on the continuing feasibility of the business. <hr/>
Jess Tyrell - Wilderness Guide and African Paddling Association Comments			
	<p>Dear Shawn,</p> <p>I have had a look at the Amended Final EIA for the Augrabies Falls Hydro Power project (inaccurately called the ‘Riemvasmaak’ project - please note this as a comment).</p> <p>I request an email as proof of receipt of each these comments, and their inclusion in amended EIA Comments and Response Report.</p> <p>Sincerely, Jess Tyrell</p>	<p>Jess Tyrell, Wilderness Guide & African Paddling Association, comment by e-mail, 26 April 2016</p>	<p>Dear Ms Jess Tyrrell,</p> <p>Thank you for your e-mail. I hereby acknowledge receiving your comments on the Amended Final EIA.</p> <p>Sincerely, Shawn Johnston</p> <hr/> <p>EAP Response:</p> <ul style="list-style-type: none"> The Project is called the Riemvasmaak HPP because the power station – the place where the electricity is actually generated – will be situated on land belonging to the <u>Riemvasmaak</u> community (emphasis added for clarity, to indicate the origin of the initialism RVM) <hr/>
	<p>1. Comments on the Public Consultation section of the EIA</p> <p>a. I do not see my name of the register of Interested and Affected Parties. I wrote to you on 02/09/2015 to ask why I had not been kept informed about the EIA process</p>	<p>Jess Tyrell, Wilderness Guide & African Paddling Association, comment by e-mail, 26</p>	<p>Dear Ms Jess Tyrrell,</p> <p>You are registered as an interested and affected party (I&AP) on both the interested and affected party database and our e-mail</p>

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	<p>after you took over from Aurecon. Those of us who participated in these initial public discussions while Aurecon was still employed were assured that our names and all comments would be handed over to the new company to continue with the EIA. This was clearly not done, and I would like to be noted that professional obligations were not fulfilled and this undermines the term "meaningful public participation" and thus submitting an accurate EIA. You replied to my email on 08/09/2015 (I have the records if you would like to see them again) informing me that you had registered my name now as an I&AP, which has not been done either, in spite of your written confirmation. It brings the question of how many others have been told the same story yet not had their names registered. This omission, while informing me of the exact opposite action, of it having been done, undermines the entire point and process of the Public Participation Process and is evidence of the consultation process improperly conducted.</p> <p>b. Despite being explicitly recommended by the African Paddling Association that all registered I&APs be contacted after you took over, and be plainly requested to resubmit their comments (i.e. the comments already submitted to Aurecon), this does not seem to have been done. I myself am an example of this act of omission, and thus improper conduct. Your consultative process is again shown to be flawed from the start and begs the question of how an EIA done by your company can be reliably credited with accurate reporting, when the very beginnings of the process are mismanaged and, to be frank, bumbled.</p> <p>c. Notification and consultation seems to have been done on a local level only – no notices were placed in national publications and no meaningful consultations were done on a regional or national level. The Augrabies Falls ("Riemvasmaak") project is of National and International importance and if it should go ahead, would have an impact on a resource that belongs to all the people of South Africa, as well as all foreign visitors to this National Heritage site.</p>	<p>April 2016</p>	<p>database. I have investigated your claim relating to your name not being on the published I&AP database. I provided the EAP, CES with the incorrect database, which was published in the AFEIR, for this mistake I apologise.</p> <p>I further looked at all e-mails sent to you as part of the process. You received all e-mails since you registered as an I&AP. This includes the last e-mail dated 07 April 2016 announcing the availability of the AFEIR.</p> <p>Sincerely, Shawn Johnston</p> <hr/> <p>EAP Response:</p> <ul style="list-style-type: none"> • Items a & b: This is addressed by Shawn Johnston above. • Item c: This comment is very similar to Comment 7c above, from Ms Marie-Louise Kellett, also of the African Paddling Association, the response to which was: • The availability of the Draft EIAR was advertised nationally, provincially and locally in the Sunday Times (25th April), and Die Burger, Die Gemsbok and Die Volksblad (29th April), all as required by DEA. The Draft Amended Final EIAR and the Draft Addendum Report were made available to all registered IAPs, as required by the Regulations and as explicitly instructed by DEA. Despite the commentator's reservations we are of the firm opinion we have conducted a consultation process that provides an opportunity to comment on the proposed project to anyone who wishes to do so. <hr/>
<p>2.</p>	<p>Comments on the original Socio-Economic Impact Assessment</p> <p>I would like to second and therefore repeat some of the comments made by the APA to</p>	<p>Jess Tyrell, Wilderness Guide & African Paddling Association,</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> • This comment is identical to Comment 8 submitted by Ms Marie-Louise Kellett, also

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	<p>emphasis the importance of the points raised:</p> <p>Augrabies Falls National Park “The waterfall is approximately 56 m high and is awe-inspiring when the river is in flood.”</p> <p>Correction - The falls and the gorge below are awe inspiring at all times of the year due to their pristine wilderness character, not only when the river is in flood.</p> <p>This short paragraph completely underplays the significance of the falls and the park itself. This is a National Park which represents the highest form of protection available. South Africa is an arid country and climate change seems set to intensify this. The Orange River is already a heavily utilized and altered river course and less than 10% of its course can still be considered pristine. The recent permission granted for the Rooikat project will exacerbate this further. If this development is allowed to go ahead, we will lose yet more pristine wilderness area. In addition, this will open the door to increased development in all of our National Parks.</p> <p>There is huge concern that the cumulative effects of this and all the other projects proposed for the Orange will damage the river system irretrievably. We believe that all proposed projects should be put on hold until a SEA is done of the entire river. Already, we have seen that your client’s current project at the Neus Weir has resulted in a high levels of fish deaths and resultant pollution of the river due to rotting fish that have died in the weir intakes. It has also damaged the fishing potential of the area as the water is now murky and smelly.</p>	<p>comment by e-mail, 26 April 2016</p>	<p>of the African Paddling Association. The response is the same, as follows:</p> <ul style="list-style-type: none"> • We note the commentator’s remarks about the falls being awe inspiring at all times of the year, and we do not disagree. However, this does not alter the truth of the quoted statement from the September 2015 Final EIAR. • We disagree that the statement “ ... <i>completely underplays the significance of the falls and the park itself.</i> The results of the impact assessment take account of the nature of the areas that will be affected by the project, from both environmental and socio-economic standpoints. We are confident that DEA will assess this project on its merits. We cannot comment on the relationship between this project and the commentator’s concerns about the potential for “<i>increased development in all of our National Parks.</i>” • The impact of this project on the Augrabies Falls is addressed in detail in section 3.3 of the Amended Final EIAR and section 2.2 of the Addendum Report. Cumulative impacts of this and all other existing, or planned HPP on the highly regulated Orange River are addressed in section 7.6.2 of the Amended Final EIAR. As stated previously, we recommend that the commentator should read these sections. • We are not able to comment on the alleged fish deaths at the Neusberg Weir, nor of their possible causes.
	<p>Social Impacts Pre Construction and Construction Sense of place.</p>	<p>Jess Tyrell, Wilderness Guide & African Paddling Association,</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> • Apart from the last two paragraphs this is identical to Comment No 9 submitted by

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
	<ul style="list-style-type: none"> <input type="checkbox"/> Increased noise. <input type="checkbox"/> Without mitigation – Medium. <input type="checkbox"/> With mitigation – Low. <input type="checkbox"/> Aesthetic impacts. <input type="checkbox"/> Without mitigation – Low. <input type="checkbox"/> With mitigation – Very low. <p>Operational Phase Sense of place.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Increased noise. <input type="checkbox"/> Without mitigation – Low. <input type="checkbox"/> With mitigation – Very low. <input type="checkbox"/> Aesthetic impacts. <input type="checkbox"/> Without mitigation – Low. <input type="checkbox"/> With mitigation – Very low. <p>The following comments apply to all of the above potential impacts:</p> <p>Given the wilderness character of this place, these impacts can only be classed as High or Very High. From no noise or human impact, to a construction site with dust, explosions, trucks etc surely cannot be classed as “Medium” , no amount of mitigation can affect the enormous impact that the construction phase will have on the sense of place. It will, without a doubt, no longer be pristine or wilderness in character and this change will be permanent and irreversible. This cannot therefore be considered a “low’ or ‘medium’ impact.</p> <p>The aesthetic impacts, as above, can only be classified as "very high" with, or without, mitigation.</p> <p>My additional comments to the APA's are that the above status's of the impacts being classified as "low" or "very low" are entirely inaccurate. Firstly on who's outlook does such a judgement and condemning statement rest? It raises the question of the author(s) ability to report impact objectively, and not with only the developers best interests at heart.</p>	<p>comment by e-mail, 26 April 2016</p>	<p>Ms Marie-Louise Kellett, also of the African Paddling Association, to which the response is.</p> <ul style="list-style-type: none"> • The results of the assessment were based on a careful analysis of the activities likely to be undertaken during the construction and operational phases of the project. Sense of place is a human perception, and the results of the assessment considered who is likely to be affected by the activities. Given the varied history of human occupation and use of the area, and the present total exclusion of all except SANParks staff from the area, we regard the assessment as fair and reasonable • The assessment was conducted by qualified and experienced practitioners, and the commentator’s allegations of bias and prejudice are unfounded. If the commentator she has evidence to substantiate the allegations we recommend it is made available to the Minister.
	<p>Comments on the Second Economic Assessment Report</p> <p>Socio-economic impacts Operational phase</p> <ul style="list-style-type: none"> <input type="checkbox"/> Cultural impacts. 	<p>Jess Tyrell, Wilderness Guide & African Paddling Association, comment by e-mail, 26 April 2016</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> • The impacts quoted are reproduced from the Executive Summary of the Socio-Economic Impact Assessment, and not the Second Economic Assessment Report.

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
	<p> <input type="checkbox"/> Cultural heritage. <input type="checkbox"/> Without mitigation – Medium. <input type="checkbox"/> With mitigation – Low. </p> <p>It is my opinion that these are both inaccurate assessments. That, in fact, the cultural impact and heritage without mitigation would be Very High, and even with mitigation would still be Very high. As much as one might try to avert damage to a heritage site, it would nevertheless be irrevocably damaged. The proposed project is therefore fatally flawed with regards to the Conservation Management perspective, as it compromises infrastructure incompatible with the AFNP.</p> <p style="text-align: center;">(SIA Impact assessment)</p> <p>Impacts on tourism Construction phase These are addressed as follows: <input type="checkbox"/> Negative impact on tourism. <input type="checkbox"/> Without mitigation – Medium. <input type="checkbox"/> With mitigation – Low.</p> <p>Impacts on tourism Operational phase These are addressed as follows: <input type="checkbox"/> Negative impact on tourism. <input type="checkbox"/> Without mitigation – Medium. <input type="checkbox"/> With mitigation – Low.</p> <p style="text-align: center;">(Commentator impact assessment)</p> <p>Impacts on tourism Construction phase Negative impact on tourism. <input type="checkbox"/> Without mitigation – Very High <input type="checkbox"/> With mitigation – High</p> <p>Impacts on tourism Operational phase <input type="checkbox"/> Negative impact on tourism. <input type="checkbox"/> Without mitigation – Very High <input type="checkbox"/> With mitigation – High</p> <p>Seconded:</p>		<ul style="list-style-type: none"> • The headings in bold font and parentheses have been added for clarity. • It is, however, not clear if the commentator has read the text of the report, in which the rationale for rating the impacts is explained. • We are satisfied that the findings of the study set out in Chapters 8 (Description of Findings - social) and 9 (Tourism) of the report properly describe the potential impacts of the project during the construction and operational phases of the project's lifetime, and that the assessment of the impacts in Chapter 10 is reasonable, and that the proposed mitigation measures are practical and achievable. • The section of the comments marked "Seconded" is identical to the comments submitted by Ms Marie-Louise Kellett, also of the African Paddling Association,, and responded to in Comment 10 above, as follows: • Section 5.2 of the report is quite clear on the number of lodge operators who were interviewed (two of a total of eight between Augrabies and Dundi Lodge), and that these two were taken as a representative sample. • The report is equally clear that these two interviewees were of the opinion that, after the construction period was over, the project would have minimal effect on tourism, especially during the operational phase. One interviewee observed that "<i>As long as the area under SANParks jurisdiction remains controlled, it would remain off the tourist map.</i>" We understand this to mean that access to the area is restricted to SANParks staff,

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	<p>It is obvious that this report was compiled hastily and with little research or understanding. The entire Tourism 'report' is based on the 8 guest lodges near the park and, of these, only 2 were actually interviewed. And these two derive a great portion of their income from people who do not even visit the park – the vehicle testing groups! This surely cannot be seen as a credible representation of the entire region's tourism sector! Anecdotal evidence suggests that most nature based tourism enterprises are against this project. Similarly, the survey that was done at the park did not properly describe the effect of the construction and visual disturbance that would result from the project. It had a narrow focus on the potential of reduced flow at the falls to affect the visitor experience.</p> <p>In addition, the "non cooperation of SanParks" is referred to. The report does not acknowledge that the views of the park manager have been documented in detail in the Issues and Response Trail and that he has very serious concerns about the project and is not in favour of it.</p> <p>This report does not even mention the loss of sense of place and wilderness that will occur permanently. Finally, there is no mention at all of the tourism businesses that will be directly affected by this project – The Augrabies Rush rafting trips, for example, will no longer be feasible.</p>		<p>and is not accessible to tourists..</p> <ul style="list-style-type: none"> • The report's remarks about lack of co-operation from the AFNP refer to approaches for information by the report compilers. The fact that the park manager has submitted written comments on the project is not disputed, and neither is the fact that he is opposed to the project, either in the Economics report or elsewhere. • Wilderness and sense of place have been addressed in the Heritage and Socio-Economic specialist reports, and were not part of the brief for the Economic Assessment. • It will be helpful if the commentator could concretise the anecdotal evidence, that "<i>most nature based tourism enterprises are against this project</i>" referred to in the comment, and submit this evidence to DEA (copied to us) as a comment on the final documents. • As we understand it the Augrabies Rush is run by Mr Craig Eksteen, whose revised views on the project are reported against Comment 7 above, and who evidently does not share the commentator's views on the continuing feasibility of the business.
	<p>Heritage Scoping Study and comments (Paragraphs numbered to facilitate responses)</p> <p>(i) Heritage report states: "A wide variety of heritage resources was recorded. These included scatters of Middle (MSA), and Later Stone Age (LSA) and historical artefacts, LSA occupation sites with deposits and historical occupation sites with ruined structures and artefacts of varying age. Significantly, a number of graves and many more stone features that may or may not be graves were located. A stone memorial was also found. All the historical features together comprise a relatively recent (20th century) cultural landscape but it should be noted that the community who created that landscape have given permission for</p>	<p>Jess Tyrell, Wilderness Guide & African Paddling Association, comment by e-mail, 26 April 2016</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> • Para (iii): The Riemvasmaak Community Trust (RCT), which we understand is mandated to represent the interests of the community as a whole, has entered into an agreement with the applicant to develop the project on community land. We are not able to comment on internal disagreements in the community.

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	<p>the development to proceed.</p> <p>(ii) The statement of "all the historical features together comprise a relatively recent (20th century) cultural landscape" is illogical and incorrect. In your own report you mention the "wide variety of heritage resources", including Middle and Late Stone Age, therefore I do not see how your comment of "a relatively 20th century" could have been counted as recent when the Middle Stone age begun around 280 000 years ago, and ended approximately 50 000 years ago. If this is a grammatical error, perhaps it should be corrected to avoid further confusion.</p> <p>(iii) Additionally, the Riemvasmaak community who have "given permission" is an inaccurate statement, as there are many members of the community who have publically objected to this development on their land. To claim that "the community" has given permission entirely discounts the members who have not, thereby the agreement of some members cannot be proclaimed as "the community". It is an inaccurate generalization.</p> <p>(iv) This community has a well know history of being forcibly removed during the 1960's and suffered a particularly brutal removal. The land was then used as military testing facility. Soon after 1994 the South African Government returned the land to the descendants of the original inhabitants. Riemvasmaak has a special place in south African history as it was the first land restitution case after the election of a democratic government. The story of this community and land offers rich and valuable lessons for the land reform process broadly. Although ecological damage has been said to be "minimal" during its occupation, military debris is a legacy with which this community will have to live with for many years.</p> <p>(v) Finally, Riemvasmaak encapsulates the difficulties communities face as land use shifts from defense to attempts to rebuild a sense of community. Development of its status as a Conservancy has been a complex, protracted, and, at times, conflict-ridden process. This is the result of a range of factors, including inadequate assistance from an ill-equipped Department of Land Affairs; social divisions in the community along education, gender, ethnic, class, and political lines, and hence a lack of community capacity to engage with development processes.</p> <p>(vi) This brief history is to highlight the comments made above once again for emphasis. The EIA's Heritage study author(s) stating that "the community" give permission for this development is an exaggerated claim that in my opinion, only serves this projects own interest. It is once again is an example of external contractors not only contributing towards, but exasperating further division in an already fragmented community, and the all too familiar exploitation of this community's so recently re-claimed heritage.</p> <p>(vii) Heritage report states: "[The community's permission] serves to temper the significance of the cultural landscape and individual features of which it is comprised. It is considered likely that, with proper planning and mitigation,</p>		<ul style="list-style-type: none"> • Paras (iv) to (vi): We are aware of the history of the RVM community. • Paras (i), (ii) and (vii) to (xiv): Note: This response was provided by Dr Lita Webley, ACO Associates, Second author of the HIA Report • With regard the comment: "all the historical features together comprise a relatively recent (20th century) cultural landscape" – I need to clarify that the archaeological term "feature" refers to ruined structures such as buildings, kraals, sheds, etc. Features are different from artefacts, which could include MSA or LSA stone tools. I think the confusion has arisen due to terminology used by the archaeologist. I would agree that the landscape shows evidence of settlement from Middle Stone Age times to the relatively recent past. • With regard the use of the term "considered likely", this refers to the degree of confidence (a term used in the impact assessment process) that the heritage practitioner has in his/her conclusions and their assessment of successfully mitigating potential negative impacts. The archaeologist is of the opinion, that "with proper planning and mitigation impacts to heritage can be reduced to satisfactory levels". • The term "satisfactory levels" acknowledges that impacts will occur, but these can be mitigated through further archaeological work, which may involve excavations, documentation, recording and publication of results. Thus while the heritage / archaeological site will be destroyed, the information will be retained.

