

APPENDIX M

COMMENTS AND RESPONSES REPORT



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

REPORT NO:
P WMA P RSA 000/A00/22118/5

PROPOSED MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJECT (PHASE 2A) (MCWAP-2A): WATER TRANSFER INFRASTRUCTURE

ENVIRONMENTAL IMPACT ASSESSMENT REPORT (FINAL)

COMMENTS AND RESPONSES REPORT

November 2018



TITLE AND APPROVAL PAGE

Project Name: *Proposed Mokolo and Crocodile River (West) Water Augmentation Project (Phase 2A) (MCWAP-2A): Water Transfer Infrastructure*

Report Title: *Final EIA Report: Comments and Responses Report*

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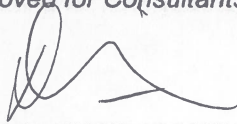
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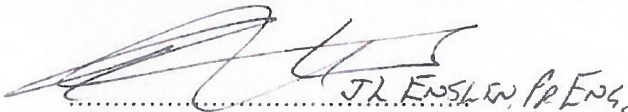


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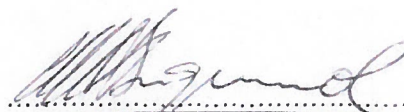
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LIST OF ACRONYMS

BP	Borrow Pit
BPEO	Best Practicable Environmental Option
BPR	Break Pressure Reservoir
CBIPPPP	Coal Baseload Independent Power Producer Procurement Programme
CRR	Comments and Responses Report
CSIR	Council for Scientific and Industrial Research
DEA	Department of Environmental Affairs
DMR	Department of Mineral Resources
DoE	Department of Energy
DWAF	Department of Water and Forestry
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
ELWU	Existing Lawful Water Use
EMF	Environmental Management Framework
EMPr	Environmental Management Programme
ERC	Energy Research Centre
EWR	Ecological Water Requirements
FGD	Flue-Gas Desulphurisation
GHG	Greenhouse Gas
GIS	Geographical Information System
GN	Government Notice
IAPs	Interested and Affected Parties
IB	Irrigation Board
IBA	Important Bird & Biodiversity Area
IDP	Integrated Development Plan
IMTT	Inter-Ministerial Task Team
INGAA	Interstate Natural Gas Association of America
IPPs	Independent Power Producers
IRP	Integrated Resource Plan
IWULA	Integrated Water Use Licence Application
MCC	Mokolo Crocodile Consultants
MCWAP	Mokolo Crocodile (West) Water Augmentation Project
MCWAP-1	Mokolo Crocodile (West) Water Augmentation Project Phase 1
MCWAP-2A	Mokolo Crocodile (West) Water Augmentation Project Phase 2A
MPRDA	Mineral and Petroleum Resources Development Act (Act No. 28 of 2002)
NEMA	National Environmental Management Act (Act No. 107 of 1998)

NFEPA	National Freshwater Ecosystem Priority Areas
NWA	National Water Act (Act No. 36 of 1998)
NW&SMP	National Water and Sanitation Master Plan
NWRS	National Water Resources Strategy
NWRS-1	National Water Resources Strategy First Edition
NWRS-2	National Water Resources Strategy Second Edition
PPP	Public Participation Process
RMP	Resource Management Plan
RMS	River Management System
RSA	Republic of South Africa
SADC	South African Development Community
SDF	Spatial Development Framework
SEA	Strategic Environmental Assessment
SIPs	Strategic Integrated Projects
SMMEs	Small, Medium and Micro-sized Enterprises
TAU-SA	Transvaal Agricultural Union South Africa
TCTA	Trans-Caledon Tunnel Authority
WMA	Water Management Area
WTI	Water Transfer Infrastructure
WUL	Water Use Licence
WULA	Water Use Licence Application
WWTW	Wastewater Treatment Works

1 INTRODUCTION

Water requirements will increase in the Lephalale Area due to various planned and anticipated developments associated with the Waterberg coalfields. The Department of Water and Sanitation (the DWS) commissioned the Mokolo and Crocodile River (West) Water Augmentation Project (MCWAP) Feasibility Study to investigate the options for meeting the aforementioned water requirements.

Nemai Consulting was appointed by the DWS (The Applicant) and the Trans-Caledon Tunnel Authority (TCTA) (Implementing Agent) to conduct the Environmental Impact Assessment (EIA) for the MCWAP Phase 2A (MCWAP-2A) in terms of Government Notice (GN) No. R. 982 of 4 December 2014, as amended. This document serves as the “Comments and Responses Report” (CRR) which accompanies **the Final EIA Report for the Proposed MCWAP-2A Water Transfer Infrastructure** (WTI).

This CRR summarises the issues and queries raised, as well as statements made, by authorities, stakeholders as well as Interested and Affected Parties (IAPs) through correspondence received (including completed Reply Forms and Comments Sheets, letters, faxes and emails) and discussions at meetings during the Announcement, Scoping and EIA Phases of the entire EIA Process. This report also aims to address the comments through responses and input provided by the relevant members of the project team (including the DWS, TCTA, Nemai Consulting, stakeholders, consulting engineers and specialists).

When reviewing the CRR, please take cognisance of the following:

1. The two primary sources of comments that were received to date (November 2018) are (1) correspondence and (2) public meetings.
2. Where necessary, additional information from the project team was included in certain responses that were provided to comments raised during meetings with IAPs and feedback from focus groups, as well as to comments received via written correspondence. This was undertaken to allow for these comments to be addressed in greater detail. *All these responses are recorded in italics font type.*
3. A number of key issues were echoed by various IAPs. In these instances where related issues were raised multiple times, a reference is provided to the comment number where the associated response is recorded. See table to follow:

Comment No.	Theme of Response
2	Alternatives
4 & 259	Existing Lawful Water Uses in terms of the National Water Act (Act No. 36 of 1998) (NWA)
6 & 259	Water Availability for the scheme
22	Location of the proposed abstraction weir

Comment No.	Theme of Response
40 & 302	Climate Change
41, 79, 80, 374	Reserve as set out in the NWA
81	Matlabas River
82	Vegetation
82	Wildlife Impact Assessment
94	Fencing
99	Noise impacts
98	Visual impacts
99	Accommodation
92	Compensation - ecotourism
111	Compensation - land
111	Servitude
142	Flood hydrology
146	Existing infrastructure
178	Engagement with Transnet
190, 198	Engagement with the Hartbeespoort Dam IAPs
190, 198	Expansion of the IAP Interest Groups
193	Assessment of Potential Impacts
194	Separate Applications
273	Land matters
296, 315	Need for Project
411	Influence of Hartbeespoort Dam's fluctuating water levels on boreholes
413	Implications of the MCWAP-2A on Hartbeespoort Dam
434	Influence of Hartbeespoort Dam's fluctuating water levels on security, property value and tourism

- This CRR does not necessarily provide verbatim comments from public and focus group meetings but rather reflects the essence of the discussions held with IAPs. Written comments were included as received, without any editing.
- The following project team members responded to the comments received during meetings (refer to relevant minutes of meetings appended to the Scoping and EIA Reports):

Name	Affiliation	Role
J. Enslin	DWS	Applicant
R. Gillmer	DWS	Applicant
O. v. d. Berg	DWS	Applicant
A. Nelwamondo	TCTA	Implementing Agent
S. Kelefetswe	TCTA	Implementing Agent
P. le Roux	Mokolo Crocodile Consultants (MCC)	Technical Team

Name	Affiliation	Role
J. Kroon	MCC	Technical Team
R. Botha	DWS	Presentation of Validation and Verification of water use in the Crocodile (West)-Marico catchment
S. Ndwandwe	Limpopo-North West Proto CMA	
P. van Rooyen	WRP Consulting Engineers	Water Resources Specialist
F. Vogel	-	Chairman of selected Meetings
S. Pienaar	Nemai Consulting	Environmental Assessment Practitioner (EAP)
C. van der Hoven	Nemai Consulting	EAP
D. Henning	Nemai Consulting	EAP

6. A large portion of the comments received were translated from Afrikaans. Where conflict may arise with the interpretation, the original Afrikaans wording will take preference (copies of comments received and minutes in Afrikaans are appended to the Final EIA Report).
7. Due to the nature of the discussions, the minutes of the Focus Group Meetings held with the Crocodile-West Irrigation Board and Hartbeespoort Irrigation Board on 2 October 2018, as well as with the Makoppa Ad Hoc Committee on 3 October 2018, were not incorporated into the CRR. Copies of these minutes (English and Afrikaans versions) are contained in Appendix T of the Final EIA Report.
8. Various references are made to legislation. Note that in all circumstances the gazetted laws take preference should a conflict arise.

2 COMMENTS AND RESPONSES – PROJECT ACCOUNCEMENT PHASE

Note that the Announcement Phase of the EIA Process refers to the period prior to the submission of the Application Form to the Department of Environmental Affairs (DEA) on 05 March 2018.

2.1 Project Motivation

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
1.	<p>Medupi Power Station is one of the intended recipients of the bulk water supply for this planned infrastructure and the delivery of this is linked to our ability to complete and operate our FGD plant to ensure continued compliance to licence conditions. Timeline for the commencement and completion of this project are therefore of strategic importance to Eskom.</p> <p><i>Specific requirements in terms of the EIA process? To be included in all communications related to the PPP and to be able to comment on all documents associated with the EIA process.</i></p>	Emile Marell	Reply Form (17/06/2016)	<p>The Scoping Report indicates that without MCWAP-2A Eskom will not be able to implement the Flue-Gas Desulphurisation (FGD) technology at the Medupi Power Station to reduce sulphur emissions, which will violate the related condition in Eskom's World Bank loan which can lead to the withdrawal of the loan with huge associated risks to the Republic of South Africa's (RSA) economy.</p> <p><i>Additional comment</i> <i>Eskom is on record that failure to commission the FGD plant within the agreed timelines may render Eskom in breach of World Bank loan agreements and their emission licence, which would result in the units not being able to operate. Such actions will have serious risks for the RSA economy.</i></p> <p>Contact details of E. Marell included in the IAP database.</p>
2.	With current strain on all the SA water sources is the augmentation seen as being fully sustainable during wet and dry periods?	Filomaine Swanepoel	Reply Form (18/05/2016)	<p>Section 10 of the Draft Scoping Report lists the various alternatives to the project.</p> <p>Alternative water resources, which were considered include:</p> <ul style="list-style-type: none"> • Ground Water; • Re-use of effluent at Lephalale; • Mokolo Dam's raising; • Crocodile River (West) Water; • Return flows in Crocodile River (West) and Vaal River Catchments; • Creating more storage by raising of existing dams and/or building of new dams;

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<ul style="list-style-type: none"> • Abstraction point at Faure Weir; and • Water for transfer from rivers beyond the borders of South Africa. <p>MCWAP-2A as configured in the Draft Scoping Report was identified as the feasible option to supply the long-term water requirements in the Lephalale area.</p>
3.	The project does not make sense. Sizes of the proposed pipe diameters don't make sense. Reasoning, starting point, feasibility, practicality and reasons for the project don't make sense and are invalid.	J. L. Pretorius	Reply Form (22/06/2016)	<p>Refer to Section 3 of the Draft Scoping Report, which provides an overview of the project background and motivation.</p> <p>The following technical reports are of particular relevance to the information contained within the Scoping Report, and provide further details of the context of the project (refer to project website):</p> <ul style="list-style-type: none"> • P RSA A000/00/8809 - Pre-feasibility Stage: Supporting Report 1: Water Requirements; • P RSA A000/00/8909 - Pre-feasibility Stage: Supporting Report 2: Water Resources; • P RSA A000/00/9109 - Pre-feasibility Stage: Supporting Report 4: Dam, Weir and River Engineering; • P RSA A000/00/9309 - Pre-feasibility Stage: Supporting Report 6: Crocodile River Transfer Scheme Options; • P RSA A000/00/8109 - Feasibility Stage: Main Report: MCWAP Feasibility Study Technical Module Summary; • P RSA A000/00/8609 - Feasibility Stage: Supporting Report 10: Requirements for the Sustainable Delivery of Water; • P RSA A000/00/8309 - Feasibility Stage: Supporting Report 12: Phase 2 Feasibility Stage; and • P RSA 000/A00/18413 - Feasibility Bridging Stage: MCWAP-2: Post Feasibility Bridging Study; Review Report. <p>The water requirements of users in the MCWAP System</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				were obtained from the Post Feasibility Bridging Study Report. They are reflected in Section 3.5 of the Draft Scoping Report and are aligned to a nominal transfer capacity of 75 million m ³ /a, which is marginally (<10%) less than the maximum requirements beyond 2040. The pipe sizes were selected to convey the transfer capacity and would be further optimised during the tender design phase.