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	<p>impacts can be reduced to satisfactory levels."</p> <p>(viii) "Considered likely" is an entirely ambiguous and vague a statement regarding strict requirements of proper planning and mitigation. Considering that this report began in its first paragraph with the admission that certain factors "unfortunately precluded proper preparation for the fieldwork. As such, minor components of the project were not surveyed" illustrates that the foundation of this report is flawed and does not bolster confidence of this not being used as an excuse in any future reports, thus leading to severe negative impact nor mitigation.</p> <p>(ix) The use of the word "satisfactory" again is again entirely ambiguous, and leaves huge amounts of room for improper interpretation of what "satisfactory" entails. Satisfactory to whom, and under who's judgement?</p> <p>(x) "using our knowledge of typical site locations we are fairly confident that significant sites would not have been missed during the survey"</p> <p>(xi) This is not a "typical site location".</p> <p>(xii) It involves a National Park, a Community Conservancy, and a heritage site, all of which are mandated to protect archaeological, cultural and natural resources, as well as public interest.</p> <p>(xiii) The word "fairly" in this sentence, is again the most ambiguous of adjectives, which undermines the implication of so called "confidence" in impacts actually being mitigated.</p> <p>(xiv) The table outlining the Assessment of Cultural Heritage states any damage to be "reversible". I would argue that any damage to a cultural heritage site is irreversible. Again I note that the proposed project is fatally flawed from a Cultural and from a Conservation Management perspective, as it compromises infrastructure incompatible with the AFNP</p>		<ul style="list-style-type: none"> • The term "fairly confident" would indicate a medium degree of confidence that significant sites have been identified. Since many archaeological sites are buried beneath the ground surface, a high degree of confidence is not possible. • With regard the use of the term "typical site locations"; this refers to the observed practice that colonial and pre-colonial people tend to settle in specific locations on the landscape – for example, on koppies, along river banks, etc. It reflects an archaeological understanding of the landscape. • Both authors have undertaken extensive heritage surveys in other National Parks, including the Richtersveld National Park, the Namaqua National Park and the Addo Elephant National Park, and have experience in this regard. • With regard the comment: "The Table outlining the Assessment of Cultural Heritage states any damage to be "reversible". I am not sure which Table Ms Tyrell is referring to. Tables 2 (archaeology), 3 (Graves) and 4 (Cultural Landscapes) all indicate that the impacts would be "irreversible". The only table which claims that the impact could be reversible is Table 5 (Augrabies Falls National Park) and it specifically states that the impact to the National Park is reversible "with full decommissioning and rehabilitation".
	<p>Visual impact assessment and comments: (Paragraphs numbered by EAP to facilitate responses)</p> <p>(i) "Potential visual impact on tourists and visitors to the Augrabies Falls (especially the AFNP Tourist Complex and local hikes and walks along the gorge) are</p>	<p>Jess Tyrell, wilderness Guide & African Paddling Association, comment by e-mail, 26</p>	<p>EAP Response: Paras (i) to (ix):</p> <ul style="list-style-type: none"> • There is no doubt that construction activity on the diversion weir and parts of the

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	<p>expected to be of moderate significance and may be mitigated to low.</p> <p>(ii) I object to the comment of the visual impact for visitors being of "moderate significance". I am one of those visitors and would consider the visual impact proposed to be of great significance. It would entirely destroy the view, not in the sense of obstruction, but the sense of place in what is still a last remaining wilderness area.</p> <p>(iii) The visual impact of the 132kV overhead power line expected to be of moderate significance. No mitigation is possible.</p> <p>(iv) Again, "moderate significance" only encompasses the views of some, such as the authors, but not others, such as myself and many other I&APs who have clearly commented on this eye-sore in the Public Comments report. I object to this point entirely on the grounds, clearly stated in the EIA report, that no mitigation is possible.</p> <p>(v) "The outcome of the visual impact assessment report (i.e. whether the project proposal should be supported or rebutted) still hinges on the principle of whether it is desirable to construct commercial power generation infrastructure within areas that have specifically been earmarked for conservation and tourism activities."</p> <p>(vi) I second this statement written by the author of the Visual Impact Assessment Report. These areas have been specifically earmarked for conservation and tourism activities. Case in point.</p> <p>(vii) In terms of the above, the proposed project is once again fatally flawed from a visual perspective and from a Conservation Management perspective, as it compromises infrastructure incompatible with the AFNP overall, and its land use zoning.</p> <p>(viii) The anticipated visual impact of the facility on the regional visual quality, and by implication on the sense of place of the region is expected to be of moderate significance during the construction phase and low during the operational phase.</p> <p>(ix) As above, the regional visual quality, and by implication the impact on the sense of place would in fact be Very High during the construction phase and beyond.</p> <p>(x) Please note, as well as add this into my comments for public view, that we, as Interested and Affected Parties, are entitled to seek protection of Augrabies National Park and its surrounding community conservancy (Riemvasmaak), should this project find some way to go ahead, as well as relief, on behalf of ourselves, and in the interest of other affected parties.</p> <p>(xi) The National Environmental Management Act (107/1998), read together with the Criminal Procedure Act (51/1977), expressly provide for individuals to institute private criminal prosecutions for the protection of the environment. Section 24 of the South African Constitution (108/1996) protects environmental rights as fundamental human rights in two ways. First, it guarantees individuals the right to an environment that is not harmful to their health and well-being. Second, a duty</p>	<p>April 2016</p>	<p>headrace will be visible from the AFNP tourist complex, albeit at distance of 2km or more, and in many cases obscured by intervening high ground and / or lines of trees.</p> <ul style="list-style-type: none"> • Views from the timber walkways and decks overlooking the falls and the gorge will not include work on the weir or tailrace because the right bank of the river, between the decks and the weir and tailrace, is at a higher elevation than the decks. • Construction work on the power station will not be visible from the camp, because of intervening high ground. • It is possible that construction activities on the power station will be visible from some vantage points on the left (west) bank of the river, particularly the ridge of high ground, but this will be at a minimum distance of 3km. • Once construction work on the diversion weir is completed only the flank walls and the offtake structure will be visible from the opposite river bank, since the actual weir will be submerged at most flow rates. The tailrace will be completely buried, except for a number of small access chambers on the surface. • The power station headworks will only be visible from the high ground on the left bank of the river. It will not normally be illuminated at night, and then only discreetly for security purposes. • With regard to power lines, the evacuation line will be buried along its entire length inside the boundaries of the park mostly along the route of the tailrace. Overhead power lines will only be constructed from the substation, outside the park boundary, across the river, following the route of

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	<p>is imposed on the state to take adequate measures to ensure environmental protection.</p> <p>(xii) The National Environmental Management Act was promulgated in order to ensure the realization of the environmental right in Section 24 of the Constitution.</p> <p>(xiii) Section 32 of the act gives standing to "any person or group of persons" to "seek appropriate relief in respect of any breach or threatened breach of any provision of [the act]...or any other statutory provision concerned with the protection of the environment or the use of natural resources" in circumstances where such person is acting:</p> <ul style="list-style-type: none"> • in that person's or group of person's own interest; • in the interest of, or on behalf of, a person who is, for practical reasons, unable to institute such proceedings; • in the interest of or on behalf of a group or class of persons whose interests are affected; • in the public interest; or • in the interest of protecting the environment. 		<p>existing overhead lines, to join the Eskom system in the south side of the river. The support structures are likely to be similar to the ones that carry the power lines across the park to the visitor complex.</p> <ul style="list-style-type: none"> • We are of the opinion that the impacts identified, described and rated in the Visual Impact Assessment represent a fair assessment of the potential impacts of the project during construction and operation. <p>Paras (x) to (xiii):</p> <ul style="list-style-type: none"> • Thank you for acquainting us with the provisions of the Constitution, NEMA, and the Criminal Procedures Act. • We are not sure why you have raised these issues, but please accept our assurances that the applicant has no intentions of breaching any of the provisions of the law, and certainly - as you appear to imply that he might - engaging on any criminal activity.
Dr. Jannette Deacon – South African Archaeological Society			
	<p>I have registered as an Interested and Affected Party only today since being alerted to the document (28 April 2016), but take the opportunity to recommend that the following paragraph from page 186 of the Amended EIAR be more appropriately worded to take into account the comment of SAHRA with regard to graves that might be impacted during the construction phase.</p> <p>It is clear that the document has not fully integrated the comments from SAHRA which has had a great deal of experience in liaising with communities when graves are impacted by development. Failure to acknowledge SAHRA's recommendation could have adverse consequences for the developers. The proposed amendments are in red.</p> <p>Original paragraph in HIA:</p> <p>A wide variety of heritage resources was recorded. These included scatters of Middle (MSA), and Later Stone Age (LSA) and historical artefacts, LSA occupation sites with deposits, and historical occupation sites with ruined structures and artefacts, of varying age. Significantly, a number of graves and many more stone features that may or may not be graves were located. A stone memorial was also</p>	<p>Dr. Janette Deacon, SA Archaeological Society, comment by e-mail, 28 April 2016.</p>	<p>Dear Dr Janette Deacon, Thank you for your e-mail and registering as an interested and affected party on the Riemvasmaak Run-of-River Hydro Project EIA.</p> <p>I hereby acknowledge that you have been registered as an I&AP on both the database and e-mail register.</p> <p>Thank you for your comments relating to the heritage and archaeological aspects of the AFEIR.</p> <p>Sincerely, Shawn Johnston</p> <hr/> <p>EAP Response: <i>Note: This response was provided by Dr</i></p>

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	<p>found. All tThe historical features together comprise a relatively recent cultural landscape with but it should be noted that the community who created that landscape have given permission for the development to proceed, This serves to temper the significance of the cultural landscape and individual features of which it is comprised.”</p> <p>Revised paragraph as submitted by commentator: “A wide variety of heritage resources was recorded. These included scatters of Middle (MSA), and Later Stone Age (LSA) and historical artefacts, LSA occupation sites with deposits, and historical occupation sites with ruined structures and artefacts, collectively spanning a time period of more than 50,000 years of varying age. Significantly, a number of graves and many more stone features that may or may not be graves were located. A stone memorial was also found. All ‡The historical (20th century) features together comprise a relatively recent cultural landscape with highly sensitive graves that will be recorded, protected and conserved according to guidelines indicated by the SAHRA Burial Grounds and Graves Unit. but it should be noted that. Although some members of the resident community who created that landscape have given permission for the development to proceed, more in-depth consultation will be required should graves be directly impacted during the construction phase. This serves to temper emphasise the significance of the cultural landscape and the individual features of which it is comprised.”</p> <p>Revised paragraph clean: “A wide variety of heritage resources was recorded. These included scatters of Middle (MSA), and Later Stone Age (LSA) and historical artefacts, LSA occupation sites with deposits, and historical occupation sites with ruined structures and artefacts, collectively spanning a time period of more than 50,000 years. Significantly, a number of graves and many more stone features that may or may not be graves were located. A stone memorial was also found. The historical (20th century) features together comprise a relatively recent cultural landscape with highly sensitive graves that will be recorded, protected and conserved according to guidelines indicated by the SAHRA Burial Grounds and Graves Unit. Although some members of the resident community have given permission for the development to proceed, more in-depth consultation will be required should graves be directly impacted during the construction phase. This serves to emphasise the significance of the cultural landscape and the individual features of which it is comprised.”</p>		<p>Lita Webley, ACO Associates, Second author of the HIA Report</p> <ul style="list-style-type: none"> • In the first paragraph, Dr Deacon states that “the document has not fully integrated the comments from SAHRA”. Unfortunately, this reflects a lack of understanding of the EIA process. The EIA process only engages with the public process AFTER the specialists’ reports are finalized. SAHRA is considered a commenting body as well. However, the specialist is not allowed to change a report once it has gone out to comment as every change in the report has to be subject to a further 30 day process. Thus, after the report was submitted to SAHRA for comment, the authors are not in the position to change the HIA report. The comments made by SAHRA can be incorporated in the FEIR and in the EMPr. • We are satisfied that Dr Deacon’s revised paragraph can be inserted into the FEIR and the EMPr, but they cannot be inserted into the HIA. • With regard to the issue of burials and cairns, the HIA clearly indicates that, apart from the cemetery at Melkbosrand, which is fenced and is not threatened by the development, there are a number of cairns along the banks of the Orange River, which may or may not be graves. This has bearing on some of the SAHRA comments. • The SAHRA Interim Comment: “<i>The SAHRA Burials Grounds and Graves Unit requests that a ground survey to verify the number of graves that are present</i>” – does not take cognizance of the results of the field survey (Orton & Webley 2012). The proposal for a second survey of the area is unlikely to result in a more

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			<p>detailed/accurate mapping of graves. The problem is that it is difficult to be sure that all cairns are graves. The cairns are not congregated in a specific area, but are dispersed over a wide area. Some cairns are clearly graves, but others may be heaps of rubble from road construction, etc.</p> <ul style="list-style-type: none"> • The SAHRA Interim Comment: “<i>That all graves should be restored where they are dilapidated</i>” is not feasible when the authors have only identified stone cairns. Re-packing a stone cairn may create a “grave” where none exists. The authors would support fencing those cairns, which stylistically suggest the likelihood of graves. • It is recommended that a protocol be established to deal with graves which are uncovered during the development process (this could be the Conservation Management Plan) outlined in the SAHRA Interim Comment. However, the provisions of the CMP must also be included in the EMPr, or they will not be implemented during construction. This would obviously include consultation with affected communities, as outlined in the NHRA. <hr/> <p>EAP Response:</p> <ul style="list-style-type: none"> • It is not considered appropriate to replace the original specialist’s words with the commentator’s rewrite. With the exception of the final sentence, which alters the sense of the authors’ words, the remainder is explanatory. • A new mitigation measure has been added to the construction phase of the Final Amended EAIR requiring graves to

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			be fenced around, generally in accordance with SAHRA's recommendations. • The mitigation measure has been inserted into the EMP.
Ashleigh Dore & Yolán Friedmann –Endangered Wildlife Trust			
	Dear Sirs Please see attached for the comments from the EWT on the Riemvasmaak community Hydro--electric power station EIA and many thanks for kindly giving us an extension to today to submit out comments. Kindest regards Ashleigh Dore Training Coordinator Skills Development Programme Endangered Wildlife Trust	Ashleigh Dore & Yolán Friedmann, Endangered Wildlife Trust, comment by e-mail, 06 May 2016.	Dear Ashleigh, Thank you for your comments. I hereby acknowledge receiving the EWT comments on the Riemvasmaak Run-of -River AFEIR. Sincerely, Shawn Johnston
	Dear Sirs RE: THE ENDANGERED WILDLIFE TRUSTS' COMMENTS RIEMVASMAAK COMMUNITY HYDRO-ELECTRIC POWER STATION EIA The Endangered Wildlife Trust (the "EWT"), established in 1973, is a registered Non-profit Organization, whose mission is to conserve threatened species and ecosystems in southern Africa, for the benefit of all.	Yolán Friedmann, Endangered Wildlife Trust, comment by e-mail, 06 May 2016.	EAP Response: The status of the commentator's organisation is noted and acknowledged.
	The EWT welcomes the opportunity to comment on the Riemvasmaak Community Hydro-Electric Power Station EIA (the "EIA"). The EWT raises the following comments on the EIA: The List of SSC bird species referred to in the EIA, provides outdated information in respect of the status of these bird species, for example the African White-backed Vulture is listed on the SSC bird species list as globally endangered and nationally vulnerable. However this species was up-listed to critically endangered in 2015 Yes. Other species which have been listed with an incorrect status include <i>inter alia</i> : Black Harrier (Endangered) and the Verreaux's Eagle (Endangered). The potential impact on certain species should be more carefully considered in light of their more threatened status;	Yolán Friedmann, Endangered Wildlife Trust, comment by e-mail, 06 May 2016.	EAP Response: Thank you for this information. The EIA Report has been amended to reflect the up-listing of these species as follows: • African White-backed Vulture: EN changed to CR (IUCN 2014-4). • Black Harrier correctly described as VU (IUCN 2015-4). • Verreaux;s (Black) Eagle correctly described as LC (IUCN 2015-4). All other listings were checked with IUCN 2015-4 and GN R.51, February 2007, and found to be correct.

Addendum to the Amended Final Environmental Impact Assessment Report – Comment and Response Report

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
			<p>The impacts and mitigation measures were reviewed, and were considered to be appropriate.</p> <hr/>
	<p>A full and proper assessment of the area for potential breeding sites of the following species: Verreaux's Eagle (IUCN LC); Lanner Falcon (IUCN LC); Secretary bird (IUCN VU), Kori Bustard (IUCN NT), Ludwig's Bustard (IUCN EN) and Black Stork (IUCN LC) must be undertaken to ensure that active and potential breeding sites are identified and are not impacted by the proposed development.</p>	<p>Yolan Friedmann, Endangered Wildlife Trust, comment by e-mail, 06 May 2016.</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> • A new mitigation measure has been added to the construction phase impacts on birds requiring a pre-construction survey to identify breeding sites. • The Construction EMPr has been amended to this effect. <hr/>
	<p>There are numerous hydroelectric power schemes being built on the Orange River without a cumulative/strategic assessment having been undertaken. This is imperative and development should not be permitted to take place without the cumulative impact being considered;</p>	<p>Yolan Friedmann, Endangered Wildlife Trust, comment by e-mail, 06 May 2016.</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> • The cumulative impacts of the proposed project are considered in section 7.6 of the Amended EIA Report (pp 174 - 183), which includes the impacts on agriculture, aquatic ecology (which pays particular attention to existing and proposed HPPs on the river), vegetation, fauna, heritage, noise, socio-economics and tourism. <hr/>
	<p>The flow rate issues are concerning. The EFR (Ecological Reserve) needs to be properly calculated. All the assumptions and mitigation responses in the EIA are based heavily on one figure, an EFR of 30m/s, without any calculations to support this. This is a major failing in the EIA;</p>	<p>Yolan Friedmann, Endangered Wildlife Trust, comment by e-mail, 06 May 2016.</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> • The impact of this project on the Augrabies Falls is addressed in detail in section 3.3 of the Amended Final EIAR and Chapter 2 of the Addendum Report. Section 2.4 of the Addendum Report goes into some detail on previous Reserve / EWR determinations, and makes it clear that 30m³/sec is not intended to be the EFR / Reserve for the river. It is the flow rate in the river below which there will be no diversions of water from the river to the power station. • Cumulative impacts of this and all other existing, or planned HPP on the highly regulated Orange River are addressed in

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
			<p>section 7.6.2 of the Amended Final EIAR.</p> <ul style="list-style-type: none"> It is recommended that the commentator read these sections to inform herself of the impact of the project on the flow regime over the falls and in the river downstream. <hr/>
	<p>A formal and legally binding undertaking needs to be established to ensure that should the flow of the river be reduced to a certain level, no water will be diverted out of the river. Further monitoring and compliance measures need to be included in the aforementioned undertaking to ensure that the undertaking is complied with;</p>	<p>Yolan Friedmann, Endangered Wildlife Trust, comment by e-mail, 06 May 2016.</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> The references cited in the previous response state clearly that no water will be diverted from the river into the HPP while the flow rate in the river is less than or equal to 30 m³/sec. If the project is authorised it will include a condition that a formal flow management plan is prepared and agreed with all parties. It is also pointed out that, if the flow rate over the falls decreases below this threshold, it will be due to the management of releases into the river from the two very large impoundments upstream of the project site, or the management of abstractions from the river between these impoundments and the project site. It will not ever be caused by diversions for the project. <hr/>
	<p>The cumulative impacts of the proposed hydro-electric power station and the existing hydroelectric power station in Richie Falls needs to be assessed jointly, this is absent in the EIA; and</p>	<p>Yolan Friedmann, Endangered Wildlife Trust, comment by e-mail, 06 May 2016.</p>	<p>EAP Response:</p> <ul style="list-style-type: none"> Cumulative impacts of the proposed project and all the other existing or proposed HPPs on the river's flow regime are discussed in section 7.6.2 of the Amended Final EIA Report. It is concluded that - <p><i>The small run-of-river hydroelectric power stations that already exist or are proposed make use of existing vertical falls in the course of the river (dams,</i></p>

Addendum to the Amended Final Environmental Impact Assessment Report – Comment and Response Report

No.	Issue	Raised by	Response from CES EIA team or Hydro SA
			<p><i>,weirs and waterfalls), and therefore require little or no storage capacity. Accordingly, unlike facilities that require large impoundments to provide the driving head (Gariep and Vanderkloof dams, for instance), they do not alter the seasonality of flow in the river. Also, since all of the water diverted through the turbines is returned to the river downstream of the abstraction point, they have no impact on the quantitative flow regime of the river.</i></p> <ul style="list-style-type: none"> • There is no existing HPP at Richie Falls. It is discussed in the EIA Report as a proposed project.
	<p>Should the development go ahead, a 50m buffer area must be established and enforced around the wetland areas and maintenance and repair of hydrologic function must be ensured. We trust you find the above comments useful. Yours Sincerely THE ENDANGERED WILDLIFE TRUST Ashleigh Dore and Yolana Friedmann</p>	<p>Yolana Friedmann, Endangered Wildlife Trust, comment by e-mail, 06 May 2016.</p>	<p>EAP Response</p> <ul style="list-style-type: none"> • The faunal specialist, Dr Bill Branch, has recommended that clearing or damaging wetlands must be avoided, the establishment of 50m buffer zones around wetlands, the rehabilitation of wetlands if they are damaged, and maintenance of water quality and flow dynamics. These recommendations have been incorporated into the EMP.

APPENDIX H: COPIES OF CORRESPONDENCE ON THE DRAFT AMENDED EIA REPORT, ADDENDUM REPORT, AND ECONOMIC ANALYSIS, MARCH 2016

Appendix H-1: Letter of notification and accompanying e-mails



**SUSTAINABLE
FUTURES ZA**

P.O. Box 749 Rondebosch 7701 Tel: 083 325 9965 Fax:086 510 2537
E-mail: swjohnston@mweb.co.za

07 April 2016

Dear Stakeholder,

**ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE
PROPOSED HYDRO SA RUN-OF-RIVER HYDRO POWER PROJECT,
RIEMVASMAAK, NORTHERN CAPE
DEA Ref. No. 14/12/16/3/3/2/600**

**NOTICE OF THE AVAILABILITY OF THE AMENDED FINAL ENVIRONMENTAL
IMPACT ASSESSMENT (AFEIR) REPORT AND ADDENDUM REPORT
FOR PUBLIC REVIEW**

RVM 1 Hydro Electric Power (Pty) Ltd (RVM), intends to construct a run-of-river hydroelectric power station on the Orange River on the farm Riemvasmaak (Remainder of Farm no. 497 and Portion 1 of Farm no. 498), north of the Augrabies Falls, approximately 40km north-west of Kakamas in the Northern Cape Province of South Africa. The power station will have an installed generating capacity of up to 40 megawatts (MW), and the annual energy output from the facility is anticipated to be approximately 235 gigawatt-hours (GWh).