2.2 Water Use and Availability

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
4.	<p>Guarantee the use of water. Acknowledge water use entitlements downstream of the abstraction weir – application of the National Water Act.</p> <p>Everything mentioned above must be discussed and dealt with comprehensively. To identify the various impacts and how it will be addressed for landowners who will adversely be affected as a result of the planned construction and infrastructure.</p> <p>The most important point is water and the insurance that he can continue unhindered with his operations on his land.</p> <p>Louma Farming is a major player in the region in terms of job creation, food cultivation and the intensive use of its irrigation projects. Every aspect of the farming is planned and coordinated to achieve optimal utilization of all resources and no deviations are accepted. It is a farming operation and company that stands strong in a difficult environment and provides work for various people and actually contributes to the well-being of the environment.</p> <p>Any kind of risk that does not go through Louma farm management or that cannot be controlled would result in</p>	B. Enslin on behalf of Louma Farming	Reply Form & Letter (17/05/2016)	<p>The water requirements of the Existing Lawful Water Users are secured through Existing Lawful Water Use in terms of the National Water Act, No. 36 of 1998. Existing Lawful Water Uses were accounted for in assessing the availability of water for the transfer scheme. In terms of Section 4(2) of the NWA: “A Person may continue with an existing lawful water use in accordance with section 34.”</p> <p>Note: Any reference to “Existing Lawful Water Use” in the responses provided herein shall be interpreted in terms of the provisions set out in the National Water Act, No. 36 of 1998.</p> <p>DWS however does not guarantee the assurance of supply in accordance with the National Water Act (Section 31).</p> <p>The Vlieëpoort Abstraction Weir will make provision for a gauging facility to monitor flows at the weir.</p> <p>The Draft Scoping Report addresses the impacts and how it will be addressed.</p> <p><i>Refer to a copy of the presentations provided during the</i></p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>negatively impacts to the farming operations.</p> <p>The farming operations consist of various facets that include breeding of exotic wildlife but mainly relies on the irrigation of crops. Any deviation in resources and availability would indicate that the industry cannot be economically managed, which would be a disaster for the company and the staff.</p> <p>All kinds of risk and guarantees for the availability of water for Louma Farming must please be extensively examined and considered.</p> <p>All the other aspects mentioned in point 2.1 of the Reply Form must also please be extensively examined and considered, due to the fact that there are many construction activities and infrastructure planned right next to his game breeding and living areas.</p> <p>We hope that you understand our problem and we want to work with you to ensure that Louma Farming is duly acknowledged in the MCWAP project.</p>			<p><i>Focus Group Meeting with Makoppa Agriculture on 25 January 2018 (contained in Appendix Q of the Draft Scoping Report). The following matters were discussed during this meeting:</i></p> <ul style="list-style-type: none"> • <i>Background and Motivation;</i> • <i>Proposed Project Layout;</i> • <i>Verification of Existing Lawful Water Uses in the Crocodile River (West);</i> • <i>Availability of Water in the Crocodile River (West);</i> • <i>Management of Impacts regarding Existing Lawful Water Uses (Operating Rules);</i> • <i>River Management System; and</i> • <i>Environmental Impact Assessment.</i> <p>The allocation of water is dealt in terms of the NWA, not the EIA.</p>
5.	<p>Can you please register me as an IAP for the MCWAP 2 EIA (both the Water Transfer Infrastructure and the Bulk Power Supply)? Contact details provided.</p> <p>We hold a prospecting right for coal in Lephalale and are in the process of applying for a mining right and EA. We have been engaging TCTA since around 2012 concerning obtaining water from MCWAP 2.</p>	Clive Machingaifa (Groothoek Coal Mining Company (Pty) Ltd)	Email (16/05/2016)	Contact details included in the IAP database.
6.	Not enough water for farmers and Eskom.	Henu Schutte	Reply Form (17/05/2016)	<p>Refer to No. 4 for response with respect to Existing Lawful Water Users as set out in the NWA.</p> <p>The increasing surplus return flow (treated effluent discharged from wastewater treatment plants) in the Crocodile River (West) catchment that can be transferred is set out in the on-going review of the Crocodile River (West) Water Supply System Reconciliation Strategy. Given that the growth in water requirements for the main urban centres (Johannesburg, Midrand, Pretoria,</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>Rustenburg) will continue to be supplied from the Vaal River System via Rand Water's network, and the commensurate growth in urban return flows towards the Crocodile River (West) and its tributaries, sufficient water is expected to be available to meet all the entitlements for water in its catchment.</p> <p>Return flows to the Crocodile River (West) are discharged into various tributaries. These mainly converge upstream and at the confluence of the Pienaars River with the Crocodile River (West), which offers the opportunity for large scale abstraction (such as for the Lephalale area) and possible regulation downstream of that point.</p> <p>The transfer of water from the Vaal River System for use in the Crocodile River (West) catchment (potable water via Rand Water network) continues to grow for all the identified planning scenarios.</p> <p>Should the need for water transfer from the Crocodile River (West) catchment to the Lephalale area be taken into account, together with the effluent flows from the Rand Water transfers to the Crocodile River (West) catchment, the low water use scenarios in the Crocodile River (West) catchment also result in the lowest total transfers from the Vaal River System, despite the need for additional augmentation (raw water) in the Lephalale area to meet the growing requirements.</p> <p>The planning phase therefore concluded that the requirement for additional water to the project area should be augmented from the Crocodile River (West) and that adequate volumes of water should be available for such transfer.</p> <p>DWS conducts reconciliation strategies and the public is free to participate. The latest update was performed in 2015.</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
7.	Guarantee of water.	Hennie Du Plessis	Reply Form (18/05/2016)	Refer to No. 4 for response with respect to Existing Lawful Water Users as set out in the NWA.
8.	<p>1. Loss of agricultural water allocations, i.e. irrigation. Commercial agriculture is one of the key economic activities along the Mokolo River. The main crops grown in the Mokolo catchment include maize, citrus fruits, tropical fruits and vegetables. Crops are watered mainly through irrigation from the river, although in some instances groundwater is also used. Around 1 000 hectares of land is under irrigation in the Mokolo Catchment.</p> <p>2. Loss of high agricultural soils/land.</p> <p>3. Water Quality Farmers have indicated that water quality is a main issue affecting agricultural production in the Mokolo Catchment. Deteriorating water quality will harm export market more especially citrus farmers.</p> <p>Conduct Agricultural Impact/Assessment Study. Conduct Hydrological Study.</p>	Ramabulana Ndwamato (DAFF)	Reply Form (19/05/2016)	<p>Note that the Mokolo River forms part of the MCWAP-1 (Phase 1) already commissioned.</p> <p>Refer to the following:</p> <ul style="list-style-type: none"> No. 4 for response with respect to Existing Lawful Water Users as set out in the NWA; and No. 6 for response to water availability for the scheme. <p>Section 14.4.3.4 of the Draft Scoping Report provides an overview of the Agricultural Impact Assessment.</p> <p>A Hydrological Assessment was conducted as part of the Feasibility Study (refer to project website - www.dwa.gov.za/Projects/MCWAP/). Findings from this study will be included in the EIA Report.</p> <p><i>Additional Response</i> Refer to the following specialist reports contained in the Draft EIA Report:</p> <ul style="list-style-type: none"> <i>Aquatic Baseline and Impact Study (Appendix I1);</i> <i>Agricultural Impact Assessment (Appendix I3); and</i> <i>Wetland Impact Assessment (Appendix I5).</i>
9.	Noted the poor water quality in the Crocodile River.	S Phasha (DWS)	Authorities Meeting (25/05/2016)	O van den Berg indicated that only the sediment will be removed as part of the transfer scheme and that the respective end users would need to treat the raw water to meet their requisite standards. He also indicated that the Zeeland Water Treatment Works will only receive water from Mokolo Dam, being of a higher quality and the facility is designed for that quality of water.
10.	Will water be taken from Mokolo Dam? There is not sufficient water downstream of this impoundment.	S Phasha (DWS)	Authorities Meeting (25/05/2016)	O van den Berg explained that MCWAP-2 entails the transfer of water from the Crocodile River (West).
11.	Indicated that the proposed return of sediment back to the Crocodile River (West) from the desilting works would constitute a Section 21(f) water use in terms of the National	R Botha (DWS)	Authorities Meeting (25/05/2016)	D Henning indicated that the Integrated Water Use Licence Application (IWULA) requirements will be discussed with the DWS Limpopo Regional Office during

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	Water Act (No. 36 of 1998).			a separate pre-application meeting. <i>A pre-application meeting was held with DWS: Limpopo Regional Office on 07/12/2017.</i>
12.	Indicated that for Section 21(i) water use all wetlands within a 500 m radius of the project infrastructure would need to be identified. He noted that the new General Authorisation would be published soon, which needed to be taken into consideration in this regard.	R Botha (DWS)	Authorities Meeting (25/05/2016)	Refer to No. 11 for response to the IWULA.
13.	The water use entitlement needs to lie with the operator of the scheme.	R Botha (DWS)	Authorities Meeting (25/05/2016)	Refer to No. 11 for response to the IWULA.
14.	The project cannot be implemented without an Integrated Water Use Licence.	S Phasha (DWS)	Authorities Meeting (25/05/2016)	Refer to No. 11 for response to the IWULA.
15.	Where will water for construction purposes be obtained from?	S Phasha (DWS)	Authorities Meeting (25/05/2016)	A Nelwamondo indicated that boreholes would be used if existing services are not available. D Henning noted that water used for this purpose may fall within the conditions of the General Authorisation, which needed to be confirmed. <i>Additional Response</i> The contractor would be responsible to source water for construction. It may include the abstraction of water from the Crocodile River and/or Matlabas River for which water use licences would be required. Another option is to lease water from irrigators.
16.	A large number of the attendees include the Makoppa farmers and that they are concerned about the availability of water.	J Nel	Public Meeting (25/05/2016)	O van den Berg stated that the surplus water in the system, which is associated with the effluent from various Wastewater Treatment Works, was confirmed as part of the Reconciliation Study through detailed analyses. He further explained the standard principle that is applied in terms of the storage of water in a system and that Hartbeespoort Dam is currently not operated as a dam that is allowed to fluctuate naturally. He indicated that Vlieëpoort Abstraction Weir will not be a storage facility but simply a diversion structure. Existing Lawful Water Uses (No. 4) as determined in accordance with the

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>National Water Act will be respected and protected. He noted that the assurance of water supply planned for power generation is 99,5%, whilst it is 91% (100% for 70% of the time and 70% for 30% of the time) for irrigation, if available. Any high flows will overtop the weir (Vlieëpoort) and recharge the downstream aquifer.</p> <p>D Henning mentioned that separate meetings will still be arranged with the Hartbeespoort Irrigation Board, Crocodile (West) Irrigation Board and farmers from the Makoppa Irrigation Area.</p> <p><i>Note that the abovementioned meetings were subsequently held and the minutes of the meetings have been incorporated into the Comments and Responses Report, and are attached to the Scoping Report.</i></p>
17.	Currently there is not enough water available in the Crocodile River (West).	J Botes	Public Meeting (25/05/2016)	Refer to No. 16 for response provided by O van den Berg during the public meeting.
18.	It is the worst drought experienced in a long time. There is not enough water in the system for the transfer scheme.	R van Tonder	Public Meeting (25/05/2016)	Refer to No. 16 for response provided by O van den Berg during the public meeting.
19.	It is critical to properly manage the water in the system. Hartbeespoort Dam is full while water is required downstream.	H Bloem	Public Meeting (25/05/2016)	<p>Refer to No. 16 for response provided by O van den Berg during the public meeting.</p> <p><i>In addition, water is released in accordance with the Existing Lawful Water Use requirements.</i></p>
20.	Will storage be provided at the pipeline's terminal point?	J Botes	Public Meeting (25/05/2016)	O van den Berg explained that the pipeline will feed multiple users. Terminal Reservoirs (at each of the large users) with 18 days storage capacity is to be provided by such users. Storage will also take place at the balancing dams, Break Pressure Reservoir and Operational Reservoir as described in the Draft Scoping Report. This is required to allow for the maintenance of the pipeline and to provide a buffer for operational shortages in the system.
21.	<ol style="list-style-type: none"> 1. Will water be pumped constantly from the river? 2. How will water supply be ensured to the downstream farmers? 3. Will large volumes of water associated with floods be stored? 	J Botes	Public Meeting (25/05/2016)	<ol style="list-style-type: none"> 1. S Pienaar indicated that water will be pumped constantly. 2. Refer to No. 4. O van den Berg also explained that a River Management System is required to monitor, control and manage the releases into the river, the

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>flows in the river and abstractions from the river enabling honouring existing entitlements.</p> <p>3. O van den Berg indicated that there are no suitable dam sites for the storage of flood water due to the surrounding topography.</p>
22.	<ol style="list-style-type: none"> 1. According to his calculations one third of the current yield of the river will be abstracted for the transfer scheme. How will the water in the system be augmented? 2. Motivation for the location of the proposed abstraction weir and alternative sites that were considered. 3. There is no confidence amongst the farmers in the findings of the Reconciliation Study and the results will need to be investigated further. 	W Potgieter	Public Meeting (25/05/2016)	<p>To form part of the discussions with the various irrigation groups (since held).</p> <ol style="list-style-type: none"> 1. <i>Refer to No. 6 for response to water availability for the scheme.</i> 2. <i>From a river hydraulic perspective the location of the abstraction weir is mostly determined by the topography, the geology and the river morphology which impacts on the sediment management. The Vlieëpoort site is the preferred site from this perspective.</i> <p><i>Refer to Section 9.3.1 of the Draft Scoping Report. "Several possible weir sites along the Crocodile River (West) were evaluated as part of the Pre-feasibility Study for suitability with respect to topography, access, founding conditions and river morphology. Of these sites the following two abstraction locations were identified as viable for further consideration during the pre-feasibility stage of the project: Boschkop Lower Site on the farm Boschkop 138 JQ and Vlieëpoort Upper Site on the farm Mooivalei 342 KQ. The choice of abstraction point was largely determined by the extent of river losses and additional costs associated with river management actions between the aforementioned two abstraction sites, as well as the need for and benefit of implementing a phased approach to deliver water to the end users. Based on these criteria, the Vlieëpoort site is regarded as the preferred option due to the following: more favourable topographical conditions, shorter rising main to the proposed Break Pressure Reservoir and better founding conditions".</i></p>

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				<p><i>Refer to the following technical report for further information: P RSA A000/00/9109 - Pre-feasibility Stage: Supporting Report 4: Dam, Weir and River Engineering (available on the project website www.dwa.gov.za/Projects/MCWAP/)</i></p> <p><i>3. The agricultural sector needs to partake in the Reconciliation Studies.</i></p>
23.	<p>Only one of the dams in the system has sluice gates that make provision for releases.</p> <p>Concerned about poor water quality in the Crocodile River (West).</p>	J Swanepoel	Public Meeting (25/05/2016)	<p><i>A River Management System is required to monitor, control and manage the releases into the river, the flows in the river and abstractions from the river.</i></p> <p><i>The proposed components of the River Management System include the following (see Section 9.11 of the Draft Scoping Report):</i></p> <ul style="list-style-type: none"> <i>• Four existing dams (i.e. Hartbeespoort, Roodekopjes, Klipvoor and Vaalkop);</i> <i>• Possible new river outlet at Hartbeespoort Dam or revised operating procedures;</i> <i>• Possible new river outlet at Roodekopjes Dam or revised operating procedures;</i> <i>• Thirteen existing river gauging stations;</i> <i>• Three and possibly four new river gauging stations;</i> <i>• Smart metering of direct abstraction;</i> <i>• Smart metering of indirect abstraction (boreholes);</i> <i>• Conveyance capacity in Crocodile River (West);</i> <i>• Data communication network; and</i> <i>• Integrated operational centre.</i> <p><i>Refer to item No 9 with regard to water quality.</i></p>
24.	Noted that he was involved with the previous EIA for MCWAP-2. He submitted a legal letter to DWS wherein he stated that he reserves his right to further dispute water-related matters.	R van Tonder	Public Meeting (25/05/2016)	<p><i>Noted. Provision is made as part of the EIA's Public Participation process to raise concerns for consideration by the project team.</i></p>
25.	How will water shortages be managed during drought periods?	B Enslin	Public Meeting (25/05/2016)	<p>O van den Berg indicated that the system is analysed on an annual basis and is discussed with the water users during talks of the System Operating Forum. Explained DWS' protocol for managing water shortages during droughts.</p>