In broad terms, the project will entail the construction of infrastructure comprising:

- (a) A low diversion weir across the Orange River upstream of the Augrabies Falls.
- (b) An off-take structure at the weir to facilitate diversion of water from the river.
- (c) A conduit – the headrace - to convey water from the intake structure to the penstock head pond.
- (d) A head pond and power station intake structure - forebay.
- (e) Vertical (or very steep) penstocks – pipes - to transfer the water from the head pond to the power chamber.
- (f) An underground power chamber containing up to four Francis turbines.
- (g) An underground tailrace and outlet works to convey water from the power chamber back to the river channel.
- (h) Haul roads to facilitate access for construction and the removal of excavated material off site for disposal or re-use.
- (i) A high voltage (HV) power line to evacuate the power from the power station to the national grid (partly underground and partly above ground).
- (j) A transformer yard and mini substation located at the headpond and a new substation.

(k) Fencing as required for public safety.

**AMMENDED FINAL ENVIRONMENTAL IMPACT REPORT & ADDENDUM
REPORT AVAILABE FOR PUBLIC REVIEW**

The Amended Final Environmental Impact Assessment Report (AFIAR) and Addendum Report has been made available for public review. The reports has been made available for a 21-day comment period at the following locations from **07 - 28 April 2016:**

1. Augrabies Falls National Park Information and Reception desk, Main Park Building, Augrabies Falls National Park
2. Marchand Khai Gariep Municipal Office , Clinic Street, Marchand Town
3. Augrabies Khai Gariep Municipal Office , 199 Tin Singel/Crescent, Augrabies Town
4. Kakamas Library , 28 Voortrekker Street, Kakamas
5. Keimoes Library , Main Road, Keimoes
6. Vredesvallei Municipal Office , Riemvasmaak Vredesvallei
7. Riemvasmaak Mission Tourism Office , Riemvasmaak
8. CES web site: http://www.cesnet.co.za/public-documents.html

For ease of understanding the changes to the AFEIR, please read the addendum report, the addendum report guides the reader and provides clarity and responses to the information requested by the National Department of Environmental Affairs.

Comments and submissions on the reports can be made as written submissions by:

1. fax;
2. post; and,
3. e-mail.

Please submit all comments to Shawn Johnston **by Thursday, 28 April 2016.**

Please do not hesitate to contact Bill Rowlston, CES Environmental Impact Assessment Practitioner on b.rowlston@cesnet.co.za or me should you require clarification regarding the reports.

Our team welcomes your participation and look forward to your comments.

Sincerely,
Shawn Johnston
Process Facilitator

Covering e-mail:

From: Shawn Johnston <swjohnston@mweb.co.za>
Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600
Date: 07 April 2016 6:45:46 AM SAST
To: Shawn Johnston <swjohnston@mweb.co.za>
Bcc: visserd@dwa.gov.za, vanderwesthuizen@dwa.gov.za, vredesvalleicwp@gmail.com, vGeemsB@eskom.co.za, willie@omdraai.co.za, wduplessis@ncpg.gov.za, wessanc@yahoo.com, WayleaCR@telkom.co.za, williams@idc.co.za, zmjila@zfm.gov.za

1 Attachment, 247 KB

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE
PROPOSED HYDRO SA RUN-OF-RIVER HYDRO POWER PROJECT,
RIEMVASMAAK, NORTHERN CAPE
DEA Ref. No. 14/12/16/3/3/2/600

NOTICE OF THE AVAILABILITY OF THE AMENDED FINAL ENVIRONMENTAL IMPACT ASSESSMENT (AFEIR) REPORT AND
ADDENDUM REPORT
FOR PUBLIC REVIEW

Dear Stakeholder,

Find attached our letter clarifying the availability of the Amended Final Environmental Impact Assessment Report and Addendum Report available for public comment.

Sincerely,

Shawn Johnston

Process Specialist

Sustainable Futures ZA

P.O. Box 749 Rondebosch 7701

Cape Town, South Africa

Tel: ++27 083 325 9965

Fax: 086 510 2537

E-mail: swjohnston@mweb.co.za



[RVM AFEIR...Final \(247 KB\)](#)

The e-mail above was also sent to the following recipients:

<p>From: ShawnJohnston <swjohnston@mweb.co.za> </p> <p>Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600</p> <p>Date: 07 April 2016 6:44:56 AM SAST</p> <p>To: Shawn Johnston <swjohnston@mweb.co.za></p> <p>Bcc: Sylvia.Moholo@dpw.gov.za, stapelberg@geoscience.org.za, snyersa@kaigarib.gov.za, Samantha De la Fontaine <sdelafontaine@gmail.com>, Serame Motlhake <MotlhakeS@sentech.co.za>, Simon Gear <advocacy@birdlife.org.za>, Sibulele Mdingi <MdingiS@eskom.co.za>, simonben98@gmail.com, Samantha Braid <sam.braid.22@gmail.com>, Lizelle Stroh <strohl@caa.co.za>, Elsabe Swart <elsabe.dtec@gmail.com>, Tania Anderson <spothil@gmail.com>, tgordon@environment.gov.za, thokob@daff.gov.za, thebeo@dwa.gov.za</p>
<p>From: ShawnJohnston <swjohnston@mweb.co.za> </p> <p>Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600</p> <p>Date: 07 April 2016 6:44:21 AM SAST</p> <p>To: Shawn Johnston <swjohnston@mweb.co.za></p> <p>Bcc: rekkies461@gmail.com, samuel.tompies@sanparks.org.za, straussv@bdfm.co.za, stanley@m IDC.co.za, Samantha Braid <sam.braid.22@gmail.com>, swartw@kaigarib.gov.za, shawls@telkom.co.za, sakkitheron@vodamail.co.za, SwanepSG@eskom.co.za, Simon Gear <simon.gear@birdlife.org.za>, StreudersK@dwa.gov.za, Sue Liell-Cock <info@intraffed.com>, sdelafontaine@gmail.com</p>
<p>From: ShawnJohnston <swjohnston@mweb.co.za> </p> <p>Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600</p> <p>Date: 07 April 2016 6:43:18 AM SAST</p> <p>To: Shawn Johnston <swjohnston@mweb.co.za></p> <p>Bcc: raolg@idc.co.za, richardroman@live.com, Ramon Odendal <OdendaRP@eskom.co.za>, rentiat@idc.co.za, Ria Milburn <bush.education@mweb.co.za>, ruwayda.baulackey@drdlr.gov.za, Riaan Wolhuter <wolhuter@sun.ac.za>, Ranwedzi Mashudu <RanwedziM@dwa.gov.za>, riaan.smit@eskom.co.za, ratha.timothy@gmail.com, Riemvasmaaktourism@gmail.com, robin.buske@eskom.co.za, rcmalgas@gmail.com, Revmartinsecond@gmail.com</p>
<p>From: ShawnJohnston <swjohnston@mweb.co.za> </p> <p>Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600</p> <p>Date: 07 April 2016 6:43:14 AM SAST</p> <p>To: Shawn Johnston <swjohnston@mweb.co.za></p> <p>Bcc: ondpoort@gmail.com, onderpoort@gmail.com, Owen Peters <PetersOw@eskom.co.za>, PremiersPA@ncpg.gov.za, phine@sahra.org.za, Peter.Chiapasco@dpw.gov.za, pgboerdery@telkomsa.net, Pheladi Masipa <Pheladi.Masipa@energy.gov.za>, Philippa <philippa@ten3safaris.co.za>, ptiger@ncpg.gov.za, Peter Cloete <peter.denc87@gmail.com>, petronellabasson@gmail.com, pphiri@ncpg.gov.za, peter.novellie@sanparks.org, pmthakgane@ncpg.gov.za</p>

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600
Date: 07 April 2016 6:42:40 AM SAST
To: Shawn Johnston <swjohnston@mweb.co.za>
Bcc: mayorspa@kaigarib.gov.za, mramagoshi@nc.sahra.org.za, mehmooda@idc.co.za, matthewslaw@telkomsa.net, "Mariana Delpont (Private)" <md@cape-ecotours.co.za>, Melanie Miles <MelanieM@L2B.co.za>, Peter M Mokomele <peterm@idc.co.za>, motoails@eskom.co.za, nameing@karsten.co.za, Noxolo Ningiza <NingizaN@sentech.co.za>, Nardus du Plessis <nardus.duplessis@sanparks.org>, Noma.qase@energy.gov.za, Nathalie Tedder <ntedder2@gmail.com>, nico@fhs.za.net, "(null)" <andrea.vangensen@eskom.co.za>

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600
Date: 07 April 2016 6:42:29 AM SAST
To: Shawn Johnston <swjohnston@mweb.co.za>
Bcc: Marinda Louw Coetsee <marindamarinda@googlemail.com>, marchandbv@lantic.net, mackayj@kaigarib.gov.za, Marius Venter <VenterM@sentech.co.za>, mietaduentyi@gmail.com, michael.salix@gmail.com, mahunonyanem@dwa.gov.za, marchandbv@lantic.net, mashuduma@daff.gov.za, MMonyai@environment.gov.za, mletsoso@ncpg.gov.za, Mark Anderson <ceo@birdlife.org.za>, moller@lantic.net, mmogorosi@ncpg.gov.za, Mfanufikile.Machi@dpw.gov.za

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600
Date: 07 April 2016 6:41:43 AM SAST
To: Shawn Johnston <swjohnston@mweb.co.za>
Bcc: lebob@idc.co.za, Ltheunissen@rcon.co.za, lionell199@gmail.com, lida@safe.co.za, Leon Marais <leon@lawsons-africa.co.za>, LSehularo@ruraldevelopment.gov.za, Willem Louw <willem.louw@sanparks.org>, marchandent@gmail.com, marchandent@gmail.com, mannellz@sentech.co.za, mlukas779@gmail.com, marina@gemsbok.co.za, mandyb@idc.co.za, mayor@kaigarib.gov.za

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600
Date: 07 April 2016 6:41:03 AM SAST
To: Shawn Johnston <swjohnston@mweb.co.za>
Bcc: "Kubayi Ernest ((UPN))" <kubayie@dwa.gov.za>, koot.becker@psgkonsult.co.za, klimw@kaigarib.gov.za, kakamaswgv@isat.co.za, koegelenbergJ@sentech.co.za, khensanim@idc.co.za, Ahilan Kailasanathan <KailasA@eskom.co.za>, leane.vanwyk@sanparks.org, lculwick@sidala.com, Lucius Moolman <lucius.moolman@sanparks.org>, lmanong@agri.ncape.gov.za, ltheunissen@icon.co.za, lucindavanwyk@ncpg.gov.za, ltheunissen@leon.co.za, lizette.slabber@volksblad.com

<p>From: ShawnJohnston <swjohnston@mweb.co.za> </p> <p>Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600</p> <p>Date: 07 April 2016 6:37:42 AM SAST</p> <p>To: Shawn Johnston <swjohnston@mweb.co.za></p> <p>Bcc: jhbproc@lantic.net, jess tyrrell <tyrrelljess@gmail.com>, Jane Spickernell <jane@ec-ho.co.za>, Jasper.Nieuwoudt@dmr.gov.za, judya@idc.co.za, jeanielr@gmail.com, joey.basson7@gmail.com, john.geeringh@eskom.co.za, johanv@botken.co.za, jowellt@idc.co.za, jwilson@ncpg.gov.za, Keesha910@gmail.com, kakamaswgv@isat.co.za, kathrinduiker@gmail.com, Kobus van Copenhagen <kobusvc@gmail.com></p>
<p>From: ShawnJohnston <swjohnston@mweb.co.za> </p> <p>Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600</p> <p>Date: 07 April 2016 6:37:17 AM SAST</p> <p>To: Shawn Johnston <swjohnston@mweb.co.za></p> <p>Bcc: info@kalahari-adventures.co.za, info@bundi.co.za, info@internationalrafting.com, izak@rooipad.co.za, jaco.wessels@kaapagri.co.za, justine.wyngaardt@eskom.co.za, Johan Koegelenberg <KoegelenbergJ@sentech.co.za>, jandupl@telkomsa.net, jacolinema@daff.gov.za, jandup1@telkomsa.net, joey.basson7@gmail.com, jkiel@justice.gov.za, jonm@idc.co.za, jhbprok@lantic.net, jesmiec@idc.co.za</p>
<p>From: ShawnJohnston <swjohnston@mweb.co.za> </p> <p>Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600</p> <p>Date: 07 April 2016 6:36:44 AM SAST</p> <p>To: Shawn Johnston <swjohnston@mweb.co.za></p> <p>Bcc: henrybasson858@gmail.com, Hendrik.vanNiekerk@dpw.gov.za, hannes@zfm.gov.za, Howard Hendricks <howard.hendricks@sanparks.org>, hannes@zfm-dm.gov.za, hanneckeds@gmail.com, henearentrading@gmail.com, herbertk@idc.co.za, heesegert@gmail.com, howard.hendricks@sanparks.org, Phillip Hopley <philip@philcogreenenergy.co.za>, isaacsa@kaigarib.gov.za, info@apa.org.za, info@intratfed.com, info@khamkirri.co.za</p>
<p>From: ShawnJohnston <swjohnston@mweb.co.za> </p> <p>Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600</p> <p>Date: 07 April 2016 6:36:08 AM SAST</p> <p>To: Shawn Johnston <swjohnston@mweb.co.za></p> <p>Bcc: Feni Ntombizanele <FeniN2@dwa.gov.za>, Fred de Groot <fredde@iburst.co.za>, gabaima1@telkom.co.za, Gene Visser <ondpoort@gmail.com>, GJJ van Niekerk <gjjvanniekerk@gmail.com>, Gerhard Smit <gmlsmit@telkomsa.net>, gvwyk@gmail.com, gregjanuarie@gmail.com, greg@l-m-i.co.za, Gift Matsabatsa <MatsabMG@eskom.co.za>, gjvanniekerk@gmail.com, gerritw@idc.co.za, Gene Visser <ondpoort@gmail.com></p>
<p>From: ShawnJohnston <swjohnston@mweb.co.za> </p> <p>Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600</p> <p>Date: 07 April 2016 6:34:51 AM SAST</p> <p>To: Shawn Johnston <swjohnston@mweb.co.za></p> <p>Bcc: dandan.boshoff@gmail.com, "Dr. Hanneline Smit-Robinson" <conservation@birdlife.org.za>, daylinvanzyl@gmail.com, d.ngxanga@vodamail.co.za, eliset@beeld.com, eljordan@vodamail.co.za, elizabethrhyn874@gmail.com, fritz@augfalls.co.za, fritz@augfalls.co.za, ferdieb@idc.co.za, franksl@dwa.gov.za, Frandri.Smith@dpw.gov.za, Frans Van Rooyen <frans.vanrooyen@sanparks.org>, Frandri.Smith@dpw.gov.za, frans.vanrooyen@sanparks.org</p>

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600
Date: 07 April 2016 6:34:29 AM SAST
To: Shawn Johnston <swjohnston@mweb.co.za>
Bcc: cdavids@justice.gov.za, cloetes@dwa.gov.za, Conrad Geldenhuys <c.geldenhuys@hotmail.com>, Luise Niemoller Coertzen <luise@pofaddertourism.co.za>, daphneydws.56@gmail.com, Daniel Marnewick <daniel.marnewick@birdlife.org.za>, DGOffice@ruraldevelopment.gov.za, Dieter Heinsohn <dieter.heinsohn@acerafrica.co.za>, dariant@idc.co.za, Danie van der Mwerwe <danie@capespanfarms.co.za>, Dekockr@nra.co.za, "Dr. Hanneline Smit-Robinson" <conservation@birdlife.org.za>, debberl@bdfm.co.za, damaraclarissa@gmail.com

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600
Date: 07 April 2016 6:33:18 AM SAST
To: Shawn Johnston <swjohnston@mweb.co.za>
Bcc: benniekordom@gmail.com, BFisher@ncpg.gov.za, benjavess@gmail.com, Karen Breytenbach <karen.breytenbach@treasury.gov.za>, cfortune@agri.ncape.gov.za, Craig Eksteen <craig@kalahari-adventures.co.za>, christine.duplessis@sanparks.org.za, clarkem@kaigarib.gov.za, charlottedwds668@gmail.com, "Cebekhulu Mduduzi Christopher (UPN)" <CebekhuluM@dwa.gov.za>, charlottedwds668@gmail.com, cloeteg@kaigarib.gov.za, cloeteg@kaigarib.gov.za, c.geldenhuys@hotmail.com, carolinebasson@gmail.com

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600
Date: 07 April 2016 6:33:00 AM SAST
To: Shawn Johnston <swjohnston@mweb.co.za>
Bcc: ayaphi@ncpg.gov.za, andrew.hockly@gmail.com, Angus Tanner <angus@sa.wild.org>, alkantrant@vodamail.co.za, alwyn@blouputs.co.za, atiplady@ska.ac.za, anmirecivilworks@yahoo.com, ad@redira.co.za, Alishea Viljoen <ViljoenA@sentech.co.za>, Benjamin Hendricks <HendricksBS@sentech.co.za>, Ben Vass <benjavass@gmail.com>, brandtm@ncpg.gov.za, barcoc64@yahoo.com, bassonlesley@gmail.com, bockb@kaigarib.gov.za

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600
Date: 07 April 2016 6:32:35 AM SAST
To: Shawn Johnston <swjohnston@mweb.co.za>
Bcc: augrabies@vodamail.co.za, at@zfm.gov.za, "(null)" <ayaphi@upprov.ncape.gov.za>, Angus Tanner <angus@wildernessfoundation.org>, at@zfm-dm.gov.za, andre.riley@sanparks.org, augustinus3@gmail.com, admin@kaigarib.co.za, ammoiemang@ncpg.gov.za, alkantrant@vodamail.co.za, Angus Tanner <angus@sa.wild.org>, abrahamsa@dwa.gov.za, andrew@gravity.co.za, ADamarah@justice.gov.za

Mr K & Mrs H Van Coppenhagen, local residents, I&APs

On 07 Apr 2016, at 12:29 PM, Kobus van Coppenhagen wrote:

Sir

Your e-mail below and voice message and our telecon of 6 April 2016 refers;

According to the voice message you wanted to deliver documents to us and according to the telecon we had, you indicated that DEA somehow "waived" the requirement for the applicants to (firstly consult with SANParks in order to obtain their instructions re. the establishment of the proper ToR for the EIA and to subsequently) obtain SANParks consent for this activity before, submission of the AFEIAR to DEA and the IAP's, for comments and final decision, thus a kind of parallel process.

We have requested in the past that the minutes of all meetings between DEA and the applicants be recorded and forwarded to us, which DEA agreed to. We need a copy of the minutes of this meeting or of the correspondence which resulted in this outcome. It must also be noted that although your e-mail states that the Amended Final EIAR is available, we have only seen a draft document on the website, which is obviously not right.

The rejection letter states certain requirements

Page 3 of the rejection letter states: *"The amended EIAR must be circulate(d) for notification to the I&APs for a period of 21 days."*

And also quotes from Regulation 19:

"(1) No development contemplated in section 50(5) of the Act shall be implemented-

(a) In any area other than an area specifically set aside for such development in a management plan; and

(b) Before a management authority has indicated in writing the nature and extent of the strategic or environmental impact assessment required for the development."

This requirement is also to inform the IAPs of SANParks decision regarding its exclusive mandate and obligation, to ensure that our National Parks are maintained unspoiled by activities unrelated to conservation and tourism, for the benefit of future generations. Thus; your effort to circulate this "amended" FEIAR without providing the required documented proof of SANParks consent at the same time and how the Park Management Plan has already been changed to enable them to consider it and to arrive at a positive outcome for the applicants, would be pre-emptive, since regulation 19 quoted above clearly states the sequence(pre-conditions) on which the determinations can be made, i.e.

Firstly the management plan MUST allow for the proposed activity and ONLY THEN

Secondly can the management authority instruct the applicant regarding the extent of the EIA ((b) above) AND THEN FINALLY

Thirdly should the management authority decide on whether it will approve the proposed activity, AFTER WHICH you should submit this application to DEA and the IAP's for comments and final consideration.