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				<i>Refer to the presentation during the Focus Group Meetings with the agricultural groups, the minutes and presentations are appended hereto.</i>
26.	Who will be the end user of the water? If it is private then the Expropriation Act cannot be applied. The sustainability of farming needs to be ensures, with specific reference to water requirements.	H Prinsloo	Public Meeting (25/05/2016)	<p>O van den Berg indicated that the end users include the following:</p> <ul style="list-style-type: none"> • Power generation in Waterberg; • Coal for power generation in the Waterberg; • Industrial/mining for other purposes; • Urban use by Lephalale Municipality; and • Authorised water for game and/or livestock watering purposes along the pipeline. <p><i>Refer to No. 4 for response to Existing Lawful Water Users.</i></p>
27.	<p>Concerned about the curtailment of his water allocation.</p> <p>Will it be possible to receive an offtake point from the pipeline?</p>	B de Beer	Public Meeting (25/05/2016)	<p><i>Refer to No. 4.</i> O van den Berg indicated that the Existing Lawful Water Use requirements will be respected and protected.</p> <p>It is DWS' standing policy to only provide off-take points for livestock and/or game watering to authorised directly affected landowners. The water will be too expensive for irrigation purposes. This matter will form part of the negotiations with the individual landowners.</p> <p><i>A limited volume of water will be set aside for this purpose. Such users will have to apply for a water use licence (Chapter 4 of the NWA) and enter into an agreement with DWS. Water tariffs will be payable in accordance with the prevailing Pricing Strategy.</i></p>
28.	Can the transfer scheme not supply water for agricultural purposes? The significance of food security must be taken into consideration.	R Peyper	Public Meeting (25/05/2016)	<p>O van den Berg indicated that Phase 2 of the Lesotho Highlands Water Project is being developed, which will supply additional water to the Crocodile System. According to analyses of the Crocodile System water must be supplied to projects that are of strategic national importance. The water from the project will be too expensive for irrigation purposes. This will be discussed further during pending meetings with the irrigators following the Public meetings.</p>

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				<i>Note that the abovementioned meetings were subsequently held and the minutes of the meetings have been incorporated into the Comments and Responses Report, and are attached to the Scoping Report.</i>
29.	What will happen with the water once it has been used by the end user?	K Herman	Public Meeting (25/05/2016)	O van den Berg indicated that the maximum re-use of the water will be promoted, and the water will thus not be discharged.
30.	What will the water quality be at the off-take points?	P Jordaan	Public Meeting (25/05/2016)	S Pienaar indicated that it will be raw water as part of the transfer scheme.
31.	Will it be possible to receive off-takes from the pipeline?	K Janse van Rensburg	Public Meeting (26/05/2016)	Refer to No. 27.
32.	Require further information pertaining to the water balance.	W du Plessis	Public Meeting (26/05/2016)	The water balance was considered as part of the technical studies. One of the objectives of the Reconciliation Strategy 2015 includes maintaining a positive water balance in future and reconciling growing water requirements and availability. Refer to No. 6.
33.	Would it be possible to receive an off-take from the pipeline?	H Steenkamp	Public Meeting (26/05/2016)	Refer to No. 27.
34.	This will have a massive impact on the ecology and downstream water users.	Willem Hazewindus (WESSA)	Reply Form (09/06/2016)	Refer to No. 4 for response with respect to Existing Lawful Water Users as set out in NWA. An Aquatic Impact Assessment (see Section 14.4.3.1 of the Draft Scoping Report) and Terrestrial Ecological Study (see Section 14.4.3.2 of the Draft Scoping Report) will be undertaken during the EIA phase to assess the impacts of the proposed project to aquatic and terrestrial ecology, respectively. <u>Additional Response</u> <i>Refer to the following specialist reports contained in the Draft EIA Report:</i> <ul style="list-style-type: none"> • <i>Baseline Aquatic and Impact Study (Appendix I1), Section 7 - Risk Assessment; and</i> • <i>Terrestrial Ecological Impact Assessment (Appendix I2), Section 12.2 - Assessment of Environmental Impacts.</i>
35.	Water users under the dam wall. The project will have a significant impact on the farming activities. No water in the river.	Kobus van Graan	Reply Form (20/06/2016)	Refer to No. 4 for response with respect to Existing Lawful Water Users as set out in NWA.

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36.	<p>Concerns include the following:</p> <ol style="list-style-type: none"> The dam wall which is going to be built in the Crocodile River at Mooivallei; The volume of water (m³/s) that will be abstracted and pumped away. <p>Specific requirements include:</p> <ol style="list-style-type: none"> The Department must provide me with my volume of registered water through a sluice in the weir; or The Department must buy out my volume of water at an acceptable price. 	L. J. van Rensburg	Reply Form (21/06/2016)	<p>Refer to No. 4 for response with respect to Existing Lawful Water Users as set out in NWA.</p> <p>75 million m³/a will be transferred.</p> <p>Your Existing Lawful Water Use will be released.</p>
37.	<p><i>Linked to No. 3.</i></p> <p>Water scarce area, constant water shortages, droughts – in other words there is no water.</p>	J. L. Pretorius	Reply Form (22/06/2016)	<p>Refer to No. 6 for response to water availability for the scheme.</p> <p>The water to be transferred via MCWAP-2A relate to the return water emanating from wastewater plants upstream.</p>
38.	<p>We are already experiencing a problem with too little irrigation water. Less water will also negatively affect the quality of the water.</p> <p>Cannot fathom how the project is being considered in an area that already has too little water.</p>	Z. W. Pienaar	Reply Form (23/06/2016)	<p>Refer to the following:</p> <ul style="list-style-type: none"> No. 4 for response with respect to Existing Lawful Water Users as set out in NWA; and No. 6 for response to water availability for the scheme.
39.	<p>Dear Mr Henning</p> <p>SUBMISSIONS ON THE BACKGROUND INFORMATION DOCUMENT FOR THE PROPOSED MOKOLO CROCODILE (WEST) WATER AUGMENTATION PROJECT PHASE 2</p> <ol style="list-style-type: none"> We act for Earthlife Africa Johannesburg (ELA or “our client”), an organisation founded in 1988 to mobilise civil society around environmental issues in relation to people. It is a membership organisation, with currently approximately 100 members, led by a Core Group which serves as its management committee. ELA challenges environmental degradation and aims to promote a culture of environmental awareness and sustainable development in South Africa. We refer to the Background Information Document (BID) 	Centre for Environmental Rights	Email (24/06/2016)	<p>Introductory section of correspondence, which provides an overview of the BID. No response necessary.</p> <p>Registered as an IAP.</p>

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	<p>for the Proposed Mokolo Crocodile (West) Water Augmentation Project Phase 2 (MCWAP-2) published on 16 May 2016. We confirm that our client has been duly registered as an interested and affected party (I&AP) in relation to this project.</p> <p>3. While we do not intend to make full and detailed submissions on the content of the BID, we are instructed to place on record that we reserve our client's rights to make full submissions during the subsequent stages of the environmental impact assessment (EIA) process for MCWAP-2. The absence of extensive comments at this stage is not, by any means, to be construed as approval for or acceptance of the proposed MCWAP-2 project.</p> <p>4. We note that the purposes of the BID, as stated, is to:</p> <p>4.1. provide an overview of the proposed MCWAP-2;</p> <p>4.2. provide an outline of the EIA process that will be undertaken for the project; and</p> <p>4.3. grant the opportunity to be registered as an I&AP and allow for comments to be made on the proposed project.</p>			
40.	<p><i>Linked to number 39.</i></p> <p>8. We state, at the outset, that our client has significant reservations about the feasibility and sustainability of the proposed MCWAP-2 project based on, inter alia;</p> <p>8.1 the current water shortages throughout South Africa, and the predictions that the water shortage will worsen;</p> <p>8.2 the impending and increasing impacts of climate change; and</p> <p>8.3 the communities and the agricultural industry which are dependent on water sources such as the Crocodile River, which will be impacted and affected by MCWAP-2.</p>	Centre for Environmental Rights	Email (24/06/2016)	<p>As is common accepted practice, the potential impact of climate change to river flows has been considered in the hydrological modelling, where a margin for error in the future predictions has been considered. This is based on historical data of wet and dry periods for the area, as well as all known water use that affects river runoff.</p> <p>Due to the small surface area of the inundation area behind the abstraction weir, in terms of global climate change factors, no noticeable impact on the climate of the region is anticipated.</p> <p>Infrastructure will be designed to be sufficiently robust to withstand severe rainfall events.</p> <p><i>It must be noted that the majority of water for the proposed transfer would be return flows from wastewater</i></p>

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				<p><i>plants.</i></p> <p>Refer to No. 4 for response with respect to Existing Lawful Water Users as set out in NWA.</p>
41.	<p><i>Linked to number 39.</i></p> <p>10. All potential impacts of MCWAP-2 must be fully assessed, and, as part of the requisite assessments, adequate consideration must be given to, amongst other things:</p> <p>10.1 impacts both on the 'giving' (Crocodile River (West)) and receiving water systems;</p> <p>10.2 water scarcity, water quality, ecological flow, and the cumulative impacts that the project will have on existing water resources in South Africa;</p> <p>10.3 potential and predicted flood patterns and flows, and associated risks;</p> <p>10.6 impacts of population growth and foreseeable demand for water from both water systems over the life of the proposed project, in terms of anticipated trends, taking into account 'the reserve'.</p>	Centre for Environmental Rights	Email (24/06/2016)	<p>The MCWAP will also aim to satisfy most of the water requirements of the new anticipated developments from the increasing source of return flows from the Gauteng area. Operating rules for both the Mokolo and the Crocodile River (West) systems will be developed by DWS in a separate process and take cognisance of this and ensure that Existing Lawful Water Use is respected and protected. Similarly, it is a legal requirement that provision is made for meeting the requirements of the Reserve, as catered for in the National Water Act (Act No. 36 of 1998).</p> <p>The available storage in the Crocodile River (West) is not being used optimally at this stage due to the steady stream of return flows that has kept Hartbeespoort Dam spilling most of the time during the past decade and a half. This storage capacity will be beneficially utilised once the transfer of water to the Lephalale area commences.</p> <p>The water requirements between the four upstream dams (i.e. Hartbeespoort, Roodekopjes, Klipvoor and Vaalkop) and Vlieëpoort, the flows required past Vlieëpoort Abstraction Weir and the other factors that will affect the flow in the river at the weir such as rainfall, evaporation from the river water surface, evapo-transpiration from the riverine vegetation, tributary and diffuse inflows and diffuse seepage outflows from the river, will be considered as part of the overall River Management System.</p>
42.	Asked why a large dam could not be built at Vlieëpoort.	D. van Vuuren	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	J. Kroon explained that the topography is steep on both banks at the proposed weir site limiting the risk of outflanking, however, the conditions for a foundation are very poor. A large portion of the water consists of return flows that create a steady stream and only a weir is thus required to allow for abstraction. The costs associated

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				<p>with building a dam due to the foundation conditions renders this option as economically unviable.</p> <p>F. Vogel also noted that the 4 to 6 m high weir already creates a backwater effect. A dam will increase this effect, which will result in significant impacts on upstream infrastructure such as roads, the railway line and access to the mine. There is thus a restriction on the volume of water that can be stored at this point.</p>
43.	Asked what will happen to the farmers that over-abstract?	N. Fourie	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	<p>S. Ndwandwe indicated that when such a person is identified the matter will be referred to the appropriate unit within DWS and the water used by this party will then be monitored. He noted that he did not know the intricate details of this process. He nevertheless stated that this is a problem to the downstream water users when water is over-abstracted upstream.</p> <p>F. Vogel noted that the situation in the Crocodile River (West), where there has been a surplus of water for many years, may change and that this may not be the case in the future. It will form part of the Irrigation Board's responsibility to ensure that water is available.</p>
44.	Asked if the verification process included the Makoppa water users?	H. Barnard	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	S. Ndwandwe indicated that the process is being undertaken for the entire Limpopo area, up to the confluence with the Olifants River.
45.	Asked why DWS not just issues a Water Use Licence?	N. Fourie	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	S. Ndwandwe explained that the Section 34 letter forms part of the authorisation in terms of the National Water Act for an Existing Lawful Water Use. He explained that these uses relate to a transitional period between the 1956 and 1998 Water Acts.
46.	Asked about the actual capacity of Hartbeespoort Dam. He also enquired about the volume of silt in the dam.	D. van Vuuren	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	<p>Post meeting note: the capacity of the dam is 186,5 million cubic metre.</p> <p>P. van Rooyen indicated that a silt analysis was taken into consideration.</p> <p>An average of 0,2% of the full supply capacity is lost</p>

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				annually.
47.	Indicated that 75 million cubic metres of water will be required annually from Hartbeespoort Dam. He noted that the Hartbeespoort Irrigation Board has an annual allocation of 80 million cubic metre, without losses. He asked what will happen if the same situation arises in the system as what is being experienced in the Western Cape. He also asked whether preference will be given to the irrigators or the Medupi Power Station.	D. van Vuuren	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	F. Vogel and P. van Rooyen indicated that the presentation provide answers to these questions.
48.	Asked how the water used by the farmers along the river will be monitored? He also asked how much water is being abstracted?	H. Barnard	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	F. Vogel and P. van Rooyen indicated that the presentation provide answers to these questions.
49.	Asked wat will happen if there is an increase in the re-use of return flows in Tshwane and Johannesburg, especially as water becomes scarcer.	N. Fourie	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	P. van Rooyen explained that this is exactly the reason why the reconciliation strategy exists. DWS approved the first phase of Tshwane's re-use project, however, the Department indicated that if any further phases of re-use are contemplated by the municipality then they will need to submit this to DWS to ensure that it forms part of the Reconciliation Strategy and projections.
50.	Asked about the period in May during the wet season, as indicated in the presentation.	D. van Vuuren	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	<p>It was explained that the Irrigation Board's new allocations only commence in September / October. If the dam is full at the end of May and water is only abstracted by the farmers in October then the Board will need to adjust the rules as large volumes of water will be lost due to quotas only being allocated to farmers during the driest periods.</p> <p>P. van Rooyen noted that DWS does not want to make a decision already in March or April regarding water restrictions as water may still flow into the dam thereafter. Although there is some flexibility the date of 1 May is anchored, based on the resource availability.</p> <p>J. Kroon indicated that Mokolo Dam also has a rule related to storage on 1 May of every year.</p>

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				<p>P. van Rooyen noted that they had analysed this rule prior to setting up the model and had confirmed that the rule is acceptable and does not need to change. As another example, when Tzaneen Dam in the Letaba area was analysed it was found that there is a rule that when the dam is 95% full then half of the demand gets restricted. Variations in the restriction rules and the implications to specific users are analysed. It is important that the restrictions are not too severe to prevent the proper utilisation of water in the dam, or that the rules are not severe enough. Hence, it needs to be evaluated periodically.</p>
51.	Stated that the Bierspruit and Sand River run dry within one week and have insufficient water	N. Fourie	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	<p>F. Vogel indicated that the point is that the Makoppa irrigators must use the water that is available in the Bierspruit and Sand River. The Vlieëpoort Abstraction Weir will also receive water from these watercourses and water must thus be measured to ensure that the Makoppa irrigators that abstract water further downstream receive sufficient water and that their water is not pumped to Lephalale.</p>
52.	Asked why is a new dam not being planned to store the water?	J. Steenkamp	Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	<p>F. Vogel explained that various options were initially considered when the transfer scheme was envisaged. This included, amongst others, building new dams and raising existing dams, but some of these were not economically viable. Refer to presentation by P van Rooyen in terms of the additional delivery of water in the system.</p> <p>P. van Rooyen explained why no dams were built in the area. He explained that if Klipvoor Dam would be raised for example, it would be a significant expense for very little additional delivery or yield. Another dam will not provide adequate delivery because the river system is already well utilized by the existing dams in the system, and the available volume of water is already stored in those dams.</p> <p>Also refer to No. 22.</p>