We have laid the above out in considerable detail, with an example, in previous correspondence but it seems as if the applicants are intent on circumventing the additional legally required procedures, as far as NATIONAL PARKS are concerned, when listed activities which are unrelated to the business of SANParks are proposed.

On 07 Apr 2016, at 1:21 nm., ShawnJohnston <swjohnston@mweb.co.za> wrote:

Dear Mr. Kobus van Coppenhagen,

Thank you for your e-mail response.

If you gave me the opportunity to clarify about the delivery of documents you would have know what I was trying to clarify. Instead you became highly emotional and insulted me over the telephone and indicated that you did want to talk to me any further. At that point I thanked you for the insult and we ended the telephone call. I really feel aggrieved about your attitude and insults towards me. At this point I regard it as water under the bridge.

Sir, your comments and attachment in this e-mail dated 07 April 2016, at 12:29:37 PM SAST are noted for the record.

Your e-mail will be processed into the final documents at the end of the 21-day comment period.

Sir

I find your comment interesting and understand that the truth might have hurt you. I merely stated the following; we have sent several e-mails to you which remain unanswered, one of which was a response from a specialist which you did not pass on to us, right?

I also said that you are supposed to be the facilitator of the project, which places a certain duty upon you towards the IAPs (re clarification of administrative issues) and that you should not be a "promoter" of the project.

When I asked you about the correct procedure which has been laid out in the rejection letter you became vague.

Subsequently I said that there is nothing which I want to discuss with you any further since you are of no assistance to me. We are not participating in this process because it is of any amusement value, but only because the survival of our system of National Parks is of vital importance to us.

Regards

Kobus van Coppenhagen.

The e-mail below was sent inadvertently before it was finalised and the added words are written in bold before sending a second time.

On 07 Apr 2016, at 12:29 nm., Kobus van Coppenhagen <kobusvc@gmail.com> wrote:

Sir

Your e-mail below and voice message and our telecon of 6 April 2016 refers;

According to the voice message you wanted to deliver documents to us and according to the telecon we had, you indicated that DEA somehow "waived" the requirement for the applicants to (firstly consult with SANParks in order to obtain their instructions re. the establishment of the proper ToR for the EIA and to subsequently) obtain SANParks consent for this activity, before submission of the AFEIAR to DEA and the IAP's, for comments and final decision, thus a kind of parallel process.

We have requested in the past that the minutes of all meetings between DEA and the applicants be recorded and forwarded to us, which DEA agreed to. We need a copy of the minutes of this meeting or of the correspondence which resulted in this outcome. It must also be noted that although your e-mail states that the Amended Final EIAR is available, we have only seen a draft document on the website, which is obviously not right.

The rejection letter states certain **administrative** requirements;

Page 3 of the rejection letter states: "*The amended EIAR must be circulate(d) for notification to the I&APs for a period of 21 days.*"

And also quotes from Regulation 19:

"(1) No development contemplated in section 50(5) of the Act shall be implemented-

(a) In any area other than an area specifically set aside for such development in a management plan; and

(b) Before a management authority has indicated in writing the nature and extent of the strategic or environmental impact assessment required for the development."

This requirement is also to inform the IAPs of SANParks decision regarding its exclusive mandate and obligation **to manage the National Park in accordance with the publicly agreed management plan, in order** to ensure that our National Parks are maintained unspoiled by activities unrelated to conservation and tourism, for the benefit of future generations. Thus; your effort to circulate this "amended" FEIAR without providing the required documented proof of SANParks consent at the same time and how the Park Management Plan has already been changed to enable them to consider it and to arrive at a positive outcome for the applicants, would be pre-emptive, since regulation 19 quoted above clearly states the sequence(pre-conditions) on which the determinations can be made, i.e.

Firstly the management plan **MUST** allow for the proposed activity and **ONLY THEN**

Secondly can the management authority instruct the applicant regarding the extent of the EIA ((b) above) **AND THEN FINALLY**

Thirdly should the management authority decide on whether it will approve the proposed activity, **AFTER WHICH** you should submit this application to DEA and the IAP's for comments and final consideration.

We have laid the above out in considerable detail, with an example, in previous correspondence but it seems as if the applicants are intent on circumventing the additional legally required procedures, as far as NATIONAL PARKS are concerned, when listed activities which are unrelated to the business of SANParks are proposed. **We have also drawn the attention of the applicants to the following SANParks publications relating to management plans, in our comments for the Draft Scoping Report on 27/8/2013:**

Page 3, para 2:

"SANParks publications:

A Framework For Developing And Implementing Management Plans For South African National Parks (April 2008).

Stakeholder Participation In Support Of Developing And Implementing Management Plans For South African National Parks (December 2009)." The full document (no 9) was also forwarded for the attention of the new consultants as part of our comments on the DEIR.

It would also be prudent to remind the applicant, SANParks and DEA at this stage that Hydro Tasmania does not have a long term commitment to its South African business and a recent quote from the Minister of Energy, Mr Groom should be enlightening:

"In relation to the South African one, the position of government had been to encourage the business to exit those arrangements, but that will happen over time."(Tasmanian Government Business Scrutiny Committee Meeting; 3 December 2015, page 28 last 2 paragraphs). All this relates to Hydro Tasmania's total investment of only AU \$ 3,559 million for its 25% share of the Kakamas HEP, the published cost of which is ZAR 581 million according to the IDC website, thus a substantially discounted price. We have always stated that they are only interested in creating jobs for their own staff, which should rather be stated as the purpose of the applications.

This lack of commitment should also be seen against the background of "promises" made by Malcolm Green (HT representative) to the community in a public meeting i.r.o the establishment of a "young engineers training programme" in Riemvasmaak and to which we have referred to in previous comments (DEIR p 10).

We need urgent clarification from the DEA regarding this deviation from the letter of rejection.

Regards

Kobus & Hannecke van Copenhagen

Sir

I) The publication of a new "Amended Draft Final EIAR" is perplexing, since the applicants have already been instructed some time ago, to proceed with the Final EIAR which they have published in 2015. The new documents are also "overprinted" with the words "DRAFT FOR PUBLIC REVIEW" in a dark shade which makes it very difficult to read. Please clarify the situation at the Competent Authority as far as the procedural milestones are concerned and whether this new Amended **Draft** FEIAR represents a legitimate step in the process?

II) We also object to the serving of legal documents during the public participation process, which is an administrative process and **definitively not the correct forum or timing** for those "specialist inputs" which we find intimidating and it will prevent us from participating any further in this deeply flawed process. We believe that the applicant should submit those legal papers directly to the Competent Authority. We need urgent feedback from the Competent Authority in this regard.

III) The legal documents only serve to confirm what the EAP has already told us during the public meeting for the DEIR in Kakamas. His response at that time, in relation to questions regarding the instruction of Oct 2013 (Appendix A) that SANParks' written authorisation was required before submission of the FEIR ; *****Frankly, we are not going to do that, because otherwise we are not going to be able to submit the Final EIA.***** **"We do not have to get SANParks or anybody else's permission to submit the FEIR" ... "I don't think it is a legitimate instruction" ... "I receive lots of instructions ***ultra vires" ... "It is a very large engineering project".** These statements precede the above mentioned legal opinions of March 2016 by almost one year. The facilitator has an audio record of that public meeting for your information. All this relates to the application of NEM:PAA (the Act) section 50(5). It is important to recognise that this "additional" requirement originates in NEM:PAA, because it relates specifically to developments inside National Parks and thus enjoy preference according to Section 6 of the Act:

"Conflicts with other legislation"

"(1) in the event of any conflict between a section of this Act and-

(a) other national legislation, **the section of this act prevails if the conflict specifically concerns the management or development of protected areas;**

....," (bold and underlining added)

Thus the notion that the instruction of DEA is "ultra vires", just because it is not dealt with directly in NEMA, is fatally flawed and must be rejected. (****audio record of DEIR public meeting in Kakamas.

See IV for our suggested solution.

IV) There is a practical reason why SANParks' approval of EIA's is required, as suggested in the Act;

Example: "Screening Noise Report"(part of EIA) states in its executive summary (p2, para 1);

*"This assessment however could not identify receptors living within 2000 meters from the proposed development (excluding powerline). **Being a baseline assessment, it cannot comment on the potential risk of a noise impact on the natural environment.**"*(bold and underlining added).

It is clear from the above that this report is grossly inadequate for the purposes of SANParks as far as decision making is concerned (and the specialist is aware of it) because there are many wild creatures, some of which are endangered, which would be seriously affected by noise and the regulations (the Act) forbid the making of noise, anyway. The fact is that the applicants submitted the FEIAR ****admitting that it cannot be approved by SANParks (it would be rejected due to inadequate assessment), which probably constitutes an offence. The solution to this and other examples of Inadequate Impact assessment as it relates to the requirements of a protected area, would be to reject it on the basis that NEM:PAA has not been complied with, which is an offence and notice of non-compliance should be served.** It is interesting to note that Chapter 8 of NEM:PAA section 89 deals with offences and penalties regarding **non-compliance** with specific provisions;

89. "Offences and penalties

(1) A person is guilty of an offence if that person –

(a) contravenes or **fails to comply** with a provision of section 45(1), 46(1), 47(2), (3) or (3A), 48(1), 49A(5)(b), **50(5)** or 55(2)(fA);.....

.....

(2) A person convicted of an offence in terms of subsection (1) is liable, in the case of a first conviction, to a fine not exceeding R5 million or imprisonment for a period not exceeding five years and, in the case of a second or subsequent conviction, to a fine not exceeding R10 million or imprisonment for a period not exceeding ten years or in both instances to both a fine and such imprisonment."

V) Legal Opinion

Even in our layman's view, the legal opinion is based on the wrong premise, eg.:

Essential services

Paragraph 21 of legal opinion:

The context in which the legal opinion quotes and interprets "essential services" are based on the wrong proposition. The Labour Relations Act deals with labour relations and it is incongruous with ESKOM or any other party's application for the acquisition of a right, to generate power inside a National Park and thus doesn't place a duty on SANParks in any way, to authorise the proposal for a hydroscheme. The opinions expressed in 22, 23 and 58 are flawed and does not in any way, offer a solution in terms of the preceding paragraph 21 as if it would be applicable to section 53(b) of the Act and should be rejected.

Management plans

Paragraph 36 of legal opinion;

*"The **management authority alone compiles the management plan** and the management authority would not have designated an area specifically for a **development** such as the Project as it is neither Park specific nor Park dependent. The raw material required to generate the power the Project expects emanates from outside the Park and merely runs through it."* (bold and underlining added)

This is conclusive proof that our comments were never considered because we have referred to the applicable SANParks documents relating to the compilation of management plans during the scoping process and other occasions. **However, we can state for the record that SANParks did conduct a transparent and consultative public participation process for the amendment of the Augrables Falls National Park Management Plan (2013-2023) and presented it to the public before adoption.** The applicants chose not to participate, as we have commented previously. We have referred to this in detail in other correspondence, together with an example. **In this case we do suggest that DEA should reject all paragraphs in the legal opinion which refer to management plans, because it is based on the wrong premise;** 12,13, 14, 15, 16, 17, 18, 19, 20, 26, 28, 32, 35 and 36. The opinion of the senior counsel is based on analysis of the same opinion and agreement with it, without identifying the fatal flaw regarding management plans, which should also render it useless as a solution for the dilemma of the applicants.

We urgently need to know for how long DEA will allow the applicants to continue to act in breach of instructions of October 2013. It is clear that the applicants will not allow the prescribed administrative process to reach finality, by "litigating" in the wrong forum.

Regards

Kobus & Hannecke van Coppenhagen.
Augrabies.

Mr & Mrs Van Coppenhagen forwarded the above message to the Department of Water and Sanitation under the cover of the following message:

From: Kobus van Coppenhagen <kobusvc@gmail.com>
Subject: Fwd: Procedural matters: RVM1 Hydroscheme application DEA Ref. No. 14/12/16/3/3/2/600
Date: 14 April 2016 10:49:04 AM SAST
To: Moses Mahunonyane <MahunonyaneM@dws.gov.za>, Steven Shibambu <ShibambuS@dws.gov.za>
Cc: A B Abrahams <abrahamsa@dwa.gov.za>, Shawn Johnston <swjohnston@mweb.co.za>, Vincent Chauke <vchauke@environment.gov.za>, Danie Smit <dsmit@environment.gov.za>, Howard Hendricks <howard.hendricks@sanparks.org>

Sir

The e-mail below is for your information/action;

Please take note that the Department of Water and Sanitation's letter, which "confirms" the availability of 3,2 MCM/day, for diversion from inside the National Park is in breach of NEM:PAA sections 6 and 50(5); because it relates to a development inside the National Park, where conservation legislation prevails.

We suggest that the Department cancel this letter, due to a lack of the required level of assessment as prescribed in NEM:PAA section 50(5); proof of which we have requested from you, to no avail and to prevent DWS from becoming embroiled in what seems to be the start of litigation by the applicants.

Regards

Kobus and Hannecke van Coppenhagen

The following message was sent direct to DEA, and copied to a number of other recipients. The messages between Mr Van Coppenhagen and Dr David McDonald, botanical specialist, that were included are also reproduced here, in date order, for completeness.

From: Kobus van Coppenhagen <kobusvc@gmail.com>
Subject: Inadequate assessments for proposed "RVM1 hydroscheme" inside the Augrabies Falls National Park.
Date: 25 April 2016 4:32:00 PM SAST
To: Vincent Chauke <vchauke@environment.gov.za>, Danie Smit <dsmit@environment.gov.za>
Cc: Mike Knight <mknight@nmmu.ac.za>, Howard Hendricks <howard.hendricks@sanparks.org>, Shawn Johnston <swjohnston@mweb.co.za>

Sir

I am forwarding this e-mail (below) for your attention again, in support of our contention that certain aspects of "newly proposed techniques", eg. the constructing and operation of a haul road with an elevation of 100 meters or more to a crusher or dump site, from the base of the ravine, **has never been considered during the scoping phase (in 2013) or properly assessed** on site by the Botanical specialist(it was not part of the ToR), as he admitted in the e-mail below.

**** "At the time of my original field investigation I did not address the question of the haul roads directly since that was not part of my brief. However, I do believe that I understand the environment of the Augrabies area adequately to have subsequently made a valid judgement as to what the impact of the haul roads would be."** (Bold and underlining added).
**Quote from Dr. McDonald's e-mail below. This is material since those "new proposals" did raise the scope to that of a major engineering project and mining operation combined, which should have required thorough consideration in the scoping phase(also by DEA), due to the impact on the protected environment, but this fact has subsequently been overlooked.

We know that consultants do not "like" being doubted, but this illustrates the fact that most of **the assessments are completely inadequate, due to non-compliance with the additional requirements of NEM:PAA 50(5)** and the regulations, over and above the **normal** requirements of NEMA regulations. We repeat that non-compliance is an offence, according to section 89 of NEM:PAA. It is probable that the other reports (noise, etc) which has been "carried over" from the BAR suffer from the same lack of assessment as far as the haul roads, crusher, dump site, etc. are concerned, because it is new. This is a very unsatisfactory situation because DEA are being engaged by "litigation documents" during the administrative process which we find unacceptable, while we must repeatedly draw your attention to the lack of compliance by the applicants, which seems to be ignored/tolerated.

Would you be so kind to offer a reply regarding the actual status of this application, in view of the legal status of our National Parks (or has NEM:PAA been repealed)? If the newly published documents are DEIR documents we need to know whether public meetings will be held. If it is a submission of the FEIR; we are afraid that the documents are marked otherwise(draft) and essentially illegible.

Regards
Kobus van Coppenhagen

On 29 Mei 2015, at 1:23 nm., Dave McDonald <dave@berwind.co.za> wrote:

Dear Mr van Coppenhagen,

It would be irregular for me to answer your queries concerning my botanical studies at Augrabies directly and would be a breach of the environmental process protocol if I were to do so.

Please would you direct all your queries in writing to Mr Shawn Johnston (swjohnston@mweb.co.za) who is dealing with all queries and comments from I & AP's. If necessary he would direct you queries to me for a response.

It is vital that these channels be followed.

Yours sincerely,

Dave McDonald

Addendum to the Amended Final Environmental Impact Assessment Report – Comment and Response Report

On 29 Mei 2015, at 2:13 nm., Kobus van Coppenhagen <kobusvc@gmail.com> wrote:

Dr McDonald and Shawn Johnston

You suggested that I should phone later on, without stating that it would be "irregular" to speak to me, which seems almost irregular? My question on the phone was quite simple and for clarification only;

We noticed that you were not contracted to EOH CES, for the botanical survey and we wondered how the **haul roads from the base of the ravine** could have been investigated by you if it was a new idea, according to the consultants?

This requires a simple yes/no.

However, we do differ from your opinion in the sense that we believe that a directly affected party may present a question to the specialist (in whichever way). This is not about your opinion, but rather a matter of fact and it is material.

Shawn, we need this reply, still today. In fact we want to receive a copy of the report as he has presented it to Aurecon.

Regards

Kobus van Coppenhagen

0836564498

On Mon, Jul 27, 2015 at 6:59 PM, Kobus van Coppenhagen <kobusvc@gmail.com> wrote:

Good day Dr McDonald

We have requested a very simple answer from you and Mr. Shawn Johnston re. the proposed haul roads for the above activity. We are disappointed that no reply is forthcoming after months have elapsed and we are contemplating whether the matter should be reported to the professional body which you are affiliated with. Please make contact with Mr Johnston in order that we may receive the courtesy of a reply.

In the meantime we accept that you did not consider the impact of the newly proposed haul roads at the time of your investigation and that the DEA must take notice of the fact.

Regards

Kobus van Coppenhagen

0836564498

On 27 Jul 2015, at 8:12 nm., Dave McDonald <dave@berowind.co.za> wrote:

Mr van Coppenhagen,

It was my understanding that Mr Shawn Johnston had communicated with you on the matter to which you refer. I object to the fact that you claim that I did not reply to you since I made it clear in my email of 29 May 2015 that I was prepared to do so if the correct channels of communication were followed.

Let me reiterate. In the normal, course of events questions such as yours are directed via the Environmental Assessment Practitioners (in this case EOH) to the relevant specialist concerned. It is not usual that members of the public (Interested and Affected Parties) such as yourself interact directly with specialists who are appointed to any project. This can lead to a great deal of confusion and miscommunication. That is the reason that I did not deal with the matter directly with you. There are protocols and channels of communication that you have apparently chosen to ignore. Therefore I do not believe that I have erred by not answering your enquiries directly.

However, to put this matter to rest I am willing to address this matter directly with you, and this matter alone.

At the time of my original field investigation I did not address the question of the haul roads directly since **that was not part of my brief**. However, I do believe that I understand the environment of the Augrabies area adequately to have subsequently made a valid judgement as to what the impact of the haul roads would be.

I trust this 'simple' answer satisfies your query.

If you have any future enquiries please would you kindly direct them through the appropriate channels of communication i.e. through Mr Shawn Johnston and EOH (Dr Ted Avis and his colleagues).

Yours faithfully,

David McDonald

From: Kobus van Coppenhagen <kobusvc@gmail.com>
Date: 27 Julie 2015 11:10:39 nm. SAST
To: Dave McDonald <dave@bergwind.co.za>
Cc: Ted Avis <t.avis@cesnet.co.za>, "swjohnston@mweb.co.za" <swjohnston@mweb.co.za>, Mercia Grimbeek <mercia@hydro-sa.com>, Danie Smit <dsmit@environment.gov.za>, Howard Hendricks <howard.hendricks@sanparks.org>, Thivhulawi Nethononda <nethononda@environment.gov.za>
Subject: Re: Riemvasmaak - Augrabies

Dr McDonald

We have requested mr. Johnston to respond, which he did not do in almost two months. You would be able to see this request to him in our mail of 29 May 2015 (look at the bottom of this page) which was directed to both of you. Your reply is vague and inappropriate, considering our simple question.

You do however confirm that NO you have NOT been contracted to investigate the impact of haul roads, by AURECON in 2013, for whom you compiled the botanical report, which was used for the DEIR.

Secondly, we would appreciate a written copy of those "protocols" which you refer to, as published by your professional body (via mr Johnston; we have actually requested it in a previous e-mail to him).

Regards

Kobus van Coppenhagen
0836564498

Ms Marie-Louise Kellet, African Paddling Association & Gravity Adventures

From: "Marie-Louise and Andrew Kellett" <andrew@gravity.co.za>
Subject: RE: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/2/600
Date: 22 April 2016 1:53:17 PM SAST
To: "ShawnJohnston" <swjohnston@mweb.co.za>
Cc: "Kalahari Outventures \(\Craig Eksteen\)" <info@kalahari-adventures.co.za>, "Jess Tyrrell" <tyrrelljess@gmail.com>

Dear Shawn

I have had a look at the Amended Final EIA for the Augrabies Falls Hydro Power project (incorrectly called the 'Riemvasmaak' project). I have the following grave concerns (my comments are in italics):

1. Comments on the Public Consultation section of the EIA

- a. *The comments submitted by myself on behalf of the African Paddling Association do not seem to have been included, despite my re-submitting them to you after you took over from Aurecon and despite you acknowledging my mail. If I am incorrect, please advise me of where they are in your report. If you did receive them, then why are they not included in the findings of the Specialist Reports – there is no mention of the intrinsic value of Wilderness and the permanent loss of the sense of place except in the most superficial terms. If they HAVE been omitted, how many other peoples comments have also been left out?*
- b. *Despite my recommending to you that all registered I&APs be contacted after you took over and be explicitly requested to resubmit their comments (i.e. the comments already already submitted to Aurecon), this does not seem to have been done. Your consultative process is therefore fatally flawed from the start.*
- c. *Notification and consultation seems to have been done on a local level only – no notices were placed in national publications and no meaningful consultations were done on a regional or national level, despite this project having an impact on a resource that belongs to all the people of the country. For example, I do not see organisations such as WWF, BirdLife SA, Peace Parks Foundation etc on the list of I&APs. I also do not see any comments from Kalahari Outventures, whose rafting concession above the falls will be severely compromised.*

2. Comments on the original Socio-Economic Impact Assessment

Augrabies Falls National Park

“The waterfall is approximately 56 m high and is awe-inspiring when the river is in flood.”

Correction - The falls and the gorge below are awe inspiring at all times of the year due to their pristine wilderness character, not only when the river is in flood.

This short paragraph completely underplays the significance of the falls and the park itself. This is a National Park which represents the highest form of protection available. South Africa is an arid country and climate change seems set to intensify this. The Orange River is already a heavily utilised and altered river course and less than 10% of its course can be considered pristine. The recent permission granted for the Rooikat project will exacerbate this further. If this development is allowed to go ahead, we will lose yet more pristine wilderness area. In addition, this will open the door to increased development in all of our National Parks.

There is huge concern that the cumulative effects of this and all the other projects proposed for the Orange will damage the river system irretrievably. We believe that all proposed projects should be put on hold until a SEA is done of the entire river. Already, we have seen that your client’s current project at the Neus Weir has resulted in a high levels of fish deaths and resultant pollution of the river due to rotting fish that have died in the weir intakes. It has also damaged the fishing potential of the area as the water is now murky and smelly.

Social Impacts

Pre Construction and Construction

Sense of place.

- Increased noise.
- Without mitigation – Medium.
- With mitigation – Low.
- Aesthetic impacts.
- Without mitigation – Low.
- With mitigation – Very low.

Operational Phase

Sense of place.

- Increased noise.
- Without mitigation – Low.
- With mitigation – Very low.
- Aesthetic impacts.
- Without mitigation – Low.
- With mitigation – Very low.

My comments apply to all of the above potential impacts: Surely, given the wilderness character of this place, these impacts can only be classed as High or Very High? From no noise or human impact to a construction site with dust, explosions, trucks etc surely cannot be classed as “Medium” , no amount of mitigation can affect the incredible impact that the construction phase will have on the sense of place. It will, without a doubt, no longer be pristine or wilderness in character and this change will be permanent and irreversible. This cannot be considered a “low’ or ‘medium’ impact.

Comments on the Second Economic Assessment Report

It is obvious that this report was compiled hastily and with little research or understanding. The entire Tourism 'report' is based on the 8 guest lodges near the park and, of these, only 2 were actually interviewed. And these two derive a great portion of their income from people who do not even visit the park – the vehicle testing groups! This surely cannot be seen as a credible representation of the entire region's tourism sector! Anecdotal evidence suggests that most nature based tourism enterprises are against this project. Similarly, the survey that was done at the park did not properly describe the effect of the construction and visual disturbance that

would result from the project. It had a narrow focus on the potential of reduced flow at the falls to affect the visitor experience.

In addition, the "non cooperation of SanParks" is referred to. The report does not acknowledge that the views of the park manager have been documented in detail in the Issues and Response Trail and that he has very serious concerns about the project and is not in favour of it.

This report does not even mention the loss of sense of place and wilderness that will occur permanently. Finally, there is no mention at all of the tourism businesses that will be directly affected by this project – The Augrabies Rush rafting trips, for example, will no longer be feasible.

Thank you,
Marie-Louise Kellett
African Paddling Association & Gravity Adventures

Ms Jess Tyrell: Wilderness Guide & African Paddling Association

Proof that Ms Tyrell had been provided with access to the Final EIAR in October 2015, a fact that she disputes in her commentary

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Proposed Hydro SA Riemvasmaak Hydro Project - Submission of Final Environmental Impact Assessment Report
Date: 01 October 2015 11:12:26 AM SAST
To: Shawn Johnston <swjohnston@mweb.co.za>
Bcc: jeanielr@gmail.com, jhbprok@lantic.net, jandup1@telkomsa.net, jesmiec@idc.co.za, jhbproc@lantic.net, jess tyrrell <tyrelljess@gmail.com>, Jane Spickernell <jane@ec-ho.co.za>, Jasper.Nieuwoudt@dmr.gov.za, judya@idc.co.za, joey.basson7@gmail.com, john.geeringh@eskom.co.za, joharv@botken.co.za, jkriel@justice.gov.za, jowellt@idc.co.za, jwilson@ncpg.gov.za

Proposed Hydro SA Riemvasmaak Hydro Project - Submission of Final Environmental Impact Assessment Report (FEIR)

Dear Stakeholder,

Find attached the **Issues and Response Trail** and our letter clarifying the submission of the Final Environmental Impact Assessment Report for the proposed Hydro SA Riemvasmaak Hydro Project to the Department of Environmental Affairs in Pretoria.

Sincerely,

Shawn Johnston

Comments on Amended EIAR and Addendum

Dear Shawn,

I have had a look at the Amended Final EIA for the Augrabies Falls Hydro Power project (inaccurately called the 'Riemvasmaak' project - please note this as a comment). I have the following serious concerns (my comments are in red and the report paragraphs being commented on remain in black):

1. Comments on the Public Consultation section of the EIA

a. *I do not see my name of the register of Interested and Affected Parties. I wrote to you on 02/09/2015 to ask why I had not been kept informed about the EIA process after you took over from Aurecon. Those of us who participated in these initial public discussions while Aurecon was still employed were assured that our names and all comments would be handed over to the new company to continue with the EIA. This was clearly not done, and I would like to be noted that professional obligations were not fulfilled and this undermines the term "meaningful public participation" and thus submitting an accurate EIA.*

*You replied to my email on 08/09/2015 (I have the records if you would like to see them again) informing me that you had registered my name now as an I&AP, which has not been done either, in spite of your written confirmation. It brings the question of how many others have been told the same story yet not had their names registered. This omission, while informing me of the exact opposite action, of it having been done, undermines the entire point and process of the Public Participation Process and is evidence of the consultation process **improperly conducted**.*

b. *Despite being explicitly recommended by the African Paddling Association that all registered I&APs be contacted after you took over, and be plainly requested to resubmit their comments (i.e. the comments **already** submitted to Aurecon), this does not seem to have been done. I myself am an example of this act of omission, and thus improper conduct. Your consultative process is again shown to be flawed from the start and begs the question of how an EIA done by your company can be reliably credited with accurate reporting, when the very beginnings of the process are mismanaged and, to be frank, bumbled.*

c. *Notification and consultation seems to have been done on a local level only – no notices were placed in national publications and no meaningful consultations were done on a regional or national level. The Augrabies Falls ("Riemvasmaak") project is of National and International importance and if it should go ahead, would have an impact on a resource that belongs to all the people of South Africa, as well as all foreign visitors to this National Heritage site.*

2. Comments on the original Socio-Economic Impact Assessment

I would like to second and therefore repeat some of the comments made by the APA to emphasis the importance of the points raised:

Augrabies Falls National Park

"The waterfall is approximately 56 m high and is awe-inspiring when the river is in flood."

*Correction - The falls and the gorge below are awe inspiring at **all** times of the year due to their pristine wilderness character, not only when the river is in flood.*

This short paragraph completely underplays the significance of the falls and the park itself. This is a National Park which represents the highest form of protection available. South Africa is an arid country and climate change seems set to intensify this. The Orange River is already a heavily utilized and altered river course and less than 10% of its course can still be considered pristine. The recent permission granted for the Rooikat project will exacerbate this further. If this development is allowed to go ahead, we will lose yet more pristine wilderness area. In addition, this will open the door to increased development in all of our National Parks.

There is huge concern that the cumulative effects of this and all the other projects proposed for the Orange will damage the river system irretrievably. We believe that all proposed projects should be put on hold until a SEA is done of the entire river. Already, we have seen that your client's current project at the Neus Weir has resulted in a high levels of fish deaths and resultant pollution of the river due to rotting fish that have died in the weir intakes. It has also damaged the fishing potential of the area as the water is now murky and smelly.

Social Impacts

Pre Construction and Construction

Sense of place.

- Increased noise.
- Without mitigation – Medium.
- With mitigation – Low.
- Aesthetic impacts.
- Without mitigation – Low.
- With mitigation – Very low.

Operational Phase

Sense of place.

- Increased noise.
- Without mitigation – Low.
- With mitigation – Very low.
- Aesthetic impacts.
- Without mitigation – Low.

- With mitigation – Very low.

The following comments apply to all of the above potential impacts:

Given the wilderness character of this place, these impacts can only be classed as High or Very High.

From no noise or human impact, to a construction site with dust, explosions, trucks etc surely cannot be classed as "Medium", no amount of mitigation can affect the enormous impact that the construction phase will have on the sense of place. It will, without a doubt, no longer be pristine or wilderness in character and this change will be permanent and irreversible. This cannot therefore be considered a "low" or "medium" impact.

The aesthetic impacts, as above, can only be classified as "very high" with, or without, mitigation.

My additional comments to the APA's are that the above status's of the impacts being classified as "low" or "very low" are entirely inaccurate. Firstly on who's outlook does such a judgement and condemning statement rest? It raises the question of the author(s) ability to report impact objectively, and not with only the developers best interests at heart.

Comments on the Second Economic Assessment Report

Socio-economic Impacts

Operational phase

- Cultural impacts.
- Cultural heritage.
 - Without mitigation – Medium.
 - With mitigation – Low.

It is my opinion that these are both inaccurate assessments. That, in fact, the cultural impact and heritage without mitigation would be Very High, and even with mitigation would still be Very high. As much as one might try to avert damage to a heritage site, it would nevertheless be irrevocably damaged. The proposed project is therefore fatally flawed with regards to the Conservation Management perspective, as it compromises infrastructure incompatible with the AFNP.

Comments on the Second Economic Assessment Report

Socio-economic Impacts

Operational phase

- Cultural impacts.
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 - Without mitigation – Medium.
 - With mitigation – Low.

It is my opinion that these are both inaccurate assessments. That, in fact, the cultural impact and heritage without mitigation would be Very High, and even with mitigation would still be Very high. As much as one might try to avert damage to a heritage site, it would nevertheless be irrevocably damaged. The proposed project is therefore fatally flawed with regards to the Conservation Management perspective, as it compromises infrastructure incompatible with the AFNP.

Impacts on tourism

Construction phase

These are addressed as follows:

- Negative impact on tourism.
- Without mitigation – Medium.
- With mitigation – Low.

Impacts on tourism

Operational phase

These are addressed as follows:

- Negative impact on tourism.
- Without mitigation – Medium.
- With mitigation – Low.

Impacts on tourism

Construction phase

Negative impact on tourism.

- Without mitigation – Very High
- With mitigation – High

Impacts on tourism

Operational phase

Negative impact on tourism.

Without mitigation – Very High

With mitigation – High

Seconded:

It is obvious that this report was compiled hastily and with little research or understanding. The entire Tourism 'report' is based on the 8 guest lodges near the park and, of these, only 2 were actually interviewed. And these two derive a great portion of their income from people who do not even visit the park – the vehicle testing groups! This surely cannot be seen as a credible representation of the entire region's tourism sector! Anecdotal evidence suggests that most nature based tourism enterprises are against this project. Similarly, the survey that was done at the park did not properly describe the effect of the construction and visual disturbance that would result from the project. It had a narrow focus on the potential of reduced flow at the falls to affect the visitor experience.

In addition, the "non cooperation of SanParks" is referred to. The report does not acknowledge that the views of the park manager have been documented in detail in the Issues and Response Trail and that he has very serious concerns about the project and is not in favour of it.

This report does not even mention the loss of sense of place and wilderness that will occur permanently. Finally, there is no mention at all of the tourism businesses that will be directly affected by this project – The Augrabies Rush rafting trips, for example, will no longer be feasible.

Heritage Scoping Study and comments

Heritage report states: "A wide variety of heritage resources was recorded. These included scatters of Middle (MSA), and Later Stone Age (LSA) and historical artefacts, LSA occupation sites with deposits and historical occupation sites with ruined structures and artefacts of varying age. Significantly, a number of graves and many more stone features that may or may not be graves were located. A stone memorial was also found. All the historical features together comprise a relatively recent (20th century) cultural landscape but it should be noted that the community who created that landscape have given permission for the development to proceed.

The statement of "all the historical features together comprise a relatively recent (20th century) cultural landscape" is illogical and incorrect. In your own report you mention the "wide variety of heritage resources", including Middle and Late Stone Age, therefore I do not see how your comment of "a relatively 20th century" could have been counted as recent when the Middle Stone age begun around 280 000 years ago, and ended approximately 50 000 years ago. If this is a grammatical error, perhaps it should be corrected to avoid further confusion.

Additionally, the Riemvasmaak community who have "given permission" is an inaccurate statement, as there are many members of the community who have publically objected to this development on their land. To claim that "the community" has given permission entirely discounts the members who have not, thereby the agreement of some members cannot be proclaimed as "the community". It is an inaccurate generalization.

This community has a well know history of being forcibly removed during the 1960's and suffered a particularly brutal removal. The land was then used as military testing facility. Soon after 1994 the South African Government returned the land to the descendants of the original inhabitants. Riemvasmaak has a special place in south African history as it

was the first land restitution case after the election of a democratic government. The story of this community and land offers rich and valuable lessons for the land reform process broadly. Although ecological damage has been said to be "minimal" during its occupation, military debris is a legacy with which this community will have to live with for many years.

*Finally, Riemvasmaak encapsulates the difficulties communities face as land use shifts from defense to attempts to rebuild a sense of community. Development of its status as a Conservancy has been a complex, protracted, and, at times, conflict-ridden process. This is the result of a range of factors, including inadequate assistance from an ill-equipped Department of Land Affairs; social divisions in the community along education, gender, ethnic, class, and political lines, and hence a lack of community **capacity** to engage with development processes.*

This brief history is to highlight the comments made above once again for emphasis. The EIA's Heritage study author(s) stating that "the community" give permission for this development is an exaggerated claim that in my opinion, only serves this projects own interest. It is once again is an example of external contractors not only contributing towards, but exasperating further division in an already fragmented community, and the all too familiar exploitation of this community's so recently re-claimed heritage.

Heritage report states: "[The community's permission] serves to temper the significance of the cultural landscape and individual features of which it is comprised. It is considered likely that, with proper planning and mitigation, impacts can be reduced to satisfactory levels."

"Considered likely" is an entirely ambiguous and vague a statement regarding strict requirements of proper planning and mitigation. Considering that this report began in its first paragraph with the admission that certain factors "unfortunately precluded proper preparation for the fieldwork. As such, minor components of the project were not surveyed" illustrates that the foundation of this report is flawed and does not bolster confidence of this not being used as an excuse in any future reports, thus leading to severe negative impact nor mitigation.

The use of the word "satisfactory" again is again entirely ambiguous, and leaves huge amounts of room for improper interpretation of what "satisfactory" entails. Satisfactory to whom, and under who's judgement?

"using our knowledge of typical site locations we are fairly confident that significant sites would not have been missed during the survey"

This is not a "typical site location".

It involves a National Park, a Community Conservancy, and a heritage site, all of which are mandated to protect archaeological, cultural and natural resources, as well as public interest.

The word "fairly" in this sentence, is again the most ambiguous of adjectives, which undermines the implication of so called "confidence" in impacts actually being mitigated.

The table outlining the Assessment of Cultural Heritage states any damage to be "reversible". I would argue that any damage to a cultural heritage site is irreversible. Again I note that the proposed project is fatally flawed from a Cultural and from a Conservation Management perspective, as it compromises infrastructure incompatible with the AFNP

Visual Impact assessment and comments:

"Potential visual impact on tourists and visitors to the Augrabies Falls (especially the AFNP Tourist Complex and local hikes and walks along the gorge) are expected to be of moderate significance and may be mitigated to low.

I object to the comment of the visual impact for visitors being of "moderate significance". I am one of those visitors and would consider the visual impact proposed to be of great significance. It would entirely destroy the view, not in the sense of obstruction, but the sense of place in what is still a last remaining wilderness area.

The visual impact of the 132kV overhead power line expected to be of moderate significance. No mitigation is possible.

Again, "moderate significance" only encompasses the views of some, such as the authors, but not others, such as myself and many other I&AP's who have clearly commented on this eye-sore in the Public Comments report. I object to this point entirely on the grounds, clearly stated in the EIA report, that no mitigation is possible.

"The outcome of the visual impact assessment report (i.e. whether the project proposal should be supported or rebutted) still hinges on the principle of whether it is desirable to construct commercial power generation infrastructure within areas that have specifically been earmarked for conservation and tourism activities."

I second this statement written by the author of the Visual Impact Assessment Report. These areas have been specifically earmarked for conservation and tourism activities. Case in point.

In terms of the above, the proposed project is once again fatally flawed from a visual perspective and from a Conservation Management perspective, as it compromises infrastructure incompatible with the AFNP overall, and its land use zoning.

The anticipated visual impact of the facility on the regional visual quality, and by implication on the sense of place of the region is expected to be of moderate significance during the construction phase and low during the operational phase.

As above, the regional visual quality, and by implication the impact on the sense of place would in fact be Very High during the construction phase and beyond.

Please note, as well as add this into my comments for public view, that we, as Interested and Affected Parties, are entitled to seek protection of Augrabies National Park and its surrounding community conservancy (Riemvasmaak), should this project find some way to go ahead, as well as relief, on behalf of ourselves, and in the interest of other affected parties.

The National Environmental Management Act (107/1998), read together with the Criminal Procedure Act (51/1977), expressly provide for individuals to institute private criminal prosecutions for the protection of the environment.

Section 24 of the South African Constitution (108/1996) protects environmental rights as fundamental human rights in two ways. First, it guarantees individuals the right to an environment that is not harmful to their health and well-being. Second, a duty is imposed on the state to take adequate measures to ensure environmental protection.

The National Environmental Management Act was promulgated in order to ensure the realization of the environmental right in Section 24 of the Constitution.

Section 32 of the act gives standing to "any person or group of persons" to "seek appropriate relief in respect of any breach or **threatened breach** of any provision of [the act]...or any other statutory provision concerned with the protection of the environment or the use of natural resources" in circumstances where such person is acting:

- in that person's or group of person's own interest;
- in the interest of, or on behalf of, a person who is, for practical reasons, unable to institute such proceedings;
- in the interest of or on behalf of a group or class of persons whose interests are affected;
- in the public interest; or
- in the interest of protecting the environment.

I request an email as proof of receipt of each these comments, and their inclusion in amended EIA Comments and Response Report.

Sincerely,

Jess Tyrrell

Social Development (BASW Hons) & Environmental Educator
tyrelljess@gmail.com / jessica@wilderdom.co.za

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Re: Riemvasmaak Run-of-River Hydro Power Project - DEA Ref. No. 14/12/16/3/3/2/600
Date: 29 April 2016 7:32:56 AM SAST
To: Jess Tyrrell <tyrrelljess@gmail.com>
Cc: Bill Rowlston <b.rowlston@cesnet.co.za>

Dear Ms Jess Tyrrell,

You are registered as an interested and affected party (I&AP) on both the interested and affected party database and our e-mail database. I have investigated your claim relating to your name not being on the published I&AP database. I provided the EAP, CES with the incorrect database, which was published in the AMFEIR, for this mistake I apologise. I further looked at all e-mails sent to you as part of the process. You received all e-mails since you registered as an I&AP. This include the last e-mail dated 07 April 2016 announcing the availability of the AFEIR.