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53.	Asked how the Validation and Verification of water use in the Crocodile (West)-Marico catchment is being undertaken?	K. Schutte	Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	<p>F. Vogel explained that the original arrangement (approximately 1998) was that the individual irrigators that formed part of the Crocodile River (West) Irrigation Board did not have to provide proof of water use. However, the schedule of the Board and the list of taxable surface area, with up to date payments, needed to be provided to DWS, which would serve as verification of the Board's water users.</p> <p>Scheduled irrigation under Irrigation Boards and from Government Water Schemes, which was not exercised in the qualifying period (NWA: Part 3 of Chapter 4), but for which the rates have been fully paid, has been declared to be existing lawful use.</p>
54.	Indicated that the table in the presentation pertaining to existing water use in quaternary catchment A21J, where 452 000 cubic metre of water is indicated, does not tally with what is the reality on the ground.	J. Swanepoel	Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	S. Ndwandwe explained that the values reflected in his presentation is what the Department currently assumes to be the Existing Lawful Water Use, as determined during the Validation and Verification process.
55.	Requested clarity on the value of 1 040 389 cubic metre shown in the table.	Unidentified attendee at meeting	Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	<p>S. Ndwandwe explained that this value indicates the potential Existing Lawful Water Use in this particular quaternary catchment.</p> <p>F Vogel noted that the process is still underway and that the values reflected in the presentation may change.</p>
56.	Asked about the statement in the summary of the presentation that indicates that there will be sufficient water for irrigators. Is this only applicable to the Crocodile River (West) scheme, or does it also apply to the irrigators downstream of the Vlieëpoort Abstraction Weir?	L. Scheepers	Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	<p>P. van Rooyen presented the Water User Priority Classification. He indicated that this will not be the case and noted that the water users downstream of the proposed Vlieëpoort Abstraction Weir only have access to the incremental flow downstream of the Roodekopjes Dam. This is currently the case and will remain the same in the future.</p> <p>See also No. 4.</p>
57.	Asked if the return flows from Lephalale can also be used? This will certainly also increase.	K. Schutte	Focus Group Meeting – Crocodile River (West) Irrigation	P. van Rooyen and J. Kroon explained that when the system of MCWAP-1 and MCWAP-2A were integrated, it was estimated that domestic water was less than 15% of the total demand, with industrial demand at 85%. The re-

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			Board (24/01/2018)	<p>use of water in Lephalale can certainly be considered but when the total picture is analysed, it is very little.</p> <p>F. Vogel also added that there are already mines which utilize the return water from the municipality, which thus reduces the need to use water from the Crocodile River.</p> <p>See also No. 29.</p>
58.	<ol style="list-style-type: none"> 1. A dam is only considered in the case of a new irrigation scheme. The volume of water that flows past in a year is about two and a half times of the volume of Roodekopjes Dam, which justifies another dam. There is 200 million cubic metres of water that flows past, which is currently in the calculations as runoff; 2. There is really only one dam (Roodekopjes Dam) in the whole system with sluices. If a sluice mechanism can be built at Klipvoor Dam, it will assist significantly; and 3. How many units are to be commissioned at the Medupi Power Station? 	J. Swanepoel	Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	<ol style="list-style-type: none"> 1. P. van Rooyen explained that the water stored within a dam needs to be converted into a steady supply, which must also take into account evaporation. A single dam of 200 000 000 cubic metre will not ensure the same steady delivery as there is no river system that functions like this. The water that currently flows past is due to Hartbeespoort Dam being "too full". F. Vogel added that, over the years, numerous analyses have been done and costs calculated to build another dam in the system and it was not found to be economically viable. 2. Noted. <i>To be considered as part of the River Management System.</i> 3. J. Kroon explained that the need for 75 million cubic metre per year provides for all 6 new units at the Medupi Power Station and the FGD to be retrofitted. The transfer capacity is unlikely to be required immediately, but it is the long-term plan by 2040. F. Vogel added that 75 million cubic metre a year does not represent the full need, as the capacity allows for other developments apart from the Medupi Power Station.
59.	Asked whether the Hartbeespoort Dam would be used as a normal storage dam and not as a recreational dam for tourism, which is currently the case and that it will not be kept 100% full all the time but can also be utilised throughout the year?	B. Breedt	Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	F. Vogel stated that the system uses the dam as a normal storage dam. H. Pretorius added that the dam is not kept at 100% full for tourism, but it is always full because large volumes of return flow are originated upstream of the dam.
60.	Mentioned that the graphs in the presentation show that their dam (Roodekopjes Dam) becomes full and then empty, but the level of Hartbeespoort Dam shows that only a little water is	J. Steenkamp	Focus Group Meeting – Crocodile River	F. Vogel explained that all irrigators in South Africa fall under the same low priority level.

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	<p>withdrawn. In the past when their dam level drops water could not be supplied from Hartbeespoort Dam. He also asked what will happen if they experience the same situation that is happening in the Cape, and if the system does not work as planned, what is going to be "Plan B"? He further asked if the irrigators are in the low priority list?</p>		<p>(West) Irrigation Board (24/01/2018)</p>	<p>P. van Rooyen indicated that according to the Roodekopjes Dam White Paper the 70/30 rule (100% volume available for 70% of the time and 70% of the volume is available for 30% of the time) applies.</p> <p>J. Kroon added that White Papers were drafted when Roodekopjes Dam was built which state that Hartbeespoort Dam does not supplement Roodekopjes Dam. In the MCWAP-2A system the water flows through the Roodekopjes Dam and the River Management System is going to release water to ensure that the requirements of Existing Lawful Water Users are protected. The confirmation of such water users will assist the system in this regard. It was mentioned that when Medupi requires water it would be a relative constant volume, water will be released from Hartbeespoort Dam at a constant rate and will be conveyed via Roodekopjes Dam and the proposed MCWAP-2A. This means that no new storage is needed.</p> <p>P. van Rooyen explained that there is currently a problem as not all of the water in the system is being utilised economically. Water must be released from Hartbeespoort Dam to allow the system to utilise the stored water, based on the additional demand. The assurance of supply is 91% for irrigators.</p>
61.	<p>Stated that a plan must be in place to release water to Roodekopjes Dam before this dam is empty.</p>	J. Steenkamp	<p>Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)</p>	<p>P. Van Rooyen explained the River Management System aims to avoid this situation and to ensure that everyone can use their lawfully entitled water.</p>
62.	<p>Asked what percentage of the Mokolo Dam's water is required for the project?</p>	B. Breedt	<p>Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)</p>	<p>J. Kroon explained that water from the Crocodile River (West) would not be transferred to the Mokolo Dam. The existing rule for the Mokolo irrigators that utilise this dam is that they may receive their full quota if the dam is at least 60% full at the beginning of the irrigation season, but if the dam it is not at 60% no water can be abstracted. The plan is to provide Medupi Power Station with water</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				from the Crocodile River (West) in the future. Mokolo Dam will be utilised by its supply area, especially by Lephalale Municipality, as the water quality of the Mokolo River is better and easier to purify for domestic use.
63.	Asked whether the flow in the river will be higher and more constant, based on volume of 75 million cubic metre per year that is required?	F. Furstenberg	Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	<p>F. Vogel explained that the current changes that the irrigators experience will still be there, with the additional water needed for abstraction, which will grow with time.</p> <p>J. Kroon explained that the water needed is a fraction of the water currently in the system, and in his opinion the water should always flow as Eskom's water needs should be constant in any year. A servitude of aqueduct will be required to protect the State as well as the landowner's requirements. Efforts will be made to stop releases when floods occur in certain river reaches.</p>
64.	Asked what is Plan B or Plan C if the project fails?	J. Steenkamp	Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	<p>P. van Rooyen explained that the team endeavours to determine risks that are as realistic as possible. The model was also built with knowledge from other areas.</p> <p>F. Vogel emphasised the need for regular monitoring of the system as well as for the involvement of the Irrigation Board, which was echoed by P. van Rooyen.</p> <p>P. van Rooyen further stated that the system must be managed efficiently to ensure that it is optimally utilised.</p>
65.	It was mentioned that the impacts to permanent crops and irrigation systems were not discussed, which need to be considered further.	J. Steenkamp	Focus Group Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	<p>To be considered in the EIA phase as part of the relevant specialist studies.</p> <p><i>Additional Response</i> Refer to the following specialist report contained in the Draft EIA Report:</p> <ul style="list-style-type: none"> • <i>Agricultural Impact Assessment (Appendix 13), Section 5.6 - Summary of Impacts.</i>
66.	Enquired about the process to remove silt from the water that is to be conveyed.	J. Botes	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	J. Kroon explained that the sediment has different grain sizes, including sand and even rocks during floods, and that this cannot be pumped to the power station. In addition, the sand fraction can cause problems for the pumps. A channel is planned to return the sediment back to the river during high flow conditions.

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				<i>Refer to Section 9.3.4 of the Draft Scoping Report for a description of the desilting works and sediment management.</i>
67.	<p>Explained that irrigation in the area is based on the abstraction of water from an underground sand aquifer in the river bed. The proposed project may increase the depth of the sand on top of the aquifer and may inhibit the accumulation of water. This is a major problem as it will limit water abstraction by farmers.</p> <p>Asked whether the sediment cannot be completely removed and suitably disposed of. He also added that sediment, no matter how it is released, will definitely cause a problem and impact on the river and sand aquifer.</p>	J. Botes	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	<p>J. Kroon explained that the desilting works have compartments where the silt fraction can be stored.</p> <p>D. Henning added that an analysis was undertaken to establish a quality profile of the silt to be abstracted from the Crocodile River. The results were found to be within allowable limits of various standards. This study found that the silt is not contaminated and will not decrease the quality of the water in the river. The study further indicated that the only a small percentage of the sediment will be returned to the river when compared to the existing sediment load in the river.</p> <p><i>Additional Response</i> <i>Refer to Section 9.3.4.2 (Sediment Management) in the Draft EIA Report.</i></p>
68.	Enquired about the validity period of the certificate (Section 34 letter) issued by DWS to the farmers.	J. Botes	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	R. Botha explained that the certificate is a confirmation of the Existing Lawful Water Use and is an important document that will remain valid until the Department requests water users to apply for licences.
69.	Argued that Schoeman and Associated convened with the farmers in 2013/2014 to confirm their water uses, and at that time there was no indication that a weir was proposed at Mooivallei. At that stage, the farmers obtained a certificate of legal water use from DWS. The problem is that the water allocated by the Department will be taken away by the proposed abstraction at the weir. There is an infringement on their rights as the irrigation water available in the river is their source of life. How will the directly affected parties be compensated? It must be ensured that all the comments are included and that their concerns are taken into consideration in the EIA Process.	A. Pieterse	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	<p>F. Vogel explained that the verification process of Existing Lawful Water Uses is a national project that was already launched nationwide in 2001, and that is not part of the proposed MCWAP project.</p> <p><i>Refer to No. 4 for response to Existing Lawful Water Users.</i></p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
70.	It was mentioned that MCWAP Phase 4 (transfer scheme from Johannesburg Klip River Wastewater Treatment Works to head waters of Crocodile River) should become Phase 1 as there is already no water available.	Unidentified attendee at meeting	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	<i>Refer to No. 6 for response to water availability for the scheme.</i>
71.	<p>Explained that they are the first users downstream of the proposed weir, and they already face the problem that in dry months there is not enough water to produce two crops a year. There is enough water if you see the total sum that was calculated, however, it will be better if a dam is built upstream to store the constant flow of water. The problem is that water will be abstracted in difficult times when there is low flow, and only some farmers can then use water. This means that the volume of water available for the Makoppa irrigation area will be less with the constant abstraction for the proposed project in dry periods (7 months of the year). What will happen in the 7 month period when there is no rainfall, as farmers who abstract will not be prioritised due to the abstraction of water for the project? The modelling and analysis do not tally with what is experienced on the ground.</p> <p>Stated that the users believe that the water use right that existed and that was recently verified, means that a certain volume of water may be abstracted throughout the year and that is what is paid for. The proposed project will abstract a constant volume of water that the Makoppa irrigators believe will adversely affect the water that the farmers rely on and that can be lawfully used for irrigation. If it is ensured that water will flow constantly past the weir and that water will be available, as it has been for the past 20 years, then there will be no problem. The model and scenarios considered should make provision for this.</p>	J. Botes	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	<p>F. Vogel explained that several previous studies have been conducted to determine whether a dam should be built for the Makoppa area. It was found that it would not be economically viable to build a dam for an area entirely dependent on the natural incremental flow from the river. The return flows from growing urban areas that feed into the Hartbeespoort Dam provide surplus water that is available for the proposed water transfer. The question that needs to be answered is if water will be abstracted at the weir, how do you ensure that the water that is available from the natural incremental runoff will reach the Makoppa area?</p> <p><i>Refer to No. 23 for response in terms of the River Management System.</i></p>
72.	Asked if information pertaining to historical flow data is available?	J. Botes	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	R. Botha indicated that it can be downloaded from DWS website.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
73.	It was proposed that the volume of water of the Makoppa Farmers be calculated and expropriated by DWS, with financial compensation.	Unidentified attendee at meeting	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	<i>Refer to No. 4 for response to Existing Lawful Water Users.</i>
74.	Indicated that Makoppa moves into a negative use in 2024. A water shortage is already anticipated in the years 2022 to 2026. The project will take longer than seven years to complete. In those seven years everyone in Makoppa will become bankrupt. This will then cause a major socio-economic impact in the area. Why are all water supply projects and management requirements not addressed concurrently?	J. Botes	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	F. Vogel explained that the analysis and scenarios for the project were based on the Department's abstraction of the return flows and not the natural flow to Makoppa. The project may also be delayed due to a lack of funding. <i>Refer to No. 4 for response to Existing Lawful Water Users.</i>
75.	Asked what is the volume of water to be abstracted?	J. Botes	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	D. Henning indicated that it is 75 million cubic metre per year. J. Kroon added that this volume represents the estimated abstraction by 2040, which will grow over time. The reason for this is that industrial developments and population growth will increase water demand in the future.