Sincerely,

Shawn Johnston

Dr Janette Deacon, SA Archaeological Society

From: "Janette Deacon" <janette@conjunction.co.za>
Subject: Comment on Hydroelectric scheme for Augrabies National Park and Riemvasmaak Conservancy
Date: 28 April 2016 9:12:44 PM SAST
To: <swjohnston@mweb.co.za>, <b.rowlston@cesnet.co.za>

Comment on **Amended Final EIA for the Augrabies Falls Hydro Power project** from Dr Janette Deacon, Honorary Secretary of the South African Archaeological Society.

I have registered as an Interested and Affected Party only today since being alerted to the document (28 April 2016), but take the opportunity to recommend that the following paragraph from page 186 of the Amended EIAR be more appropriately worded to take into account the comment of SAHRA with regard to graves that might be impacted during the construction phase. It is clear that the document has not fully integrated the comments from SAHRA which has had a great deal of experience in liaising with communities when graves are impacted by development. Failure to acknowledge SAHRA's recommendation could have adverse consequences for the developers. The proposed amendments are **in red**.

"A wide variety of heritage resources was recorded. These included scatters of Middle (MSA), and Later Stone Age (LSA) and historical artefacts, LSA occupation sites with deposits, and historical occupation sites with ruined structures and artefacts, **collectively spanning a time period of more than 50,000 years of varying age**. Significantly, a number of graves and many more stone features that may or may not be graves were located. A stone memorial was also found. ~~All the~~ **historical (20th century) features together comprise a relatively recent cultural landscape with highly sensitive graves that will be recorded, protected and conserved according to guidelines indicated by the SAHRA Burial Grounds and Graves Unit. but it should be noted that Although some members of the resident community who created that landscape have given permission for the development to proceed, more in-depth consultation will be required should graves be directly impacted during the construction phase.** This serves to ~~temper~~ **emphasise** the significance of the cultural landscape and **the** individual features of which it is comprised."

Yours sincerely

Dr Janette Deacon
SA Archaeological Society
P O Box 15700
Vlaeberg
8018
Janette@conjunction.co.za
082 491 5067

Ashley Dore & Yolana Friedman, Endangered Wildlife Trust

From: Ashleigh Dore <ashleighd@ewt.org.za>
Subject: FW: URGENT EIA COMMENTS REQUIRED: Riemvasmaak community Hydro-electric power station EIA
Date: 06 May 2016 4:26:52 PM SAST
To: "swjohnston@mweb.co.za" <swjohnston@mweb.co.za>, "b.rowlston@cesnet.co.za" <b.rowlston@cesnet.co.za>
Cc: Yolana Friedmann <yolanaf@ewt.org.za>

Dear Sirs

Please see attached for the comments from the EWT on the Riemvasmaak community Hydro-electric power station EIA and many thanks for kindly giving us an extension to today to submit out comments.

Kindest regards

Ashleigh Dore
Training Coordinator
Skills Development Programme
Endangered Wildlife Trust

Physical Address: Building K2, Pinelands Office Park, Ardeer Road, Modderfontein, 1609
Postal Address: Private Bag X11, Modderfontein, 1645, Johannesburg, South Africa
GPS Co-ordinates: S 26° 05.591' | E 28° 09.247'
Tell: +27 11 372 3600 Fax: +27 11 608 4682



THE SMALLEST DONATION CAN
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Text of letter

21 April 2016

Shawn Johnston and Bill Rowlston

Per email: swjohnston@mweb.co.za and b.rowlston@cesnet.co.za

Dear Sirs

RE: THE ENDANGERED WILDLIFE TRUSTS' COMMENTS RIEMVASMAAK COMMUNITY HYDRO-ELECTRIC POWER STATION EIA

The Endangered Wildlife Trust (the "EWT"), established in 1973, is a registered Non-profit Organization, whose mission is to conserve threatened species and ecosystems in southern Africa, for the benefit of all.

The EWT welcomes the opportunity to comment on the Riemvasmaak Community Hydro-Electric Power Station EIA (the "EIA"). The EWT raises the following comments on the EIA:

- The List of SSC bird species referred to in the EIA, provides outdated information in respect of the status of these bird species, for example the African White-backed Vulture is listed on the SSC bird species list as globally endangered and nationally vulnerable. However this species was up-listed to critically endangered in 2015. Other species which have been listed with an incorrect status include *inter alia*: Black Harrier (Endangered) and the Verreaux's Eagle (Endangered). The potential impact on certain species should be more carefully considered in light of their more threatened status;
- A full and proper assessment of the area for potential breeding sites of the following species: Verreaux's Eagle; Lanner Falcon; Secretary bird, Kori Bustard, Ludwig's Bustard and Black Stork must be undertaken to ensure that active and potential breeding sites are identified and are not impacted by the proposed development;
- There are numerous hydroelectric power schemes being built on the Orange River without a cumulative/strategic assessment having been undertaken. This is imperative and development should not be permitted to take place without the cumulative impact being considered;
- The flow rate issues are concerning. The EFR (Ecological Reserve) needs to be properly calculated. All the assumptions and mitigation responses in the EIA are based heavily on one figure, an EFR of 30m/s, without any calculations to support this. This is a major failing in the EIA;
- A formal and legally binding undertaking needs to be established to ensure that should the flow of the river be reduced to a certain level, no water will be diverted out of the river. Further monitoring and compliance measures need to be included in the aforementioned undertaking to ensure that the undertaking is complied with;
- The cumulative impacts of the proposed hydro-electric power station and the existing hydroelectric power station in Richie Falls needs to be assessed jointly, this is absent in the EIA; and
- Should the development go ahead, a 50m buffer area must be established and enforced around the wetland areas and maintenance and repair of hydrologic function must be ensured.

We trust you find the above comments useful.

Yours Sincerely

THE ENDANGERED WILDLIFE TRUST

Ashleigh Dore and Yolan Friedmann

From: ShawnJohnston <swjohnston@mweb.co.za>
Subject: Re: URGENT EIA COMMENTS REQUIRED: Riemvasmaak community Hydro-electric power station EIA
Date: 06 May 2016 4:30:04 PM SAST
To: Ashleigh Dore <ashleighd@ewt.org.za>
Cc: "b.rowlston@cesnet.co.za" <b.rowlston@cesnet.co.za>, Yolan Friedmann <yolanf@ewt.org.za>

Dear Ashleigh,

Thank you for your comments.

I hereby acknowledge receiving the EWT comments on the Riemvasmaak Run-of -River AFEIR.

Sincerely,

Shawn Johnston

APPENDIX I: I&AP DATABASE

Updated: 25-Aug-15; 09-Dec-15; 01-Jan-16; 07-Apr-16; 28-Apr-16; 09-May-16

Hydro SA Riemvasmaak Run-of-River Hydro Project											
Environmental Impact Assessment Interested and Affected											
Name	Surname	Interested & Affected Party Group/Organisation	Address One	Address Two	Postal Code	E-mail Address	Cellphone	Telephone	Fax	Notes	PIP Interactions
Abe	Abrahams	Department of Water and Sanitation	28 Central Road, Beaconsfield	Kimberley	8300	franksl@dwa.gov.za					
Bundi	Adams	Farm 15/17				info@bundi.co.za	082 567 9801				
Benjamin	Adams	Kai! Garib	PO Box 68	Kakamas	8870	simonben98@gmail.com	0786304450				Riemvasmaak
Lorenzo	Adams	AGS Kerk	PO Box 253	Augrabies	8874		0735492247				
Lea	Adams	Riemvasmaak Sending	Posbus 209	Kakamas	8870		0732329050				Riemvasmaak
Johanna M	Adams	Riemvasmaak Sending	Posbus 627	Kakamas	8870		0732614143				Riemvasmaak
Maria	Adams	Riemvasmaak Sending									Riemvasmaak
Telda Fabiola	Adams	Riemvasmaak Sending	Posbox 509	Kakamas	8870		0789367601				
Maria	Adams	Riemvasmaak Sending									
Romitheus	Adams	Riemvasmaak Sending					0785916359				
Jessie	Adams	Riemvasmaak Sending					0786677282				
sarelda	Adams	Riemvasmaak Sending									
Katrina	Adams	Riemvasmaak Sending	PO Box 591	Riemvasmaak							
Niklaas	Adams	Riemvasmaak Sending	PO Box 591	Riemvasmaak							
Roman R	Adams	Riemvasmaak Sending	PO Box 819	kakamas	8870	rekies461@gmail.com	0782228930				
Sabastian	Adams	Riemvasmaak Sending	Posbus 509	kakamas	8870		0789457009				
Andreas	Adams	Riemvasmaak Development Committee				anmirecivilworks@yahoo.com	078 101 4148	086 6151701			
Gloria	Adams	Vredes Valley Community	P.O. Box 491	Kakamas	8870		08331788196				
Glonia	Adonis	Riemvasmaak Planning Committee					083 3178196				
Pelagia	Afrikaner	Riemvasmaak Sending	Huis 38	Augrabies	8874		0730957050				
Antonius	Afrikaner	Riemvasmaak Melkbosrand	PO Box 94	Marchand	8873		0843020891				
Katrina	Andreas	Riemvasmaak Melkbosrand									
Anna	Andreas	Riemvasmaak Melkbosrand									
Jakobus	Andreas	Riemvasmaak Melkbosrand	PO Box 195	Marchand	8873		0836984111				Riemvasmaak
Sarah	Andreas	Riemvasmaak Melkbosrand	Posbus 697	kakamas	8870		0835842005				
Jan	Andreas	Riemvasmaak Melkbosrand	Huis no: 110	Marchand	8873					Landowner	
Henry	Angus	Marchand Community					073 5468370				Public Meeting
Janetta Wilhelmina	Antunes	Riemvasmaak Melkbosrand	59 Paul Kruger St	Pretoria	2						
Henry	Augus	Marchand Enterprise	PO Box 188	Marchand	8873	marchandent@gmail.com	0735468370				
Ivis	B	Riemvasmaak Sending									
Ge vatuis	Baartman	Riemvasmaak	Huis 412	Marchand	8873		0838600485				
Nwabisa	Bamane	Vredes Valley Community	P.O. Box 8871	Kakamas	8870		0786455076				
Anna V	Basson	Riemvasmaak Melkbosrand	Huis no. 71	Riemvasmaak							
Aletha	Basson	Riemvasmaak Melkbosrand	Posbus 243	Kakamas	8870			054 454 3010			Riemvasmaak
Piet	Basson	Riemvasmaak Melkbosrand									Riemvasmaak
Irma	Basson	Riemvasmaak Melkbosrand									Riemvasmaak
Rosaria	Basson	Riemvasmaak Melkbosrand					0739202662				Riemvasmaak
Katrina Geraldine	Basson	Riemvasmaak Sending	PO Box 597	Kakamas	8870		0734787249				Riemvasmaak
Caroline	Basson	Riemvasmaak Sending	PO Box 1209	Kakamas	8870	carolinebasson@gmail.com	0738758688				
Anna	Basson	Riemvasmaak Sending	Posbus 337	Kakamas	8870		0810783199				
Valerie	Basson	Riemvasmaak Sending					078980224				
Sophia	Basson	Riemvasmaak Sending									
Rebecca	Basson	Riemvasmaak Sending									
Victoria	Basson	Riemvasmaak Sending	Huis 71	Riemvasmaak							
Priscilla	Basson	Riemvasmaak Sending	Huis no 86	Riemvasmaak							
L.P	Basson	Riemvasmaak Sending	Huis no. 107	Riemvasmaak							
Henry	Basson	Riemvasmaak Sending				henrybasson858@gmail.com	0783145565				

Addendum to the Amended Final Environmental Impact Assessment Report – Comment and Response Report

Bernadette	Basson	Riemvasmaak Sending					0789277734			
Ray	Basson	Riemvasmaak Sending								
Feitjie H	Basson	Riemvasmaak Sending	PO Box 468	Kakamas	8870		0837692346			
Ragel	Basson	Riemvasmaak Sending	455 Kakamas	Kakamas	8870		0783521704			
Petronella	Basson	Riemvasmaak Development				petronellabasson@gmail.com	078 3204544			
Jacobus	Basson	Riemvasmaak Planning Committee				barcoc64@yahoo.com	078 369 565	086 5474923		
Michael H.	Basson	Riemvasmaak Development				joey.basson7@gmail.com	073 212 0841			
Feitjie	Basson	Riemvasmaak Governance Committee					083 769 2346			
Markus	Basson	Melkbosrant Committee Chairperson	P.O. Box 455	Kakamas	8870					
Michael	Basson	Vredes Valley Community				joey.basson7@gmail.com	0732120841			
Vincentina	Basson	Riemvasmaak Melkbosrand	Huis no 417							Public Meeting
Ruwayda	Baulackey	Department of Rural Development				ruwayda.baulackey@drdlr.gov.za				
JT	Benade	Oseiland Blouputs Farms Association		Blouputs		alkantrant@vodamail.co.za	082 3745609			Riemvasmaak
Frans	Bergh	Marchand Farmers Association				marchandbv@lantic.net	082 9286378			
Frans	Bergh	Marchand Farmers Association	P.O. Box 32	Marchand	8873	marchandbv@lantic.net	054 4410237			
Amanda	Bester	Telkom SA Limited	178 Madiba Street	Pretoria		WayleaCR@telkom.co.za				
Marius	Beukes	Riemvasmaak Sending								
Nicolaas	Beukes	Riemvasmaak Sending	Posbus 724	Kakamas	8870					
Patricia	Beukes	Riemvasmaak Sending	Perseel R4	Twalaland						
Mari	Beukes	Riemvasmaak Melkbosrand								
Isak	Beukes	Riemvasmaak Melkbosrand	PO Box 140	Marchand	8873		0748882430			
Demetheo	Beukes	Riemvasmaak Sending								
Mina	Bezuidenhout	Riemvasmaak Melkbosrand								
Henrieta	Bezuidenhout	Riemvasmaak Melkbosrand	Huis 80, Posbus 164	Augrabies	8874					
Elizabeth. K	Bezuidenhout	Riemvasmaak Melkbosrand								
C	Bezuidenhout	Riemvasmaak Melkbosrand	Posbus 119	Marchand	8873					
Bernard	Bezuidenhout	Riemvasmaak Melkbosrand	Posbus 73	Marchand	8873		0790494861			
Bernard	Bezuidenhout	Melkbosrant Community					079 0494861			
Alexander	Bezuidenhout	Riemvasmaak Melkbosrand					0789256047			
Sara	Bezuidenhout	Riemvasmaak Melkbosrand	Posbus 73	Marchand	8873		0790494861			
Dhelha	Bezuidenhout	Riemvasmaak Melkbosrand		Marchand	8873		072766406			
Josia	Blaauw	Riemvasmaak Melkbosrand	328 Naboom Str				0838703736			
Desmond	Blaauw	Vredes Valley Community					0726315403			
Franco	Blaauw	Vredes Valley Community					0810956163			
Rhodea	Bock	Riemvasmaak Melkbosrand	Posbus 160	Marchand	8873		0747099495			
Anna	Bok	Marchand Community	P.O Box 113	Marchand	8873		079 158 3655			
Masixole	Booi	Vredes Valley Community								
Gertruida	Booyesen	Riemvasmaak Melkbosrand								
Jackie	Booyesen	Riemvasmaak Melkbosrand								
Beauty	Booyesen	Riemvasmaak Melkbosrand	PO Box 719	Riemvasmaak			0737523243			
Shalmy	Booyesen	Riemvasmaak Sending					0739235851			
Katrina	Booyesen	Riemvasmaak Sending	Huis 111							
Margareth	Booyesen	Riemvasmaak Sending	PO Box 491	Kakamas	8870		0786426595			
Gerald	Booyesen	Riemvasmaak Melkbosrand								
L	Bosan	Riemvasmaak Melkbosrand		59 Marchand	8873		0783834945			
Daniel	Boshoff	Interested Party				dandan.boshoff@gmail.com	074 186 8624			
Magdalene	Bostander	Vredes Valley Community					0717042181			Public Meeting
Samantha	Braid	Interested Party	11 Cumbury Court	Cumnor Ave Kenilworth	7708	sam.braid.22@gmail.com	082 8992220	021 5265768		
Samantha	Braid	The Federation of Canoeing South Africa (CSA)				sam.braid.22@gmail.com	082 8992220			
Ragel	Brandt	Riemvasmaak Melkbosrand								
Morney	Brandt	Interested Party		174 Marchand	8873					
Robin	Buske	Eskom Network Development Planning				robin.buske@eskom.co.za				
Pietro	Chiapasco	Department of Public Works				isPeter.Chiapasco@dpw.gov.za				
RW	Cloete	Marchand Enterprise	PO Box 198	Marchand	8873		0820742009			
G.A	Cloete	Kai! Garib Local Municipality	PO Box 37	Augrabies	8874	cloeteg@kaigarib.gov.za	0762399502			

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Lukas	Cloete	Riemvasmaak Sending								Landowner	
Peter	Cloete	COS Kakamas	PO BOX 243	Kakamas	8870		0734662797				Riemvasmaak
John HH	Cloete	Interested Party	PO Box 768	Kakamas	8870		0734327619				Public Meeting
Noella	Cloete	Riemvasmaak Sending	Posbus 27	Marchand	8873		0718421870				
John	Cloete	Riemvasmaak Repatriation Committee					073 432 7619				
John	Cloete	Vredes Valley Community	P.O. Box 768	Kakamas	8870		0734327619				
Louisa	Coertzen	Pofadder Tourism				jhbprok@lantic.net	082 702 0774				Riemvasmaak
Fritz	Coetzee	Interested Party	Daniel Vaas Str				0796772616				Riemvasmaak
Norbert	Coetzee	Riemvasmaak Sending	P.O. Box 278	Kakamas	8870						
The Landowner	Conradie	Conradie Trust	PO Box 1	Augrabies	8874						Riemvasmaak
Gregorius	Conradie	Interested Party	PO Box 164	Augrabies	8874		0780310875				
WV	Copenhagen	Daberas				kobusvc@gmail.com	0836564498				
Luel	Culwick	Sidala Energy				iculwick@sidala.com	082 452 0212				
Hannecke	da Silva	Interested and Affected Party	P.O. Box 1042 Kathu 8446			hannecks@gmail.com					Riemvasmaak
Clarissa	Damara	Riemvasmaak Tourism				damaraclarissa@gmail.com/ Riemvasmaaktourism@gmail.com	0733838812/ 0838737715				Riemvasmaak
Anna	Damara	Riemvasmaak Sending									Riemvasmaak
WT	Damarah	Riemvasmaak Sending	Posbus 694	Kakamas	8870		0839996841				
Lillian	Damarah	Riemvasmaak Sending	PO Box 694	Kakamas	8870		0781260016				
A	Damarah	Department of Justice				ADamarah@justice.gov.za					
Kathrina	Daniels	Riemvasmaak Sending									
L	Davids	Riemvasmaak Sending	Huis no. 209	Riemvasmaak							
Lena	Davids	Riemvasmaak Sending	Huis 46								
Craig	Davids	Master of the High Court				cdavids@justice.gov.za					Landowner
Angeline	Dawids	Riemvasmaak Sending					0730396513				
Lauretta	Dawids	Riemvasmaak Sending									
Magdalena	Dawids	Kai! Garib		468 Kakamas	8870		0839495776				
Anna	Dawids	Riemvasmaak Sending									Sent copy of DSR notification letter & Exec Summ 17Jul14
John	Dawids	Riemvasmaak Sending					0735113716				
C.G	Dawids	Riemvasmaak Sending	Huis no. 499	Riemvasmaak							Public Meeting
Daphney	Dawids	Riemvasmaak Sending	PO Box 507	kakamas	8870	daphneydws.56@gmail.com	0717833283				
Charlotte	Dawids	Riemvasmaak Repatriation Committee				charlottedws668@gmail.com	078 1813 013				Public Meeting
Charlotte	Dawids	Vredes Valley Community	P.O. Box 507	Kakamas	8870	charlottedws668@gmail.com	0781813013				
Fred	de Groot	Interested and Affected Party									
Paul Andries	de Klerk	Riemvasmaak Sending	PO Box 296	Kakamas	8870						Landowner
Rene	De Kock	South African National Roads Agency	Parc du Cap Building 5, cnr Mispel	Bellville		Dekockr@nra.co.za					
Samantha	De la Fontaine	Northern Cape Department of Environment and Nature Conservation	90 Long Street	Kimberley	8301	sdelafontaine@gmail.com					
Alexandra	De Water	Riemvasmaak	Huis 144	Marchand	8873		0763504017				Landowner
Dr Jannette	Deacon	SA Archaeological Society	P O Box 15700 Vlaeberg	Cape Town	8018	janette@conjunction.co.za	082 491 5067				
Mariana	Delpont	DEDT registered Cultural and FGASA Level 2 Field Guide	4 Dedarberg Road Eversdal		7550	md@cape-ecotours.co.za					Landowner
Alwyn	Dippenaar	L.A. Grapa Farms	P.O. Box 43	Kakamas	8870	alwyn@blouputs.co.za					
Lena	Dobanie	Riemvasmaak	Huis 19	Augrabies	8874						
Bernadette	Domkrag	Interested Party	Posbus 153	Augrabies	8874						Riemvasmaak
Ashleigh	Dore	Endangered Wildlife Trust	Private Bag X11 Modderfontein	Johannesburg	1609	Ashleigh Dore <ashleighd@ewt.org.za>	011 372 3600/1/2/3				
Jan	du Plessis	Farm 431/0				jandup1@telkomsa.net	082 925 0977				
Willie	du Plessis	Erf 208/211	PO Box 442	Kakamas	8870	willie@omdraai.co.za	0825586973				Riemvasmaak
Nardus	Du Plessis	SANParks: Augrabies Falls National Park	Private Bag X1	Kakamas	8870	nardus.duplessis@sanparks.org	054 452 9207	054 451 5003			
Nico	Du Plessis	Neighbouring farmer	P.O. Box 18100	Rand Airport	1419	nico@fhs.za.net					
Christine	du Plessis	SANPARKS	Private Bag X1	Augrabies	8874	christine.duplessis@sanparks.org.za	054 452 9203				Alt add: McGregor Museum, Atlas street, Kimberley, 8300
Burger	du Plessis	Burger du Plessis Familie Trust	PO Box 45	Augrabies	8874						
Burger	du Plessis	Eternal Flame Inv 104 Pty Ltd	PO Box 45	Augrabies	8874						

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WP	du Plessis	WP du Plessis Familie Trust	PO Box 45	Augrabies	8874							
M	du Preez	Interested Party										Landowner
Andre	du Toit	Interested and Affected Party	Suite 14 Grantham Office Park	Umhlanga Rocks	4319	adutoit@satib.co.za	082 446 1697					
Kathrin	Duiker	Coghsta	359 Kakamas	Kakamas	8870	kathrinduiker@gmail.com	0739539154					
Nomokula Mieta	Dyentyi	Interested Party	Posbus 243	Kakamas	8870	mietaduentyi@gmail.com	0825308987					
Craig	Eksteen	Kalahari Outventures	P.O. Box 781	Kakamas	8870	info@kalahari-adventures.co.za						
Clive	Engelbrecht	Interested Party	PO Box 190	Augrabies	8874		078305581					
G	Engelbrecht	Marchand		114			0781698550					
Renato	Engelbreght	Interested Party	PO Box 190	Augrabies	8874		078305581					
S	Erasmus	Wildlife and Environmental Society of SA	P.O. Box 316	Kimberly	8300	wessanc@yahoo.com		053 839 2717	053 842 1433			
Margrett	Fass	Interested Party	Posbus 243	Kakamas	8870							Alt address: 315 Cnr Pretorius & Lilian Ngoyi Street, Fedsure Forum Building, 2nd Floor, North Tower, Pretoria, 0001
JW	Fass	Interested Party										Riemvasmaak
Jan	Filander	Bassondrift CPA	PO Box 34	Kakamas	8870		0762278696					
The Landowner	Flying Falcon	Flying Falcon Prop 12 cc	PO Box 21	Augrabies	8874							
Sylvester	Frans	Interested Party										Landowner
T	Frans	Riemvasmaak Melkbosrand		197	Marchand	8873		0834924559				
Jan	Frans	Riemvasmaak Melkbosrand	Huis no: 182	Marchand	8873			0544412089				Public Meeting
Silvester	Frans	Vredes Valley Community					084 292 6042					
Jan	Frans	Marchand Community	P.O. Box 197	Marchand			054 441 0298					
Yolan	Friedmann	Endangered Wildlife Trust	Private Bag X11 Modderfontein	Johannesburg		Yolan Friedmann <yolanf@ewt.org.za>		011 372 3600/1/2/3				
Altus	Gagiano	Blouputs Farmers Association					0769108031					
Namein	Gagiano	Secretary Blouputs Farmers Association	P.O. Box 316	Kakamas	8870	nameing@karsten.co.za	054 4540046					
Simon	Gear	BirdLife South Africa - Policy & Advocacy	P.O. Box 515, Randburg 2125 Gauteng,			advocacy@birdlife.org.za	082 821 4975	011 7891122	011 789 5188			
Gustav	Geffrath	African Paddling Association				gustav@itchyfeet.co.za/info@apa.org.za						
Yolanda	Gertse	Riemvasmaak Melkbosrand	Huis nr 281	Marchand	8873							
Emelda	Gewers	Riemvasmaak Sending	PO Box 820	Kakamas	8870							
Monica	Goreses	Interested Party										
Frederick	Gouws	Roman Catholic	Huis no. 85	Augrabies	8874		0836087203					
Brandon	Gouws	Interested Party	PO BOX 71	Augrabies	8874		0747317472					
Isak	Green	Marchand Community										
The Landowner	Groenheuwel	Groenheuwel Trust	PO Box 21	Augrabies	8874							
Ratuise	H	Riemvasmaak Sending	Huis 149	Riemvasmaak								
Mina	Hampinan	Interested Party										
Theresa	Hampira	Riemvasmaak Planning Committee					073 7815628					
Theresa	Hampira	Riemvasmaak Sending	P.O. Box 360	Riemvasmaak								Riemvasmaak
Gert	Heese	Orleans Boerdery/Vaalkop Eiland	Posbus 724	Kakamas	8870	heesegeert@gmail.com	0827862330					
Dr Dieter	Heihnsen	Acer Africa				dieter.heinsohn@acerafrica.co.za						
Christine	Hendricks	COC Sec	Madiba weg 235				0784075568					Landowner
Howard	Hendricks	South African National Parks Pretoria	643Leyds St, Mucklenneuk	Pretoria	000 1	howard.hendricks@sanparks.org	012 426 5000					
Christina	Hendrickse	Vredes Valley Community					078 4075568					
Ignatius	Hifikya	Riemvasmaak Sending	P O Box 468	Kakamas	8870		0603287503					
Phillip	Hine	South African Heritage Resources Agency (SAHRA)	111 Harrington Street	Cape Town	8000	phine@sahra.org.za						Riemvasmaak
Andrew	Hockly	Interested Party Augrabies	P.O. Box 20 Augrabies 8874			andrew.hockly@gmail.com /	079 888 9502					
Solomon	Hoorn	Interested Party	Posbus 724	Kakamas	8870							
Zolike	Hoorn	Vredes Valley Community	P.O. Box 243	Kakamas								Riemvasmaak
Manda	Hough	Kakamas Public Library	24 Voortrekker Road		Kakamas	8870		054 431 6303				Riemvasmaak
Andrew	Isaaks	Riemvasmaak Melkbosrand	Posbus 78	Marchand	8873		0732439604					
Samson	Isaks	Riemvasmaak Melkbosrand	Posbus 243	Kakamas	8870			054 454 3010				
Trooi	Jaar	Riemvasmaak Melkbosrand					0761808122					
Ragina	Jaar	Marchand Community	P.O.Box 143	Marchand	8873		079151566					

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Penelope	Jack	Interested and Affected Party				got2haveit@biara.co.za>				
Nicoleen	Jacobs	Riemvasmaak Melkbosrand	Huis no 128	Riemvasmaak						
Sarah	Jacobs	Kai!Garib	PO Box 99	Kakamas	8870	speaker@kai!garib.gov.za	0766647679			
Katrina	Jansen	Riemvasmaak	Huis: 144	Marchand	8873		0763504017			
Auxillia	Januarie	Riemvasmaak Melkbosrand	Huis 38	Augrabies	8874					
Gregorius	Januarie	Riemvasmaak Melkbosrand	PO Box 164	Augrabies	8874	gregjanuarie@gmail.com	0780310875			
Marie	Johnson	Riemvasmaak Melkbosrand		Kakamas	8870					
Christie	Jordaan	Christie Jordaan Boerdery Trust	PO Box 32	Kakamas	8870					
Wendall	Jors	Vredes Valley Community	P.O. Box 243	Kakamas	8870		073 4916543			
Julian	Kans	Riemvasmaak Melkbosrand								
Lod	Kariata	Riemvasmaak Melkbosrand	Posbus 720	Kakamas	8870		0849292423			
Welma	Kariata	Vredes Valley Community					0611313165			
Loot	Kariata	Vredes Valley Community	P.O. Box 883	Vredesvallei			0849292423			
Theresia	Keepers	Interested Party								
Andrew & Marie-Louise	Kellett	African Paddling Association & Gravity Adventures	21 Selous Rd, Claremont, 7708 Cape Town			andrew@gravity.co.za	082 692 4399			
I	Khan	Interested Party	PO Box 491	Augrabies	8874		0710350803			
Debbie	Khan	Department of Rural Development and Land Reform	Old Building184 Jacob Mare Street	Pretoria	0 002	DGOffice@ruraldevelopment.gov.za				Alt add: Louiseval Road, Kimberley, 8300
Sebrena	Klein	Interested Party								
Ragel	Klein	Riemvasmaak Melkbosrand								
Anna	Klim	Riemvasmaak Sending	Posbus 578	Kakamas	8870					
Veronika	Klim	Riemvasmaak Sending	Posbus 578	Kakamas	8870		0737648956			
Walter D	Klim	Kai! Garib				klimw@kaigarib.gov.za	0735452439			
Johana	Kock	Riemvasmaak Melkbosrand	Posbus 27	Marchand	8873					
Claudina	Kock	Riemvasmaak Melkbosrand	Huis no: 202	Marchand	8873		0784088605			
Maria	Kock	Riemvasmaak Melkbosrand	Huis no: 202	Marchand	8873					
Johan	Koegelenberg	Sentech Ltd	Sender Technology Park (STP)Radiokop Ext.3 Octave Road	Honeydew	2040	koegelenbergJ@sentech.co.za				
Melkom	Komo	Riemvasmaak Melkbosrand								
Sophia	Kopers	Riemvasmaak Melkbosrand					0780150940			
Leon	Kopers	Roman Catholic Church Riemvasmaak					0603480611			
Clara	Kordom	Riemvasmaak Melkbosrand					0730114282			
S	Kordom	Roman Catholic Church					0835497754			Riemvasmaak
R	Kordom	Riemvasmaak Melkbosrand	Huis no 410	kakamas	8870					
Lena	Kordom	Riemvasmaak Melkbosrand								
Raymond	Kordom	Riemvasmaak Melkbosrand	Huis no. 161	Riemvasmaak			0837390103			
Bennie	Kordom	Community Development Worker	PO Box 149	Marchand	8873	benniekordom@gmail.com	0714439277			
Chris	Kotze	Riemvasmaak Melkbosrand								Riemvasmaak
Hendrik	Kotze	Riemvasmaak Melkbosrand					0710600067			
Christopher	Kotze	Vredes Valley Community					0787935004			
Ketelien	Kotze	Vredes Valley Community					0737740851			
C.B.	Kriel	KWGV	Perseel 162	Kakamas	8870	jkriel@justice.gov.za		054 431 0705		
J.	Kriel	Department of Justice	Private Bag X1	Kakamas	8870	jkriel@justice.gov.za		054 431 0705		
E	Kubayi	DWA: Lower Orange Catchment Management Area	Private Bag X6101	Kimberly	8300	kubayie@dwa.gov.za		054 830 8801	054 831 4534	Riemvasmaak
E	Lance	Vredes Valley Community					0736446274			
Jaenie	Le Roux	Interested Party				jeanielr@gmail.com	072 959 1818			
Z	Lesley	Interested Party	PO Box 152	Augrabies	8874	bassonlesley@gmail.com	0735492247			
Heinrich	Liebenberg	Schroeder Farmers Association					082 956 7249			
Sue	Liell-Cock	International Rafting Federation				info@internationalrafting.com				
K	Links	Riemvasmaak Melkbosrand					076605253			
Antonia	Loss	Vredes Valley Community	P.O. Box 243	Kakamas	8870		0782037572			
Willem	Louw	Manager: Park Planning and Development Conservation Services Division -SANParks	WJ Louw Bldg, 07 Old Paarl Rd Bellville			willem.louw@sanparks.org	083 640 5298	021 949-6414		
Donald	Louw	Riemvasmaak Melkbosrand	Posbus 160	Marchand	8873		0838957477			Alternative address: 33 Park Road, Belgravia, Kimberley 8801
Jennifer	Louw	Interested and Affected Party	11 Welbelond Road	Constantia	7806	jenny@earthartist.co.za	082 4682273			
Sylvia	Lucas	Northern Cape Premier				PremiersPA@ncpg.gov.za	053 838 2615			
Claudia J	Lukas	Riemvasmaak Repatriation Committee				mlukas779@gmail.com	078 226 2345			
Claudia J	Lukas	Riemvasmaak Melkbosrand	Huis 402	Riemvasmaak						Sent copy of DSR notification letter & Exec Summ 17Jul15

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Julina	Lusap	Khai! Gariep Municipality - Secretary to Mayor Olyn		Keimoes		mavorspa@kaigarib.gov.za	083 047 7606	054 461 6700	054 4616401		
Thandiswa	Macanda	Vredes Valley Community	P.O. Box 883	Vredesvallei			0719334746				
Johnny	MaCay	Kai! Garib Local Municipality	Private Bag X6 Kakamas			mackayj@kaigarib.gov.za					
A.D.	Malan	Augrabies Boerevereniging	Perseel 690	Augrabies	8874	ad@redira.co.za	072 835 1760				
Lotty	Malan	Riemvasmaak Melkbosrand									Landowner
Leroy	Malgas	Riemvasmaak Melkbosrand									Public Meeting
Paulus	Malgas	Riemvasmaak sending	Posbus 822	Kakamas	8870		0736065992				Public Meeting
B	Malgas	Riemvasmaak Sending	Huis 419	Augrabies	8874						Riemvasmaak
Richardo	Malgas	Riemvasmaak Repatriation Committee				rcmalgas@gmail.com	078 938 4026				
Andries	Malosi	Riemvasmaak Melkbosrand					0790826349				
LJ	Manong	Department of Agriculture and Land Reform (Northern Cape)	7 Elliot Street	Kimberly	8300	lmanong@agri.ncape.gov.za		053 838 9165			
Jacoline	Mans	Department of Agriculture, Forestry & Fisheries	P.O. Box 2782 Upington 8000	Upington		jacolinema@daff.gov.za					
Eunika	Mapanka	Riemvasmaak Vredes Vallei/Molopo	PO Box 275	Augrabies	8874						
Tommy	Mapanka	Riemvasmaak Vredes Vallei/Molopo					0781015210				
Enrico	Mapanka	Riemvasmaak Sending									Alt add:1 Robb St, kimberley 8300
LW	Maparla	Riemvasmaak Vredes Vallei/Molopo		385 Riemvasmaak		lionell199@gmail.com	0730521284				
Johannes	Mapikana	Riemvasmaak Vredes Vallei/Molopo					0780291268				
Goobani	Mapikana	Vredes Valley Community					0822978881				
Leon	Marias	Lawson's Birding, Wildlife and Custom Safaris	P.O. Box 16849	West Acres Nelspruit	1211	leon@lawsons-africa.co.za	013 741 2458				
Willem	Markus	Basson-drift CPA	PO BOX 26	Kakamas	8870		0824718600				
Daniel	Marnewick	BirdLife South Africa - Important Bird & Biodiversity Areas & Regional Conservation Programme				daniel.marnewick@birdlife.org.za					
Shewe	Masala	Riemvasmaak Vredes Vallei/Molopo		280 Marchand	8873						Riemvasmaak
Nomthandazo	Masheqa	Vredes Valley Community	P.O. Box 883	Vredesvallei			0736614970				Riemvasmaak
Nomvula	Masheqa	Vredes Valley Community					0789963706				
Marubini	Mashudu	Department of Agriculture, Forestry & Fisheries	Delpen Building, Cnr Annie Botha & Union Streets, Office 270	Pretoria	0 002	mashuduma@daff.gov.za					
Rachel	Mate	Riemvasmaak Vredes Vallei/Molopo	Posbus 242	Kakamas	8870						
Yekami	Mate	Riemvasmaak Vredes Vallei/Molopo	Posbus 724	Kakamas	8870						
Yekani	Mate	Vredes Valley Community					081 0658964				
Maxon	Mathe	Riemvasmaak Vredes Vallei/Molopo	Posbus 243	Kakamas	8870		0732564396				
Mercy	Mathe	Riemvasmaak Vredes Vallei/Molopo									
Sinethemba	Mathe	Vredes Valley Community				vredesvalleicwp@gmail.com	078 9368248				
Nodo	Matinzina	Riemvasmaak Vredes Vallei/Molopo	Huis 239	Marchand	8873						
Roger	Matthews	Riemvasmaak Trust	PO Box 10118	Beacons Field	8315	matthewslaw@telkomsa.net		053 832 8222	053 832 8444		
LJ	Mblankomo	Vredes Valley Community									Alt add: 11th Avenue, Kakamas, 8870
V	McPherson	Kai!Garib Town Planner				mcphersonv@khaigarib.gov.za		054 4616433			
Ria	Milburn	Interested and Affected Party				bush.education@mweb.co.za					
Magriet	Molele	Marchand Community	P.O. Box 113	Marchand	8873		0791583655				
Rachel	Monderinger	Interested Party	Posbus 760	Kakamas	8870		0738480877				Landowner
Mpho	Monyai	DEA Case Officer				MMonyai@environment.gov.za		012 310 3938			
Lucius	Moolman	South African National Arid Region	Postnet Suite 46 Upington 8800	Upington							
Moses	Moses	Department of Water and Sanitation	28 Central Road, Beaconsfield	Kimberley		mahunonyanem@dwa.gov.za					
Lebohang	Motoai	Eskom Grid Access				motoails@eskom.co.za					
Skelo	Mtikitiki	Future Focus Art & Craft	PO Box 243	Kakamas	8870		0720584449				
Izak	Nel	Farm 13/2	13 Rooipad	Augrabies	8874	izak@rooipad.co.za	082 800 7127				
Marintia	Nel	Future Focus Art & Craft									
Luise Niemoller	Niemoller Coertzen	Niemoller Winkel, Khai-Ma Business Forum & Pofadder Tourism	P.O Box 45 Pofadder 8890			luise@pofaddertourism.co.za					
Sarel	Nieuwoudt	Sarel Nieuwoudt Familie Trust	PO Box 7	Augrabies	8874						
Jasper	Nieuwoudt	Department of Mineral Resources	Hopley Centre, cnr of Van der stel & Van Riebeeck Streets,	Springbok	8240	Jasper.Nieuwoudt@dmr.gov.za					
Nolukholo	Nkuphu	Vredes Valley Community	P.O. Box 883	Vredesvallei			0787622935				
Kholikile	Nogwili	Northern Cape Department of Roads and Public Works	9-11 Stokroos Street, Squarehill Park	Kimberley	8301	lucindavanwyk@ncpg.gov.za					Alt add: Louiseval Road, Kimberley, 8300