2.3 Alternatives

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
76.	Please update me on which route the pipeline is going to be built.	Leoni Barnard	Email (04/08/2016)	The Best Practicable Environmental Options (BPEO) for the proposed project infrastructure (including the pipeline alignment) will be identified in the EIA phase. This will be done through a comparative analysis of the project options based on technical, financial and environmental factors as well as input from IAPs. Provided a map of the pipeline route in proximity to the property in question. <i>Additional response:</i>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>Extract from Section 14.6 (BPEO's Selection) of the Draft EIA Report. The following options were identified as the BPEOs for the related pipeline alignments:</p> <ul style="list-style-type: none"> • Section 1 – Central Route; • Section 2 – Central Route; • Section 3 – Central Route; and • Section 4 – Alternative D1.

2.4 Aquatic Ecology

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
77.	<p>The pan Taaiboschpan is located on the eastern boundary of the farm and extends through the fence to Enkeldraai. If a trench of 4 metre is to be dug in or nearby the area of the pan it would threaten the pan's water retention capacity, drain the pan and disturb the whole ecology of the farm altogether. The sensitivity of the pan and environment should be taken into account.</p> <p>A pan's feeding area is very wide as the underground water drains to the lowest point, which is the pan. After extensive rains the pan is fed for months from the area's underground drainage water. The intersection of this underground flow through trenching will accelerate the drying of the pan, which will cause an ecological disaster for the animals that use the pan.</p>	Prof J. H. Meiring	Reply Form (16/05/2016)	<p>The status of wetlands (including pans) in the project area and the potential impact of the project and concomitant management measures will be considered during a specialist Aquatic Ecological Study (including delineation), earmarked for the EIA phase.</p> <p>Mitigation measures to manage the local drawdown as a result of dewatering during excavation (including trenching) will be included in the EMPr.</p> <p>See No. 12.</p> <p><u>Additional response:</u> Extract from Section 10.3 of the Wetland Impact Assessment (Refer to Appendix 15 of the Draft EIA Report) which states the following: A 100 m corridor along the route alignment was allowed for in the impact assessment. In each case the route is in proximity of the depressions but does not enter the pan. It is possible to miss the pan altogether by placing the route on a specific side of the road, railway line or fence. It is recommended that the placement of the routes are as follows:</p> <ul style="list-style-type: none"> • Alternative D1: eastern side of fence and then cross over to the western side in order to miss the pan at Enkeldraai 314EQ;

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<ul style="list-style-type: none"> • <i>Alternative D2: eastern side of fence; and</i> • <i>Alternative D3: western side of the road.</i> <p><i>If these recommendations are followed, then the construction of the pipeline will not impact on any of the pans.</i></p>
78.	The specific requirements in terms of the EIA process include the hydrological impact, ecological impact focusing on river dynamics and ecosystems and the quality of the Crocodile River water.	Filomaine Swanepoel	Reply Form (18/05/2016)	<p>An Aquatic Impact Assessment will be undertaken during the EIA phase to assess the impacts of proposed project to aquatic environments/watercourses. Refer to Section 14.4.3.1 of the Draft Scoping Report for the triggers and scope of this study.</p> <p>A HEC-RAS model of the Crocodile River (West) was set up to determine the flood levels in the Crocodile River (West). The model was also used to determine and check the impact of the proposed Abstraction Works on flood levels and on infrastructure up- and downstream of the Works.</p> <p><u><i>Additional Response:</i></u> <i>Refer to Section 7 (Risk Assessment) of the Baseline Aquatic and Impact Study (Appendix I1 of the Draft EIA Report), which assesses the impacts of the proposed project to aquatic environments/watercourses.</i></p>
79.	<p>Our comments for the WULA:</p> <ol style="list-style-type: none"> 1. Alternatives must be described. 2. Modifications to flow drivers (surface flows, interflow, groundwater flow), water quality and responses (geomorphology, habitat, biota) and mitigation measures must be described. 3. Ecological connectivity and category must be maintained. 4. Fishway requirements must be investigated. 5. The Hoxane Abstraction weir design in the Sabie River at Hazyview can be used as a guide and improved upon. Kobus van Deventer designed the weir with a fishway and hippo crossing. 	Pieter Ackerman (DWS)	Email (19/05/2016)	<p>Refer to No. 2 for response to alternatives.</p> <p>An Integrated Water Use Licence Application (IWULA) will be submitted separately to the DWS Limpopo Regional Office. The following requirements of the NWA will be catered for:</p> <ul style="list-style-type: none"> • Provision for the Reserve requirements of the Crocodile River (West). <i>The DWS already embarked on the Reserve determination by proposing the classes of water resource and resource quality objectives for Mokolo, Matlabas, Crocodile (West) and Marico catchments. (Notice No. 1388 contained in Government Gazette No. 41310 dated 8 December 2017); and</i> • Ensure that Existing Lawful Water Use is respected

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>and protected.</p> <p>An Aquatic Impact Assessment will be undertaken during the EIA phase to assess the impacts of the proposed project to aquatic environments/watercourses. Refer to Section 14.4.3.1 of the Draft Scoping Report for the triggers and scope of this study. The need for a fish ladder at the weir will also be investigated further as part of this study.</p> <p><i>Additional Response:</i> Refer to the following sections of the Baseline Aquatic and Impact Study (Appendix I1 of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 7 (Risk Assessment), which assesses the impacts of the proposed project to aquatic environments/watercourses; and • Section 7.4.9 (Maintenance of Connectivity), which provides fish way requirements.
80.	Require further information pertaining to the Ecological Reserve.	W du Plessis	Public Meeting (26/05/2016)	<p>Refer to No. 41 and No. 79 for responses to the Reserve.</p> <p><i>A crucial part of the river management functions during the operational stage of MCWAP-2A, will be to determine the timing and magnitude of water releases required from the Hartbeespoort and Roodekopjes Dams (and possibly also the Klipvoor and Vaalkop Dams) in order to supply the water allocated to the MCWAP Scheme and the other authorised users between these three upstream dams and Vlieëpoort and other authorised users downstream of Vlieëpoort, which includes the Ecological Water Requirements (EWR).</i></p>
81.	The land is part of the Matlabas Reserve and the project must be considered with due caution.	Harold Prinsloo	Reply Form (01/06/2016)	<p>The impacts to the watercourses that are affected by the project infrastructure will be evaluated as part of an Aquatic Impact Assessment during the EIA phase.</p> <p><i>Additional Response</i> <i>The ecological status of the Matlabas River needs to be determined during the high-flow period, prior to construction. This will determine the requirements for crossing the watercourse (i.e. open trench or trenchless),</i></p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>as well as for scouring (i.e. draining water from the pipeline, typically during maintenance).</p> <p>Refer to the following sections of the Baseline Aquatic and Impact Study (Appendix I1 of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 7 (Risk Assessment), which assesses the impacts of the proposed project to aquatic environments/watercourses; and • Section 9.3 (Risk Matrix), Table 10, for an impact assessment of the pipeline construction at the Matlabas river crossing.

2.5 Terrestrial Ecology

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
82.	<ol style="list-style-type: none"> 1. Pipeline passes through an exotic wildlife camp. 2. Noted that the area includes large tree bushveld - includes many Camel Thorn and Marula trees. 	Gawie Du Preez	Reply Form (23/05/2016)	<ol style="list-style-type: none"> 1. A Wildlife Impact Assessment will be undertaken as part of the EIA (refer to Section 14.4.3.7 of the Draft Scoping Report), taking into consideration the types of game kept on the farms and the requisite mitigation measures. The Wildlife Impact Assessment will be appended to the EIA Report for review by IAPs. <p><i>Additional Response</i> Refer to the following sections of the Wildlife Impact Assessment (Appendix I7 of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 6 (Wildlife Specific Impacts) explains the impacts of the proposed project on wildlife, and • Section 7 (Wildlife Mitigation Measures) provides the requisite mitigation measures to mitigate impacts on wildlife. 2. The status of vegetation in the project footprint is to be confirmed as part of the Terrestrial Ecological Study (refer to Section 14.4.3.2 of the Draft Scoping Report). Optimisation of final pipeline route to be considered in the design phase to avoid sensitive

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>features (where possible). Provision will be made in the EMPr for the reinstatement and rehabilitation of the areas affected by construction activities, as well as managing impacts to flora and fauna. Where avoidance is not possible, permits will be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF) if protected trees are to be cut, disturbed, damaged, destroyed or removed in terms of the National Forests Act (No. 84 of 1998).</p> <p><u>Additional Response</u> Refer to the following sections of the Terrestrial Ecological Impact Assessment (Appendix I2 of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 10.1.3 (Protected Trees); and • The mitigation measures provided in Section 12.2 (Assessment of Environmental Impacts and Suggested Mitigation Measures). <p>Refer to the following sections in the Draft EMPr (Appendix K of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 12.4.20 Management of Flora; • Section 12.4.21 Management of Fauna; • Section 12.4.21 Management of Reinstatement and Rehabilitation.
83.	Mentioned that he has exotic game on his farm which will be adversely affected by dust, noise and light pollution during the construction period.	H Bloem	Public Meeting (25/05/2016)	<p>D Henning indicated that these matters will be addressed by mitigation measures that will be identified during the EIA phase.</p> <p><i>The Environmental Management Programme (EMPr), which will be developed during the EIA phase, will include best practices to manage impacts associated with construction activities, including aspects such as dust, noise and light pollution.</i></p> <p><u>Additional Response</u> Refer to the following sections of the Wildlife Impact Assessment (Appendix I7 of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 6 (Wildlife Specific Impacts) explains the

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p><i>impacts of the proposed project on wildlife; and</i></p> <ul style="list-style-type: none"> <i>Section 7 (Wildlife Mitigation Measures) provides the requisite mitigation measures to mitigate impacts on wildlife.</i> <p><i>Refer to Section 12.4.21 (Management of Fauna) and Section 12.4.19 (Management of Pollution Generation Potential) in the Draft EMPr (Appendix K of the Draft EIA Report), for mitigation measures to followed during the construction period.</i></p>
84.	The pipeline route will traverse a Camel Thorn Forest on his property.	H Prinsloo	Public Meeting (25/05/2016)	<p>D Henning indicated that all sensitive environmental features will be identified and assessed as part of the EIA. All vegetation within the 40 m wide construction servitude will be cleared.</p> <p><i>Refer to No. 82 for response in terms of Terrestrial Ecological Impact Assessment.</i></p>
85.	<p>Will the pipeline run on the western side of the railway line?</p> <p>The proposed pipeline route will traverse a camp that holds exotic game on his property. What will be done to manage impacts to the game?</p>	G du Preez	Public Meeting (26/05/2016)	<p>D Henning confirmed that the pipeline will run on the western side of the railway line.</p> <p>A Nelwamondo indicated that the camp may need to be moved prior to construction. Refer to No. 82 for response in terms of the Wildlife Impact Assessment. Further details in terms of the approach to dealing with sensitive game and the related mitigation measures will be included in the EIA Report.</p> <p>S Pienaar mentioned that the fencing will need to comply with the relevant specifications.</p> <p><i>Refer to No. 82 for response in terms of the Wildlife Impact Assessment.</i></p>
86.	<p>The farm is already burdened with Eskom's servitude.</p> <p>The proposed routes traverse the exclusive breeding camps of Kremetartpan Game Breeders. The species in the camps include:</p> <ul style="list-style-type: none"> Golden Wildebeest; Sable; 	P Botha	Reply Form (26/05/2016)	<p>To minimise impacts to the receiving environment and current land uses, the proposed pipeline route attempts to remain alongside existing linear-type infrastructure, such as roads (main roads and dirt roads), the railway line (i.e. section of approximately 56 km), transmission lines, industrial corridors and farm boundaries.</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<ul style="list-style-type: none"> • Black Impala; • Black Springbuck; • Nyalas; • Copper Springbuck; and • Normal Heartwater Springbuck. <p>The risk to the buck whilst the trenches are being dug is too great. There are no alternative camps where these buck can be relocated to. The costs of creating new camps are exorbitant. The camps cannot be “shielded” or fenced of alongside the work area as this would render the camps too small in terms of the required carrying capacity. Hence, the buck will need to be relocated to new camps, which will have significant cost implications.</p> <p>Further comments regarding this matter can only be made once you have indicated exactly what and how this will be done.</p> <p>The additional problems are significant. The breeding phases of the game will be influenced if they are relocated to new camps. It will also take too long to ensure that a camp is free from predators. If other camps are created for the relocation of game while construction is underway there may be a risk that the predators are not all removed if the fencing of the camp is done too hastily, which will result in the predation of the young with resultant financial losses.</p> <p>Specific requirements of the EIA include the impact of the construction works on the camps and the breeding of buck.</p> <p>General comments: As mentioned, the impact of construction within the camps on the breeding of exclusive game with the associated loss of income is too large to calculate.</p>			<p><i>Refer to No. 82 for response in terms of the Wildlife Impact Assessment.</i></p> <p><u><i>Additional Response</i></u> <i>Refer to Section 8 (Discussion) of the Wildlife Impact Assessment Report, which is contained in Appendix 17 of the Draft EIA Report.</i></p>
87.	How will construction related impacts to sensitive game species be managed? Recommend that a specialist be used in this regard.	B Enslin	Reply Form (26/05/2016)	D Henning indicated that the recommendation will be considered. The EMPr will include specified mitigation measures to safeguard sensitive game. Landowners may also recommend mitigation measures for consideration.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<i>Refer to No. 82 for response in terms of the Wildlife Impact Assessment.</i>
88.	<i>Linked to number 81.</i> Impacts on Camel Thorn trees and other big trees.	H Prinsloo	Reply Form (01/06/2016)	Refer to No. 82 for response to vegetation.
89.	Influence of proposed Mokolo and Crocodile West Water Scheme on Farm Diepkuil 135 KQ With regards to the above subject I would like to share the following with you. The farm Diepkuil is mainly used as breeding farm for exotic game such as Roan Antelope, Sable Antelope, Buffalo, Black Impala, Golden Gnu and Njalas. We also applied for Rhino and Lion permits which is in final stages of approval. We believe that the level of noise and traffic generated by a major project such as this will have a detrimental effect on these animals. A powerline also runs from West to East on the Southern side of the servitude road, furthermore the Farm Diepkuil's major borehole is situated in close proximity to the North Eastern corner of the farm. I sincerely hope that you will take into consideration the effects of your decision on the above.	W De Swart	Letter (19/06/2016)	<i>Refer to No. 82 and No. 86 for response in terms of the Wildlife Impact Assessment.</i>
90.	I represent Mr. Pieter Bothma from Cheetah Safaris. Many kilometres of construction will take place alongside his rare game breeding camps. We need to determine how to minimise impacts to his operations. He also receives international hunters, which will be a problem during construction.	B. Enslin	Email (20/06/2016)	<i>Refer to No. 82 and No. 86 for response in terms of the Wildlife Impact Assessment.</i>
91.	<i>Linked to No. 3.</i> Habitat destruction of wild species, trees etc.	J. L. Pretorius	Reply Form (22/06/2016)	To be assessed as part of the Terrestrial Ecological Impact Assessment (refer to Section 14.4.3.2 of the Draft Scoping Report), which will be undertaken as part of the EIA phase.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<i>Refer to No. 82 for response to impacts of project on protected trees and sensitive wildlife.</i>
92.	<p>The visual and noise impact from the Break Pressure Reservoir on Portion 1, Farm Leeuwbosch, with related impacts to ecotourism and game farming on my farm, the remainder of the farm Leeuwbosch, in the long-term.</p> <p>The short-term impact of the servitude and Break Pressure Reservoir on my ecotourism business and game farming.</p> <p>Specific EIA process requirements include:</p> <ul style="list-style-type: none"> The impact of the development on the habitat of the northern Vliegpoortberg and hills. <p>General Concerns: The true impact of this planned development inside the Waterberg Biosphere Reserve on this environment's main water source, namely the Crocodile River, as well as the natural nature is irreversible. It places the entire development plan of the Waterberg District under suspicion in terms of ecotourism development. No remuneration model can adequately compensate the local residents.</p>	Dr L. F. Fouche	Reply Form (24/06/2016)	<p>Refer to the following:</p> <ul style="list-style-type: none"> No. 97 and 99 for responses to noise; No. 98 for response to visual impacts; No. 82 for response in terms of the Wildlife Impact Assessment. <p>Impacts of the project on habitats within the receiving environment will be assessed as part of the Terrestrial Ecological Impact Assessment (refer to Section 14.4.3.2 of the Draft Scoping Report), which will be undertaken as part of the EIA phase.</p> <p>A Socio-Economic Impact Assessment earmarked for the EIA phase will need to consider the impacts of the MCWAP-2A on local tourism. Compensation will be payable to directly affected landowners in terms of the then prevailing legislation.</p> <p>Refer to No. 6 for response to water availability for the scheme.</p> <p><u>Additional Response</u> <i>Refer to the Terrestrial Ecological Impact Assessment (Appendix 12 of the Draft EIA Report), Section 12.2 (Assessment of Environmental Impacts and Suggested Mitigation Measures).</i></p> <p><i>Refer to the Socio-Economic Impact Assessment (Appendix 16 of the Draft EIA Report), Section 6.3.4 (Impact and mitigation assessment of Recreational or Tourism Business Impacts).</i></p>
93.	<p>I have already had a meeting with TCTA and it is clear that they understand that animals near the construction area need to be moved.</p> <p>I also already identified a landowner that has land available to where the animals can be moved in those instances where</p>	B. Enslin	Email (27/06/2016)	<p><i>Refer to No. 97 and 99 for responses to noise.</i></p> <p>Refer to the indicative implementation programme Section 9.9 of the Draft Scoping Report. However note the construction is a linear process and the direct impact on each property could be shorter.</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>affected parties do not have any alternatives. However, camps will need to be built for the relocated wildlife. This matter must be attended to. We hereby express our willingness to assist with this, however, everyone will have to work together. I'm in the process of seeking quotations from contractors if fences or camps need to be moved. Provision is made in the quotes for the clearance or areas to create the camps and for the relocation of wildlife.</p> <p>Another major concern is that planning will need to be done for farms where hunting takes place prior to construction, where many clients book ahead. How will Eco-tourism be addressed?</p> <p>What will be the duration of the construction period?</p>			<p><i>Refer to No. 82 for response in terms of the Wildlife Impact Assessment.</i></p> <p><i>See No. 92 for response to compensation.</i></p> <p><i>Refer to No. 92 for responses to impact on eco-tourism.</i></p>
94.	<p>Specific requirements in terms of the EIA:</p> <ul style="list-style-type: none"> • Game or breeding camps which are cleared; • Specifications for game fences. I require that my area is restored to current fence and gates. 	Tuffy Reyneke	Reply Form (28/06/2016)	<p>Refer to No. 82 for response in terms of the Wildlife Impact Assessment.</p> <p>Provision will be made in the EMPr for fencing arrangements, where the management objectives will include:</p> <ul style="list-style-type: none"> • Protect and maintain existing fences; • Fencing arrangements to adequately protect livestock and game animals from construction activities; • Adhere to agreements made with individual landowners and/or land users regarding fencing; and • Minimise disturbance to animals. <p>Specific measures will be included in the EMPr for game fences and for the reinstatement of areas affected by construction.</p> <p><u><i>Additional Response:</i></u> <i>Refer to the following sections of the EMPr (Appendix K of the Draft EIA Report):</i></p> <ul style="list-style-type: none"> • <i>Section 12.4.6 (Fencing Arrangements);</i> • <i>Section 12.4.26 (Management of Reinstatement and Rehabilitation); and</i> • <i>Section 12.5.1 (Management of Access, Routine Maintenance Inspections and Maintenance Works).</i>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
95.	<p>Have you already appointed the specialist to complete the study of the wildlife in camps adjacent to the construction area? You need to take into account that the relocation of wildlife, clearing and creating camps cannot take place if inadequate notice is given.</p> <p>TCTA will need to make sufficient provision for these activities to take place in advance, otherwise it will not work. We must realize these are wild animals and there are mating seasons and calf and lamb seasons that will need to be taken into consideration.</p> <p>To reiterate, all my clients want to cooperate but we require everyone's cooperation. Please let me know as I want to get started with seeking quotations and arranging for people to be in place, to allow for adequate preparations.</p> <p>Any dates for me about meetings with your specialists? We do not have much time.</p>	B. Enslin	Email (22/08/2016)	<p>It is anticipated that the Wildlife Impact Assessment will only be undertaken during the EIA phase (refer to Section 14.4.3.7 of the Draft Scoping Report). The various factors stated will be taken into consideration by the specialist.</p> <p>All requisite mitigation measures need to be implemented at the appropriate stages of the project life-cycle.</p> <p>Procurement should be delayed until a decision is received from DEA that approves the application (if received).</p> <p>Refer to No.82 for See No. 82 for response in terms of the Wildlife Impact Assessment.</p>
96.	I have Buffalo and Sable Antelope (amongst others) which are hunted by international trophy hunters. I am also a qualified professional hunter.	T. Roux	Email (24/10/2016)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • See No. 82 for response in terms of the Wildlife Impact Assessment; • See No. 92 for response to compensation.

2.6 Visual, Air, Noise and Light Pollution

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
97.	<p>The impact during construction on all facets such as security, dust, noise, workers, disturbance to the environment and impact on all aspects of the project and surrounding environment as a whole.</p> <p>Everything mentioned above must be discussed and dealt with comprehensively. To identify the various impacts and how it will be addressed for landowners who will adversely be affected as a result of the planned construction and</p>	B. Enslin	Reply Form & Letter (17/05/2016)	<p>The EMPr, which will be developed during the EIA phase for comment by stakeholders, will include best practices to manage impacts associated with construction activities, including aspects such as dust, noise, workers and disturbance to the environment.</p> <p><i>Additional Response:</i> <i>Refer to the following sections of the EMPr (Appendix K of the Draft EIA Report):</i></p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	infrastructure.			<ul style="list-style-type: none"> • Section 12.4.1 (Management of Security); • Section 12.4.7 (Management of Labour Force); • Section 12.4.19 (Management of Pollution Generation Potential); • Section 12.4.20 (Management of Flora); and • Section 12.4.21 (Management of Fauna).
98.	<p>Linked to number 81.</p> <p>River crossing – impact on aesthetics values.</p>	Harold Prinsloo	Reply Form (01/06/2016)	<p>The findings of the Visual Impact Assessment that was conducted as part of previous EIA for MCWAP-2 were considered in the EIA Report.</p> <p>Provision will be made in the EMPr to mitigate impacts to the study area's visual quality. In addition, measures will be included in the EMPr for the reinstatement and rehabilitation of the areas affected by construction activities. Specific measures will be included for river crossings.</p> <p><u>Additional Response</u> <i>The ecological status of the Matlabas River needs to be determined during the high-flow period, prior to construction. This will determine the requirements for crossing the watercourse (i.e. open trench or trenchless), as well as for scouring (i.e. draining water from the pipeline, typically during maintenance).</i></p> <p><i>Refer to the following sections of the EMPr (Appendix K of the Draft EIA Report):</i></p> <ul style="list-style-type: none"> • Section 12.4.10 (Management of Visual Aspects); • Section 12.4.22 (Management of Watercourses); and • Section 12.4.26 (Management of Reinstatement and Rehabilitation).
99.	<ol style="list-style-type: none"> 1. Pollution, noise and spoiling of the current view. 2. Effect on the tourism industry. 3. Create permanent staff accommodation. 4. Farm boundary is approximately 300 m from the proposed site – effect of noise from construction and future activities. Specify in decibels on site and 300 m away from it. 5. Loss of aesthetical value. 	Jan & Bertus Grobler	Reply Form (14/06/2016)	<ol style="list-style-type: none"> 1. Noise that emanates from construction activities will be addressed through targeted best practices for noise management in the EMPr. The EIA will further pay special attention to the management of noise from the pumping stations, by investigating measures to attenuate noise to remain within regulated standards. The findings of a Noise Study that was

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>undertaken will be included in the EIA Report. Measures will also be included in the EMP to mitigate against other potential forms of pollution.</p> <p>Refer to No. 98 for response to pollution, noise and visual aspects.</p> <p>2. Refer to No. 92 for response to impacts to ecotourism.</p> <p>3. The intention is to not provide any accommodation on site for the abstraction works during the construction phase, however security staff will be needed at all times. Alternative accommodation (e.g. in Thabazimbi) will be sought. Provision is made for ancillary structures (accommodation, offices, security and workshops) adjacent to the desilting works and high-lift pumping station for the operational phase.</p> <p>4. Refer to No.1 above for response to noise. <i>Refer to the Environmental Noise Assessment (Appendix 110 of the Draft EIA Report), Section 3.4 (Predicted Impact of Operation Noise) which provides probable decibels on site and 300m away from the pump station.</i></p> <p>5. Refer to No. 98 for response to visual impacts.</p>
100.	<p><i>Linked to No. 89.</i></p> <p>The farm Diepkuil is mainly used as breeding farm for exotic game such as Roan Antelope, Sable Antelope, Buffalo, Black Impala, Golden Gnu and Njals.</p> <p>We also applied for Rhino and Lion permits which is in final stages of approval.</p> <p>We believe that the level of noise and traffic generated by a major project such as this will have a detrimental effect on these animals.</p>	Willie De Swart	Letter (19/06/2016)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 97 and No. 99 for responses to noise impacts; • No. 82 for response in terms of the Wildlife Impact Assessment.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
101.	I heard about the study that will be done to assess noise impacts to wild animals located in camps nearby to the construction area. May you please provide more information regarding the size of the pumps in Mooivallei, and the noise associated with the pump station?	B. Enslin	Email (20/06/2016)	Refer to No. 97 and No. 99 for responses to noise impacts. <i>Additional Response</i> Refer to the following sections provided in the Draft EIA Report for technical information on components: <ul style="list-style-type: none"> • Section 9.2 (MCWAP-2A WTI Components); • Section 9.3.2 (River Abstraction (low-lift) Pumping Station); and • Section 9.3.6 (High Lift Pumping Station).
102.	Operate Eco tourism on the farm with international clients. Noise pollution.	J. J. Jansen van Vuuren	Reply Form (21/06/2016)	Refer to No. 97 and No. 99 for responses to noise.
103.	<i>Linked to No. 3.</i> 1. Noise pollution; 2. Air pollution; 3. Light pollution; and 4. Large cement structures.	J. L. Pretorius	Reply Form (22/06/2016)	<ol style="list-style-type: none"> 1. Refer to No. 97 and No. 99 for responses to noise. 2. Refer to the following sections of the EMPr (Appendix K of the Draft EIA Report): <ul style="list-style-type: none"> • Section 7.1.4 (Environmental Parameters); • Section 12.4.19 (Management of Pollution Generation Potential); 3. Refer to the following sections of the Draft EMPr (Appendix K of the Draft EIA Report): <ul style="list-style-type: none"> • Section 12.4.10 (Management of Visual Aspects); and • Section 12.3.4 (Construction Site Planning and Layout). 4. Refer to No. 98 for response to visual impacts.
104.	<ol style="list-style-type: none"> 1. Break Pressure Reservoir along the Elliras Road affects our business directly. 2. The alternative pipeline routes through Buffelsvley 127 KQ and between Buffelsvley 127 KQ and Rietkuil 101 KQ, as well as through Zondasskuil 130 KQ, affect our breeding camps directly. <p>Specific requirements in terms of the EIA process include:</p> <ol style="list-style-type: none"> 1. Noise and air pollution during construction; and 2. Noise and light pollution after construction. <p>Our business includes hunting (overseas clients) and breeding of exotic wildlife. Any air, light or noise pollution and dust have</p>	H. Bloum	Reply Form (24/06/2016)	Refer to the following: <ul style="list-style-type: none"> • No. 82 for response in terms of the Wildlife Impact Assessment; • No. 97 and No. 99 for responses to noise; and • No. 103 for responses to air and light pollution.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	a direct impact on our business.			
105.	<p><i>Linked to No. 92.</i></p> <p>The visual and noise impact from the Break Pressure Reservoir on Portion 1, Farm Leeuwbosch, with related impacts to ecotourism and game farming on my farm, the remainder of the farm Leeuwbosch, in the long-term.</p> <p>Specific EIA process requirements include:</p> <ul style="list-style-type: none"> • Provide technical information with regards to the Break Pressure Reservoir for example the surface, lighting, design and accommodation. 	Dr L. F. Fouche	Reply Form (24/06/2016)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 97 and No. 99 for responses to noise; • No. 98 for response to visual impacts; • No. 92 for response to impacts on ecotourism; and • Refer to No. 99 for response to accommodation. <p><u><i>Additional Response</i></u> Refer to the following sections provided in the Draft EIA Report for technical information on the Break Pressure Reservoir:</p> <ul style="list-style-type: none"> • Section 9.2 (MCWAP-2A WTI Components); • Section 9.5 (Break Pressure Reservoir – layout drawing of the BPR is seen in Figure 53).
106.	<p>We have invested in ecotourism and the project will thus not be acceptable to us. Silence is going to be replaced with noise and hikers in the mountain are going to see an unsightly pump station. We also rehabilitate wildlife.</p> <p>It is thus our general feeling that the pump station is going to negatively influence us and that we will lose income. In addition, our property value will depreciate.</p>	P. Ellis	Reply Form (24/06/2016)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 97 and No. 99 for responses to noise; • No. 98 for response to visual impacts; • No. 92 for response to impacts to ecotourism.
107.	<p>When will you be able to provide the Noise Study that was conducted for the pump station next to Louma Farming on the farm Hampton to us? How far is the distance that the pumps can be heard from?</p> <p>Have you already appointed a specialist to undertake the study on the impact from the construction and associated noise on the animals and exotic animals in breeding camps close to and next to the planned servitude?</p>	B. Enslin	Email (27/06/2016)	<p>Refer to No. 97 and No. 99 for responses to the impact of noise from the pump station on surrounding properties.</p> <p><u><i>Additional Response</i></u> Refer to the Environmental Noise Assessment in Appendix I10 of the Draft EIA Report.</p> <p><i>A Wildlife Impact Assessment was conducted as part of the EIA phase (Appendix 17 of the Draft EIA Report). Refer to Section 6 Wildlife Specific Impacts and 6.4 Wildlife dispersal and migration.</i></p>
108.	<p><i>Linked to No. 94.</i></p> <p>Potential issues include:</p> <ul style="list-style-type: none"> • Noise. 	T. Reyneke	Reply Form (28/06/2016)	Refer to No. 97 and No. 99 for responses to noise.