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Peter	Novellie	South African National Parks	643 Leyds Street, Muckleneuk	Pretoria		peter.novellie@sanparks.org					Landowner
Mzingisi	Npupu	Vredes Valley Community					0781781649				Landowner
Ramon	Odendal	Eskom Land & Rights				ramon-odendal@eskom.co.za					
J.J.J	Olyn	Mayor Khai! Gariiep Municipality		Keimoes		mayor@kaigarib.gov.za					Landowner
Frits	Osthuizen	Interested Party	Posbus 28	Augrabies	8874	fritz@augfalls.co.za	0828073383				Landowner
Graham	Page	Graham Page & Associates	PO Box 24	Grootdrink	8827	graham@graham-page.com	0832555588				
Anna	Penizza	Interested Party					0787458319				
Owen	Peters	Eskom Distribution				PetersOw@eskom.co.za					
Masipa	Pheladi	Department of Energy	192 Visagie Street Corner Paul Kruger & Visagie Street	Pretoria	0002	Pheladi.Masipa@energy.gov.za					
Miriam	Phillips	Interested Party	554 Kingstraat, Paballelo	Upington			0744550495				
Noma	Qase	Department of Energy				Noma.qase@energy.gov.za					
M	Ramagoshi	South African Heritage Resources Agency (SAHRA) (Northern Cape)	P.O. Box 1930	Kimberly	8301	mramagoshi@nc.sahra.org.za					Riemvasmaak
Moshudu	Ranwedzi	Department of Water & Sanitation Upington	P.O. Box 2782 Upington 8000								
Rewaldo	Regent	Interested Party	PO BOX 63	Kakamas	8870		0713975495				
Willem	Regent	Interested Party	PO BOX 63	Kakamas	8870		0713975495				
Patrick	Regent	Vredes Valley Community					0740664822				
Phillip	Regent	Vredes Valley Community									
Anna	Reheke	Interested Party	Posbus 243	Kakamas	8870			054 454 3010			Landowner
Elizabeth. K	Rhyn	Riemvasmaak Vredes Vallei/Molopo	PO. Box 883	Kakamas	8870	elizabethrhyn874@gmail.com	0730056379				
Norman	Rhyn	Vredes Valley Community					064 4543040				
Andre	Riley	South African National Parks									
Eno	Rodreas	Riemvasmaak Sending									
Magrietha	Roman	Riemvasmaak Sending	Posbus 275	Kakamas	8870		0736207592				
Richard	Roman	Riemvasmaak Sending	PO Box 275	Kakamas	8870	richardroman@live.com	0838582592				Alt add: Louiseval Road, Kimberley, 8300
Dawid	Roman	Riemvasmaak Sending	PO Box 867	Kakamas	8870		0710326605				Public Meeting
Leonard	Roman	Vredes Valley Community					063 0969647				
Festus	Roman	Vredes Valley Community				vredesvalleicwp@gmail.com	073 3676098				Landowner
Stacy	Roman	Augrabies Falls National Park	Private Bag X1 Augrabies 8874			stacy.roman@snaparks.org					
Marie	Rooi	Bassondrift CPA	PO BOX 505	Kakamas	8870						
Pieter	Rossouw	Aurecon (Kimberley)				Pieter.Rossouw@aurecongroup.com					
Hannes	S	ZFM District Municipality - Upington		Upington		hannes@zfm-dm.gov.za	082 303 4301	082 8599356			
Ryaan	Saal	HR Heeren Trading	Fase 4 Malfa Straat	Kakamas	1202	henearentrading@gmail.com					
Mary Aan	Sauls	Riemvasmaak Melkbosrand	Huis 144	Marchand	8873		0763504017				
PJ	Scheepers	Kai! Garib Local Municipality	P.O. Box 1124	Kakamas	8870	admin@kaigarib.co.za		054 461 6400	054 337 2888		Landowner Riemvasmaak
Sanna	Schoffers	Riemvasmaak Melkbosrand	Huis no: 269	Marchand	8873		0738831820				
Martin	Second	Church Kakamas	425 Reguit Str	Kakamas	8870	Revmartinsecond@gmail.com	0848960910				
Lorato	Sehularo	Department of Rural Development and Land Reform	Old Building184 Jacob Mare Street	Pretoria	0 002	LSehularo@ruraldevelopment.gov.za					
Louisa Magdalena	Shaw	Interested Party	PO Box 743	Kakamas	8870						
Leonard	Shaw	Telkom SA Limited	178 Madiba Street	Pretoria	0 002	shawls@telkom.co.za					
Regina	Simon	Interested Party	Posbus 243	Kakamas	8870						
Patrick	Simon	Riemvasmaak Sending					0738518525				
Maritjie	Simon	Interested Party									Landowner
Zena	Siyangu	Interested Party	Posbus 243	Kakamas	8870						
Arrie	Skeffers	Interested Party									Public Meeting
Danie	Smit	Department of Environmental Affairs: Integrated Environmental Management	Private Bag x447	Pretoria	0001	tgordon@environment.gov.za		012 310 3891	012 322 1936		Riemvasmaak
Gerhard	Smit	Interested Party				gmlsmit@telkomsa.net					
Katrina	Smith	Interested Party									
LJ	Snyders	DWA: Chief Director Northern Cape	Private Bag X6101	Kimberly	8300	snydersl@dwaf.gov.za		053 830 8804	053 831 4534		
The Landowner	Sonland	Sonland Boerdery Pty Ltd	PO Box 331	Augrabies	8874						
The Landowner	Sonland	Sonland Boerdery Pty Ltd	PO Box 331	Augrabies	8874						

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The Landowner	Sonvrucht	Sonvrucht Farming Pty Ltd	PO Box 182	Marchand	8873					
Johannes Rudolph	Spangenberg	Zwart Boois Berg Boerdery Trust	PO Box 117	Kakamas	8870					
Jane	Spickernell	Interested and Affected Party				Jane Spickernell <jane@ec-ho.co.za>	021 7090161			
Frederik	Stapelberg	Council for Geoscience				stapelberg@geoscience.org.za				Landowner
Christian	Steenkamp	Farm Orange Falls	4 Orange Falls	Augrabies	8874			054 451 9200		
Ilana	Steenkamp	Interested Party								
Haman	Steenkamp	Interested Party								
Zelma	Steenkamp	Interested Party				Keesha910@gmail.com	0734672457			
Rosemary	Steenkamp	Interested Party								
Rosina	Stofels	Riemvasmaak Melkbosrand	huis no. 59	Marchand	8873					
Kobus	Streuders	Dapartment of Water & Sanitation	Private Bag X6101	Kimberley	8300	StreudersK@dwa.gov.za				
Vloos	Stuikhelm	Riemvasmaak Melkbosrand	Posbus 242	Kakamas	8870					Public Meeting
Lehanie	Stuurman	Interested Party	PO BOX 04	Augrabies	8874			0743043789		
Theoleen	Stuurman	Interested Party		111 Marchand	8873			0788329438		
The Landowner	Superlane	Superlane 124 Pty Ltd	PO Box 518	Constantia	7848					
Elsebe	Swart	Northern Cape Department of Environment and Nature Conservation	90 Long Street	Kimberley	8301	elsabe.dtec@gmail.com				
Klaas	Sy	Swartura	Huis no: 114	Marchand	8873			0742545074		
Angus	Tanner	Senior Manager: Consevation Wilderness Foundation				angus@wildernessfoundation.org	0413730293			
Jolanda	Tatana	Interested Party	PO Box 719	Riemvasmaak				0710929294		
Maseri	Tava	Interested Party						0835936021		Landowner
Nathalie	Tedder	Interested and Affected Party	11 Ottawa Avenue Cape Town 8005			ntedder2@gmail.com>		083 283 7099		Landowner
Elise	Tempelhoff	Die Beeld Newspaper				eliset@beeld.com				
Teresa	Thagetsi	Interested Party	Huis nr 15	Marchand	8873			0711097564		
O	Thebe	DWA: Hydrological Services	Private Bag X6101	Kimberly	8300	thebeo@dwa.gov.za		053 836 7600	086 624 3423	
Samuel	Thekiso	Interested Party	Huis no. 317 Posbus 101	Augrabies	8874					
Willem Adriaan	Theron	W & L Theron Trust	PO Box 64	Kakamas	8870					
Sakkie	Theron	Oseiland Farms/ Rooipad Farmers Association						082 6710043		
LW	Theunissen	Riemvasmaak Community Trust	PO Box 1548	Mulbarton	2059	ltheunissen@leon.co.za	0832668406			
Lloyd	Theunissen	Riemvasmaak Community Trust	Po Box 1548	Mulbarton	2059	ltheunissen@rcon.co.za	0832668406			Landowner
Pieter Willem	Thirion	Interested Party	16 Cabernet Sauvignon St	Oude Westhof	7530					Riemvasmaak
Willem	Thomas	Interested Party								
Cecelia	Thutwe	Interested Party	huis 260	Marchand	8873			0730281034		
Alfred	Tieties	Z.F. Mgcuwu District Municipality	Private Bag X6039, Upington, 8800							
Gert	Tieties	Roman Catholic Church	Huis no. 110	Augrabies	8874			0836087203		Landowner
Niklaas	Tieties	Vredes Valley Community						0630969647		
Ratha Andrew	Timothy	Ngwao-Boswa Ya Kapa Bokone (Northern Cape Provincial Heritage Resources Authority)	1 Roper Street	Kimberley	8301	ratha.timothy@gmail.com				Alt add: JW Sauer Building, 6th Floor, cnr Roper and Quinn Streets, kimberley 8300
Adrian	Tiplady	Square Kilometre Array (SKA): South Africa	SKA Office, 1st Floor, 17 Baker Street,	Rosebank	2196	atiplady@ska.ac.za				
Samuel	Tompies	SANParks: Augrabies Falls National Park	Private Bag X1	Kakamas	8870	samuel.tompies@sanparks.org.za	0838996357			
Jess	Tyrrell	Wilderness Guide and African Paddling Association				jessica@wilderdom.co.za		0741 727 327		
Cecilia	Uweseb	Interested Party								
Kobus & Hannecke	van Coppenhagen	Interested and Affected Paty - Neighbour to Augrabies Falls NP	Posbus 689	Kakamas	8870	kobusvc@gmail.com	083 656 4498			Landowner
JHB	van der Merwe	Onseepkans River Camp	P.O. Box 284 Pofadder 8890			jhbproc@lantic.net				
Giepie	Van Niekerk	KWGV	P.O. Box 8	Marchand	8873	gjvanniekerk@gmail.com	082 823 1272			
Adriaan Pieter	van Niekerk	Interested Party	PO Box 75	Kakamas	8870					Landowner
Andre	van Niekerk	Rooipad Farmers Association						082 6710043		
Giepie	van Niekerk	Kakamas Water User Association				gjvanniekerk@gmail.com	082 823 1272			Alt add: Eskom Road, Brackenfell, 7560
Wian	van Rensburg	Kakamas Farmers Association						082 920 7798		Alt address: Sasko Building, Long Street 90, Kimberley, 8300
Magrietha	Van Rooi	Riemvasmaak Sending	Posbus 116	Marchand	8873			0735156580		
Frans	Van Rooyen	Park Manager - Augrabies Falls National Park	Private Bag X1	Kakamas	8870	frans.vanrooyen@sanparks.org				
Daniel	van Weyers	Riemvasmaak Sending	P.O. Box 278	Kakamas	8870					

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P	van Wyk	Marchand Enterprise (Ltd) Pty	Posbus 188	Marchand	8873	marchandent@gmail.com	0796067144			
Guillaume	Van Wyk	Department of Agriculture	Posbus 52	Upington	8800	gvwyk@gmail.com		0543378000		
She-arle	van Wyk	Interested Party		65 Marchand	8873		0739667604			
JD	Van Wyk	Ledebe		80 Marchand	8873		072855805			
Dirk	van Wyk	Marchand Community	P.O. Box 115	Marchand	8873		0785637160			
Anna	van Wyk	Marchand Community	P.O Box 113	Marchand	8873		0791583655			
David	van Wyk	Vredes Valley Community					0604327515			
Leane	van Wyk	Augrabies Falls National Park	Private Bag X1 Augrabies 8874			leane.vanwyk@sanparks.org		054 4529202		
Dante	van Wyk	Interested Party	PO Box 23	Marchand	8873	Dante4@mobilemail.vodacomsa.co.za	0725858053			
Lukas Christoffel	van Zyl	Riemvasmaak Melkbosrand	PO Box 531	Kakamas	8870					
Wikus	van Zyl	Riemvasmaak Melkbosrand	PO BOX 243	Kakamas	8870	daylinvanzyl@gmail.com	0730928284			
Phillippa	van Zyl	Ten 3 Safaris Augrabies Falls	Augrabies Falls			Philippa <philippa@ten3safaris.co.za>	084 2444408	825705509		
Henry	Vass	Riemvasmaak Melkbosrand								
Fihlakelew	Vass	Riemvasmaak Melkbosrand					0825964151			
Danial	Vass	Riemvasmaak Melkbosrand					0879466042			
Edward	Vass	Riemvasmaak Melkbosrand	PO BOX 243	Kakamas	8870		0711306408			
Leentjie	Vass	Riemvasmaak Melkbosrand					0731533476			
Ben	Vass	Riemvasmaak Melkbosrand	PO Box 798	Kakamas	8870	benjavass@gmail.com	0784031315			
Ben	Vass	Riemvasmaak Development				benjavess@gmail.com	078 8693495			
Isak	Vass	Riemvasmaak Sending								
Ethel	Vass	Vredes Valley Community				vredesvalleicwp@gmail.com	083 4028320			
Dennie	Vass	Vredes Valley Community					0632823402			
Nomsa	Vass	Vredes Valley Community					0786455076			
Michael	Vervueil	Interested Party	359 Alexander Street	Brooklyn	181	michael.salix@gmail.com				
Mitha	Vhogo	Interested Party	Posbus 243	Kakamas	8870					
Johan	Viljoen	Botes & Kenedy	Private Bag X5879, Post Net 1, Suite 172	Upington	8800	johanv@botken.co.za	0829590952			
A.G.	Visser	DWA (NWR1)	Private Bag 528	Bloemfontein	9300					
Okkie	Visser	Augrabies Boerevereniging	P.O. Box 282	Augrabies	8874	pgboerdery@telkomsa.net	082 564 6582			
Gerrit Jacobus	Visser	Interested Party	PO Box 813	Kakamas	8870					
Willem	Visser	Willem Visser Trust	PO Box 83	Augrabies	8874					
Christina	Visser	Interested Party								
Eugene	Visser	Onderstepoort Bordery				ondpoort@gmail.com	082 823 3636/ 076 475 5888			
Eugene & Lea	Visser	Narries Intereseted Party	P.O. Box 91 Augrabies 8874			onderpoort@gmail.com	087 1500769			
Safie	Voko	Interested Party								
Willem	Voko	Interested Party	PO Box 2354	Kakamas	8870		0732534353			
The Landowner	Vroeeson	Vroeeson Familie Trust	PO Box 813	Kakamas	8870					
Greg	Walpole	Country Director SMI and LMI South Africa				greg@l-m-i.co.za				
Angelo	Watt	Interested Party	141 Wolwaramstraat	Augrabies	8874	www.augustinus3.gmail.com	0719349558			
Jaco	Wessles	Kaap Agri Mark Kakamas				jaco.wessels@kaapagri.co.za				
Jack	Will	Jackwill Trust	PO Box 459	Kakamas	8870					
Jo-ann	Willemse	Interested Party	PO Box 125	Augrabies	8874		0733822088			
P	Williams	Provincial Heritage (Northern Cape)	Private Bag X5016	Kimberly	8301			054 831 4100	053 838 2748	
Charl	Williams	KWGV	Private Bag X4	Kakamas	8870	kakamaswgv@isat.co.za	0845803942			
C	Williams	Kakamas Water User Association	Private Bag X4	Kakamas	8870	kakamaswgv@isat.co.za	084 580 3942			
The Landowner	Winskpr	Winskpr 148 Pty Ltd	PO Box 60	Augrabies	8874					
Jam	Witbooi	Riemvasmaak Melkbosrand	Huis no 14	Marchand	8873					
Theresa	Witbooi	Riemvasmaak Melkbosrand	Huis no: 151	Marchand	8873		0795595027			
The Landowner	Witvlei	Witvlei Boerdery Trust	PO Box 241	Kakamas	8870					
Katrina	Wylbach	Riemvasmaak								
J	Wyngaardt	Eskom: Brackenfell	P.O. Box 222	Brackenfell	7561	justine.wyngaardt@eskom.co.za		021 980 3242	021 981 6742	
A	Yaphi	Department of Environmental Affairs and Nature Conservation (Northern Cape)	Private Bag X6102	Kimberly	8300	ayaphi@upprov.ncape.gov.za		054 332 2885	054 331 1155	

APPENDIX J: PROOF OF DELIVERY OF DRAFT AMENDED FINAL EIA AND DRAFT ADDENDUM REPORTS



RIEMVASMAAK RUN-OF-RIVER HYDRO EIA

DELIVERY NOTE FOR AMENDED FEIAR & ADDENDUM REPORT


Date: 5 - 6 April 2016

NAME & SURNAME	ORGANISATION	POSTAL ADDRESS	CONTACT NUMBERS	SIGNATURE
ALTUS GAGIANO	BLCUPITS	Posbus 35 Kakamas	Tel: 054 454 3803 Cell: 076910 8031	<i>[Signature]</i> CD
Ludwina Malgas	Vredesvallei	P.O. Box 387 Kerkwaaier	Tel: Cell: 06344443817	<i>[Signature]</i> Report + CD
DJ Strauss	Rooipad Boerevereniging	ing Posbus 26 Augrabies	Tel: 0544517007 Cell: 0827277955	<i>[Signature]</i> CD
Sckete	AFNP Reception	AFNP Private Bag X1 Augrabies 8874	Tel: 0544529209 Cell:	<i>[Signature]</i> CD + Report
M. de Nee	AFNP	AFNP Private Bag X1 Augrabies 8874	Tel: 054 452 9200 Cell:	<i>[Signature]</i> CD + Reports
Jaco Malan	Augrabies Boerevereniging	Posbus 65 Augrabies 8874	Tel: 054 4510060 Cell:	<i>[Signature]</i> CD

NAME & SURNAME	ORGANISATION	POSTAL ADDRESS	CONTACT NUMBERS	SIGNATURE
Sylvia Rooi	AUGRABIES Munisipaliteit	199 Tinsingel Augrabies	Tel: 054 431 6328 Cell: 0823479465	<i>[Signature]</i> Report
ZIRELWA Bezuidenhout	Munisipaliteit	MARCHAND SALLIE STREET 208	Tel: Cell: 0829293240	<i>[Signature]</i> Report
V. S. Joone	Marchand Boerevereniging	Marchand	Tel: Cell:	<i>[Signature]</i> CD
V. S. Joone	Kakamas WUA	Marchand	Tel: Cell:	<i>[Signature]</i> Report
C. H. Bree	Kakamas Blikkies	Kakamas	Tel: 054 431 6305 Cell: 553 691 9788	<i>[Signature]</i>
Wiaan v Kensburg	Kakamas FA ORLU	Bus 79 Kakamas	Tel: Cell: 0829207798	<i>[Signature]</i>

NAME & SURNAME	ORGANISATION	POSTAL ADDRESS	CONTACT NUMBERS	SIGNATURE
Maripa Visagie	Keimoes Bib	Posbus 8, Keimoes	Tel: Cell: 0781226249	<i>[Signature]</i> Report
Johy Macky	Kai! Gats	Posbus 8, Keimoes	Tel: Cell: 0788028938	<i>[Signature]</i> CD + Report
G.C. WHITE	DH SANITATION	P/BAG X 5912 UP T	Tel: 054 338 5800 Cell:	<i>[Signature]</i> CD + Report
J. Mans	DAFF	Bus 2782, Upington, 8801	Tel: 054 338 5909 Cell: 082 808 2737	<i>[Signature]</i> CD + Report
A. Tietjens	Z.F. Mqam. Dru	P/Boeg X 6059 Up:	Tel: 0543372800 Cell: 0845554195	<i>[Signature]</i>
W. HIRIKUA	RVM Development Trust	P.O. Box 1561 Lipt.	Tel: 054 3375900 Cell: 0834250924	<i>[Signature]</i>

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NAME & SURNAME	ORGANISATION	POSTAL ADDRESS	CONTACT NUMBERS	SIGNATURE
				AMENDMENT REPORT & BAR
Samantha De la Fontaine.	DENC	Provincial building Upington	Tel: Cell: 082 4509970	 CD + Report
A. Modman	Sanperks	Postnet 46, Upt, 8300	Tel: 054-3380600 Cell: 0829054652	 CD + Cl report
E. BOSSON	Riemvasmark bib	Riemvasmark Mail	Tel: Cell: 0736756686	 E. BOSSON.
B. Vans	RVM AEU Con	Riemvasmark Mail	Tel: Cell: 0733211103	
			Tel: Cell:	
			Tel: Cell:	