2.7 Technical & Land Matters

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
109.	Although the pipeline will run \pm 3 km from my farm, an accident where the pipeline is damaged will influence my property.	A. Venter	Reply Form (16/05/2016)	<p>Provision to be made in the EMPr for managing impacts during the operational phase of the project.</p> <p><i>Additional Response</i> Refer to the following sections of the EMPr (Appendix K of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 12.5.1 (Management of Routine Maintenance); and • Section 12.5.2 (Management of Leaks). <p><i>The assumption by the landowner that damage to pipeline will influence his property is pre-emptive at this point in time and if that happened in future mitigation will be sought if any damage surface.</i></p>
110.	Location of substation and 132 kV powerlines.	X. Neethling (ESKOM)	Reply Form (16/05/2016)	Bulk power is required for the operation of the high-lift and low-lift pump stations associated with the MCWAP-2A WTI. Eskom has confirmed that the proposed MCWAP-2A substation can be accommodated into the network without any capacity constraints. The proposed substation will be supplied from the new planned Thabatshipi – Thabazimbi Combined 132 kV Power Line. A separate application will be submitted by Eskom to seek approval for the bulk power required for MCWAP-2A.
111.	<p>Servitude – width and compensation value? Safeguarding against possible pollution (e.g. oil, diesel, etc.) during site preparation.</p> <p>Are all the objections previously provided still in your possession (2011)?</p>	T. de Clercq	Reply Form (16/05/2016)	<p>The pipeline specifications, as included in the Draft Scoping Report, are as follows:</p> <ul style="list-style-type: none"> • Pipe diameter – <ul style="list-style-type: none"> ○ Up to 2 400 mm; • Pipe material – <ul style="list-style-type: none"> ○ Steel pipes with welded joints; • Installation – <ul style="list-style-type: none"> ○ Underground, with a minimum cover above the pipe of 1 m; ○ Access/valve chambers will be located at approximately 500 m intervals along the route. It will be concrete structures protruding above

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>natural ground level;</p> <ul style="list-style-type: none"> • Servitude Width – <ul style="list-style-type: none"> ○ Typically 40 m during construction (temporary) and 25 m permanent; • Servitude Conditions – <ul style="list-style-type: none"> ○ Permanent access to the pipeline servitude will be required after construction; ○ Pipeline markers (concrete posts) will be installed at changes in direction and at regular intervals along the route; and ○ Farming activities (stock and crop farming) can continue within the servitude area after rehabilitation (between 1 and 2 years after construction), taking cognisance of the need for permanent access to the pipeline servitude. ○ No permanent structures and trees with roots more than 1 m deep is allowed in the permanent servitude area. <p>Refer to Annexure 1 for the TCTA Policy and Land Acquisition Process for MCWAP-2A.</p> <p>Acquisition of land and land rights ("servitudes") will be undertaken by TCTA, as the project's implementing agent. TCTA's land acquisition strategy will adhere to all statutory requirements prevailing at the time, such as, but not limited to the Constitution of the Republic of South Africa, Act 108 of 1996 ("the Constitution"), the Promotion of Administrative Justice Act ("Act No. 3 of 2000"), the Expropriation Act ("Act No. 63 of 1975), and the National Water Act (Act No. 36 of 1998) delegated by the Minister of Water and Sanitation.</p> <p>The determination of compensation will be undertaken by an independent valuer in accordance with the principle set out in Section 25 of the Constitution concurrent with Section 12 of the Expropriation Act. TCTA shall endeavour to compensate the affected parties' fair and equitable amount.</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
112.	Please let the project begin as soon as possible.	C. Maritz (Steenbokpan Development Consortium)	Reply Form (16/05/2016)	Refer to the indicative implementation programme Section 9.9 of the Draft Scoping Report.
113.	<i>Linked to No. 7.</i> Construction period.	H. Du Plessis	Reply Form (18/05/2016)	Refer to the indicative implementation programme Section 9.9 of the Draft Scoping Report.
114.	<i>Linked to No. 82.</i> <ul style="list-style-type: none"> • Pipeline goes over windmill and dam. • Inhibits further fencing of the farm. • Time elapsed on farm. • What will be done to restore area to original condition? 	G. Du Preez	Reply Form (23/05/2016)	<p>The infrastructure affected by the proposed development will be relocated, as necessary. Alternatively, compensation will also be considered, where relevant. Optimisation of final pipeline route to be considered in the design phase to avoid existing structures and buildings, as well as other sensitive features (where possible).</p> <p>Provision will be made in the EMPr for the reinstatement and rehabilitation of the areas affected by construction activities.</p> <p><i>Additional Response</i> Refer to the rehabilitation measures prescribed in Section 12.4.26 (Management of Reinstatement and Rehabilitation) of the Draft EMPr (Appendix K of the Draft EIA Report).</p>
115.	Will the proposed abstraction weir be standardised?	S. Phasha (DWS)	Authorities Meeting (25/05/2016)	O van den Berg explained that it will not primarily serve as a gauging weir but as a diversion weir to allow for water abstraction. He indicated that gauging weirs will form part of the River Management System.
116.	Questioned the location of the abstraction weir at Vlieëpoort.	A. Pieterse	Public Meeting (25/05/2016)	<p>Refer to No. 22 for the response to the location of the abstraction weir.</p> <p><i>Additional Response</i> Refer to Section 9.3.1 (Abstraction Weir) in the Draft EIA Report, for more information on the location of the weir. Section 9.3.1.1 discusses the alternative sites considered for the abstraction weir.</p>
117.	Concerned with the statement made by TCTA that they will not negotiate with landowners in cases where there is insufficient time.	B. Enslin	Public Meeting (25/05/2016)	TCTA acquire land and land rights by means of expropriation as per a directive issued by the Minister of Water and Sanitation. However, TCTA does engage with landowners thoroughly before the expropriation process

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				starts, to allow them sufficient time to make representation thereof. In summation, TCTA does negotiate with landowners on matters of mutual interest.
118.	Will discussion be held with the landowners as part of the land acquisition process?	G Bower	Public Meeting (25/05/2016)	<p>A Nelwamondo emphasised that the landowners will be consulted with.</p> <p><i>Additional Response</i> Definitely, TCTA will engage affected landowners as part of land acquisition process to afford them an opportunity to raise their concerns related thereto.</p> <p>D Henning indicated that a more comprehensive description of the land acquisition process will be provided to the landowners. Refer to Annexure 1 hereto.</p> <p><i>The Land Acquisition process is discussed in Section 9.12 of the Draft Scoping Report.</i></p> <p><i>Refer to No. 111 for the response to compensation.</i></p>
119.	Will the servitude be 100 m or 40 m?	P Jordaan	Public Meeting (25/05/2016)	S Pienaar explained that a 100 m wide corridor (i.e. 50 m on either side of the proposed centre line) was adopted as the study area for the pipeline during the Scoping phase, which allows for possible deviations from the proposed alignment within this corridor (e.g. avoidance of sensitive features, if possible). He noted that the temporary (construction) servitude will be 40 m wide and the permanent servitude 25 m wide.
120.	Where will the pipeline's servitude start in the part of the route that follows the railway line?	H Prinsloo	Public Meeting (25/05/2016)	S Pienaar indicated that the pipeline's servitude will be alongside the reserve of the railway line, on the adjoining property.
121.	Two of the possible pipeline routes traverse his property, which may influence boreholes, pipelines and camps.	B de Beer	Public Meeting (25/05/2016)	<p><i>Refer to No. 146 for response to impacts to existing infrastructure. Provision will be made in the EMP for the reinstatement and rehabilitation of the areas affected by construction activities.</i></p> <p><i>This will also form part of the negotiations with the individual landowners.</i></p> <p><i>Additional Response</i></p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<i>Refer to No.114 for response to reinstatement and rehabilitation.</i>
122.	When will the preferred pipeline route be confirmed?	B de Beer	Public Meeting (25/05/2016)	D Henning indicated that the preferred options for all the project components will only be identified in the EIA phase, taking into consideration the findings from the specialist studies, input from the technical team and matters raised by IAPs. <i>Additional Response</i> <i>Refer to No. 76 for a response on the preferred pipeline alignment.</i>
123.	Mentioned that he receives water from the eastern side of the railway line, which is conveyed to the western side.	M Benade	Public Meeting (25/05/2016)	<i>Refer to No. 146 for response to impacts to existing infrastructure. Provision will be made in the EMP for the reinstatement and rehabilitation of the areas affected by construction activities.</i> <i>This will also form part of the negotiations with the individual landowners.</i> <i>Additional Response</i> <i>Refer to No.114 for response to reinstatement and rehabilitation.</i>
124.	What is the project's budget?	C Vos	Public Meeting (25/05/2016)	O van den Berg explained that the funding depends on South Africa's energy policy and that there are discussions with National Treasury and the Department of Energy in this regard. The project will be funded through loans and tariffs will be set with the end users as part of the user agreements.
125.	Noted that the project team spent a total of 27 days on his property as part of the previous study for MCWAP-2. Will further site visits be required on his property?	J Erasmus	Public Meeting (26/05/2016)	A Nelwamondo indicated that it depends on whether all the necessary studies have been completed.
126.	Provide an indication of the preferred pipeline route.	J Erasmus	Public Meeting (26/05/2016)	D Henning indicated that the preferred options for all the project components will only be identified in the EIA phase, taking into consideration the findings from the specialist studies, input from the technical team and matters raised by IAPs. Although the technical studies identified Steenbokpan as the preferred terminal point, the EIA still needs to confirm which of the alternative routes are the most preferred.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p><i>Additional Response</i> Refer to No. 76 for a response on the preferred pipeline alignment.</p>
127.	Where will the construction camps be located and how many staff will be housed at the camps?	B Enslin	Public Meeting (26/05/2016)	<p>A Nelwamondo indicated that as far as possible, preference will be given to local labour. There will be a maximum of 1 000 construction workers. Existing facilities on surrounding farms will be utilised, if possible, where landowners are willing and interested. The requisite mitigation measures will be implemented to manage the impacts associated with construction camps.</p> <p><i>Additional Response</i> Refer to Section 9.10.6 (Construction Camps) and Appendix C of the Draft EIA Report, for the location and approximate sizes of the construction camps required for the construction phase of MCWAP-2A.</p>
128.	<p>Although the pipeline is planned to follow farm boundaries, certain farms have more than one title deed in place and these farms function as a unit. In these instances the pipeline will traverse the farm.</p> <p>Exchange of farms through sales creates problems in terms of the compensation received by the farmers for the pipeline where the pipeline is only constructed once the new owner has taken ownership. This needs to be clearly set out in the contract with the landowner.</p>	K Janse van Rensburg	Public Meeting (26/05/2016)	<p>D Henning indicated that landowners are obligated to provide the details of the servitude to any new landowners.</p> <p>In terms of section 9(1) (d)(ii) of the Expropriation Act the landowner has a duty and responsibility to inform the expropriating authority about the preceding sale of the land in question and provide name and address of the buyer as well as sale agreement.</p> <p>Therefore, the landowner has the role to play to enable the process to unfold without prejudice to either party (Seller/Buyer).The afore mentioned clause will be part of the expropriation notice as part of the duties of the landowner.</p>
129.	Ensure that when communicating with farm managers that the owners are also informed of all correspondence and decisions and that the contract entered into is endorsed by the owners.	K Janse van Rensburg	Public Meeting (26/05/2016)	<p><i>Where the details of the landowners are not available, correspondence is sent to the person in control of the land (e.g. farm manager).</i></p> <p><i>Additional Response</i> TCTA's process is always to engage with the registered owner. TCTA only deals with the farm manager when the</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<i>former has given consent to do so as an authorised representative.</i>
130.	The pipeline will influence a dam and borehole on his property.	G du Preez	Public Meeting (26/05/2016)	<p>A Nelwamondo explained that the proposed servitude will be surveyed as part of the compensation process to identify all infrastructure and assets.</p> <p><u>Additional Response</u> <i>The assumption that the pipeline will influence a dam and borehole on the property will be evaluated and confirmed at the latter stage once the final design has been approved.</i></p> <p><i>Refer to No. 146 for response to impacts to existing infrastructure. Provision will be made in the EMP for the reinstatement and rehabilitation of the areas affected by construction activities.</i></p> <p><i>This will also form part of the negotiations with the individual landowners.</i></p> <p><u>Additional Response</u> <i>Refer to No.114 for response to reinstatement and rehabilitation after the construction has been completed.</i></p>
131.	Will rehabilitation take place after construction?	G du Preez	Public Meeting (26/05/2016)	<p>A Nelwamondo confirmed that rehabilitation will take place and that a suitable seed mix will be sown. Input will also be sought from the landowners on the preferred grass species.</p> <p><u>Additional Response</u> <i>Refer to No.114 for response to reinstatement and rehabilitation after the construction has been completed.</i></p>
132.	The water that will be released during maintenance activities associated with the infrastructure will possibly pollute the surrounding water sources.	J Erasmus	Public Meeting (26/05/2016)	<p><i>The Scoping Report acknowledges that during the maintenance of the pipeline and reservoirs the raw water conveyed and stored within this system, which is water of poor quality from the Crocodile River, will be released into the Matlabas River and other watercourses from scour valves. This matter will be investigated further during the EIA stage.</i></p>

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				<p><u>Additional Response</u> Refer to measures provided in Section 12.5.3 (Management of Pipeline Scouring) in the Draft EMPr (Appendix K of the Draft EIA Report);</p> <p>Refer to the Aquatic Baseline and Impact Assessment (Appendix 11 of the Draft EIA Report), Section 7.3 states that “during the scouring of the pipeline into the system, risks were rated as moderate due to the potential modifications to water quality and instream habitat”.</p> <p>Refer to the Wetland Impact Assessment (Appendix 15 of the Draft EIA Report), Section 10.2.</p> <p>The ecological status of the Matlabas River also needs to be determined during the high-flow period, prior to construction, in order to determine the requirements for scouring (i.e. draining water from the pipeline, typically during maintenance).</p>
133.	When will the negotiations commence with the landowners regarding land acquisition?	J Erasmus	Public Meeting (26/05/2016)	<p>A Nelwamondo indicated that these negotiations will only commence after Environmental Authorisation is obtained, if granted by DEA.</p> <p>The appeal period will also first need to be concluded.</p> <p><u>Additional Response</u> A pre-consultation process will commence immediately after the above process unfold as part of expropriation process to allow landowner opportunity to raise their issues before notices are issued.</p>
134.	Will there be a separate access road for the servitude?	G du Preez	Public Meeting (26/05/2016)	<p>S Pienaar confirmed that this will be the case. The permanent servitude will allow access along it.</p> <p><u>Additional Response</u> However, there are circumstances wherein a separate access road needs to be acquired due to unforeseen reason(s).</p>
135.	His property is affected by various linear infrastructure, including a railway line, road, power lines and the proposed	J Erasmus	Public Meeting (26/05/2016)	<p>D Henning indicated that this matter will need to be considered further.</p>

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	pipeline. How will this be factored into compensation?			<p><i>To minimise impacts to the receiving environment and current land uses, the proposed pipeline route attempts to remain alongside existing linear-type infrastructure, such as roads (main roads and dirt roads), the railway line (i.e. section of approximately 56 km), transmission lines, industrial corridors and farm boundaries. This is also aligned with the Environmental Management Framework (EMF) for the Waterberg District Municipality.</i></p> <p><i>At this point in time, we can't be certain until such time a proper valuation has been done. For that reason, It will be premature to predict.</i></p>
136.	Require further information pertaining to the updated project timeframes.	W du Plessis	Public Meeting (26/05/2016)	Refer to the indicative implementation programme Section 9.9 of the Draft Scoping Report.
137.	Will the servitude be fenced on both sides?	A Pugh	Public Meeting (26/05/2016)	D Henning confirmed that during construction land used for agriculture and game farming will be fenced off along the temporary construction servitude. The permanent servitude will not be fenced off following construction and no improvements may be erected or established within such area.
138.	When will the valuation of the servitude take place?	H Steenkamp	Public Meeting (26/05/2016)	Valuation process proceed after pre-consultation with the affected landowners has taken place and the latter consent to date of site inspection.
139.	Request made that the pipeline follows the farm boundaries as opposed to the road to Steenbokpan.	H Steenkamp	Public Meeting (26/05/2016)	Refer to extract from Section 10.3.3 Alternatives suggested by Interested and Affected Parties in the Draft EIA Report, which states the following: <i>"Mr Steenkamp did not formally provide an alternative route to the project team, and could therefore not be assessed in detail for technical viability. In accordance with the approach employed for the alignment of the pipeline, the current alignment of Alternative D3 follows the existing Steenbokpan Road (D175). The suggested route was not adopted as it will lead to the fragmentation of the affected properties. Construction access would be more difficult to the (i) south (boundary between the Farms Grootlaagte 354 LQ and Rooipan LQ 355) (ii) centrally (boundary between the Farms Doornlaagte 353 LQ and Zandheuvel 356 LQ); and (iii) at the northern end</i>

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				<i>of this alternative. Additional access roads will also be required to the borrow pits adjacent to Alternative D3. The security risk associated with a second access parallel to the existing road will also have to be considered by the land owners”.</i>
140.	<ol style="list-style-type: none"> 1. Although the pipeline is planned to follow farm boundaries you are aware that farms have more than one title deed in place and that these farms function as a unit. In these instances the pipeline will traverse the farm. 2. Possibility of off-take points for the farmers. 3. Exchange of farms through sales creates problems in terms of the compensation received by the farmers for the pipeline where the pipeline is only constructed once the new owner has taken ownership. This needs to be clearly set out in the contract with the landowner. 4. Mandate of communication. Ensure that when communicating with farm managers that the owners are also informed of all correspondence and decisions and that the contract entered into is endorsed by the owners (especially in the case of foreign owners). 5. Consider land claimants, especially gazetted claims. Land owners are not always aware of claims. 6. Property agents - allow agencies to become a vendor to avoid discord and to sign a mandate with the owner of the property to be leased. 	Kobus Janse Van Rensburg	Reply Form (26/05/2016)	<ol style="list-style-type: none"> 1. To minimise impacts to the receiving environment and current land uses, the proposed pipeline route attempts to remain alongside existing linear-type infrastructure, such as roads (main roads and dirt roads), the railway line (i.e. section of approximately 56 km), transmission lines, industrial corridors and farm boundaries. However, we are aware that in some instances adjoining farms have been consolidated and that there are no boundary fences. 2. Refer to No. 27. 3. See response No. 128 above. 4. Where the details of the landowners are not available, correspondence is sent to the person in control of the land (e.g. farm manager). <p><i><u>Additional Response</u></i> <i>However, TCTA cannot conclude the transection without the landowner’s consent unless such authority has been given to the farm manager/ legal representative duly authorised to act on behalf.</i></p> <ol style="list-style-type: none"> 5. The status of land claims will be assessed when the land is acquired. 6. Our mode of acquisition does not requires a middle man due to the complexity and confidentiality involved in this kind of transection.
141.	<p><i>Linked to No. 81.</i></p> <ul style="list-style-type: none"> • Expropriation versus negotiated settlement. • Diplomatic consequences – the landowner is a foreign head of state. • Impact on river and aesthetics at river crossing. • The land is part of the Matlabas Reserve and the project must be considered with due caution. 	Harold Prinsloo	Reply Form (01/06/2016)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 111 for the response with respect to compensation; • No. 81 for the response to the crossing of watercourses (including the Matlabas River). <p><i><u>Additional Response</u></i> <i>The expropriation must not be construed as forceful way</i></p>

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				<p><i>of acquiring Land, it must be construed as a way of expediting the process of acquisition and not to delay construction. The right of landowner to negotiate compensation is not taken away by the current Expropriation Act. Therefore, landowner rights are strictly reserved in this regard.</i></p>
142.	<p>Farm No KQ 629 (Grootfontein) – questions</p> <ol style="list-style-type: none"> 1. Is a “weir” a “stuwal”? 2. How far does the water push up in KQ 629 (Vliegepoort weir)? 3. Please indicate on a map a 20 km buffer around weir, roads, bridges, power infrastructure. 4. Accommodation for construction staff: where, when and how long? 	J. P. Grobler	Reply Form (02/06/2016)	<ol style="list-style-type: none"> 1. Yes, a weir is a “stuwal” (a “meetwal” is a “gauging weir”). 2. A HEC-RAS model of the Crocodile River (West) was set up to determine the flood levels in the Crocodile River. The model was also used to determine and check the impact of the proposed Abstraction Works on flood levels and on infrastructure up- and downstream of the Works. The weir is not designed for storage and it is assumed it will silt up. Further details on the implications of the project on the flood hydrology are included in the Scoping Report. Land matters within the weir basin will be dealt with when the land is acquired in terms of the Expropriation Act for the construction of the abstraction weir including the impoundment up to the 1:100 year flood level and a buffer zone. Length of impoundment is about 10 km. <p><i><u>Additional Response</u></i> <i>Refer to Section 13.8.3 (Hydrology) (Figure 136) of the Draft EIA Report, which provides a map of the upstream structures affected by Vlieëpoort Weir Full Supply Level.</i></p> <ol style="list-style-type: none"> 3. Maps provided. 4. Refer to No. 99 for the response to accommodation.
143.	How is my farm Honingvley (located 30 km north of Thabazimbi along the R510) influenced? Please keep me informed.	Francois van der Walt	Email (03/06/2016)	<p>Alternative C of the pipeline route (map provided) runs on the western boundary of your property (Honingvley 99 KQ Portion 13). As part of the EIA the preferred route must still be confirmed.</p> <p>Contact details included in IAP database. To be informed as the EIA process unfolds.</p>

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				<p><i>Additional Response</i> Refer to No. 76 for the response with regards to the preferred pipeline route alignment.</p>
144.	<p>Thank you for your prompt response. Just a few questions:</p> <ol style="list-style-type: none"> 1. Are the servitudes bought out? 2. How deep is the pipeline? 3. Is the topsoil available again after work has been completed, for the owner, such as for agriculture, roads etc.? 4. The pipe will certainly not be on the property boundary, otherwise the fence will be destroyed. Provided that cases 1 & 3 apply, my land will be available on my side on condition that the access road along the boundary fence is on top of the pipeline, and will be left in a useable condition. <p>Please keep me informed I'm not on the farm but next week. I would like to meet you.</p>	Francois van der Walt	Email (06/06/2016)	<p>Refer to No. 111 for the response to the servitude.</p> <p>The defined permanent servitude area will not be fenced off following construction and no improvements may be erected or established within such area. Access to pipeline servitudes will not be controlled, but restrictions will be placed on activities inside the servitudes. Existing fencing will be reinstated and gates installed where these fences cross the servitude-of-aqueduct. A permanent right-of-way servitude to accommodate the permanent accesses, need to be acquired and registered. A service road (to basic standards) will be provided along the servitude for maintenance purposes and will be patrolled on a regular basis. Refer to Section 9.4.2 in the Draft Scoping Report.</p> <p>Depth of pipeline: Refer to No. 111.</p> <p>Specific measures to manage topsoil will be included in the EMPr. The primary management objective will be to ensure the suitable removal, storage, and transportation of topsoil for re-use during rehabilitation.</p> <p><i>Additional Response</i> Refer to the following sections of the EMPr (Appendix K of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 12.4.12 (Management of Topsoil); and • Section 12.4.26 (Management of Reinstatement and Rehabilitation). <ol style="list-style-type: none"> 1. Yes, servitudes will be acquired to have unlimited rights to use but Land as a whole remain yours. 2. Depth of pipeline: Refer to No. 111. 3. The topsoil will be returned as part of rehabilitation after construction to maintain the same quality it was

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p><i>before construction takes place.</i></p> <p>4. <i>The pipeline will definitely be in your legal boundary. However, if found out that the position of the fence is incorrect you will be advised accordingly.</i></p>
145.	<p><i>Linked to No. 99.</i></p> <ol style="list-style-type: none"> 1. Increase high-water mark. 2. Impacts to borehole, roads, fences and landscape. 	Jan & Bertus Grobler	Reply Form (14/06/2016)	<ol style="list-style-type: none"> 1. Refer to No. 142 for response to flood hydrology. 2. Refer to No. 94 for response to fences. Refer to No. 146 for response to impacts to existing infrastructure. Provision will be made in the EMPr for the reinstatement and rehabilitation of the areas affected by construction activities. <p><i><u>Additional Response</u></i> <i>Refer to No. 114 for response to reinstatement and rehabilitation procedures.</i></p>
146.	<p><i>Linked to No. 89.</i></p> <p>A powerline also runs from West to East on the Southern side of the servitude road, furthermore the Farm Diepkuil's major borehole is situated in close proximity to the North Eastern corner of the farm.</p>	Willie De Swart	Letter (19/06/2016)	<p>The infrastructure affected by the proposed development will be relocated, as necessary. Alternatively, compensation in accordance with prevailing legislation <i>at the time</i> will also be considered, where relevant. Optimisation of final pipeline route to be considered in the design phase to avoid existing structures and buildings, as well as other sensitive features (where possible).</p> <p>Provision will be made in the EMPr for the reinstatement and rehabilitation of the areas affected by construction activities.</p> <p><i><u>Additional Response</u></i> <i>Refer to No. 114 for response to reinstatement and rehabilitation procedures.</i></p> <p><i>Refer to Section 12.4. (Management of Existing Services and Infrastructure) of the EMPr (Appendix K of the Draft EIA Report).</i></p>
147.	<p>Operate Eco tourism on the farm with international clients.</p> <ol style="list-style-type: none"> 1. Loss of grazing, Crocodile river and Bier stream; 2. Loss of irrigation crops; 3. Extra flood damage to lodge along the Crocodile River; 4. Lost access to border fences; 5. Flood damage to wild bomas. 	J. J. Jansen van Vuuren	Reply Form (21/06/2016)	<ol style="list-style-type: none"> 1 – 2. Land to accommodate the Vlieëpoort Abstraction Weir (including the basin) and Abstraction Works and ancillary structures (pumping stations, housing, workshops, Break Pressure Reservoir, Operational Reservoir) will need to be acquired (purchased). Refer to No. 111 for response to

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>land matters within the weir basin.</p> <p>3 & 5. Refer to No. 142 for response to flood hydrology.</p> <p>4. Refer to No. 94 for response to fences and access to the servitude.</p>
148.	<p><i>Linked to No. 3.</i></p> <p>Water table.</p>	J. L. Pretorius	Reply Form (22/06/2016)	<ul style="list-style-type: none"> • Surface water and groundwater interactions were taken into account from a regional perspective when determining the hydrology of the river catchment during the Technical Feasibility Study. • Monitoring of the ground-, and surface water levels as well as chemistry to confirm the link between surface and groundwater. Borehole water level monitoring to be instituted at Vlieëpoort to compliment surface flow measurements and to ensure that the alluvial aquifer downstream of Vlieëpoort would not be negatively impacted on by the proposed Vlieëpoort abstraction works. <p><i>Additional response:</i> <i>The second bullet above is removed and updated with the following (based on Section 13.6.1 of the Draft EIA Report):</i></p> <ul style="list-style-type: none"> ○ <i>Once the weir is constructed monitoring of the ground-, and surface water levels as well as chemistry should be done to confirm the link between surface and groundwater;</i> ○ <i>Digital real-time water level loggers should be installed in the boreholes to ensure accurate water level data;</i> ○ <i>A digital rain gauge should be installed at the weir site or site specific rainfall data should be obtained; and</i> ○ <i>Boreholes will be established upstream and downstream of the proposed weir site to define a groundwater level baseline prior to the construction of the weir.</i> <ul style="list-style-type: none"> • Geotechnical Study undertaken as part of the Feasibility Study. Additional findings will be included in the EIA Report, as necessary.

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				<ul style="list-style-type: none"> Further geotechnical investigations will be undertaken during the design phase. This investigation would result in more information to evaluate the geo-hydrological conditions.
149.	<p>I am in the process of planning citrus production on Portion 1 of the Farm Mooivallei. I have already had a climate study done on the farm (direct environment) by Dr Graham Barry and it was found that it is suitable and possibly also one of the earlier areas in the Northern and South Africa. The planned production entails high value mandarin cultivars, which will complement our citrus basket and season in relation to our citrus production in the Western Cape. My concern is the possible construction of the balancing dam at Mooivallei, and I thus require definite clarification about the building or planning of the proposed balancing dam. I want to state on record that the purpose of our citrus development is not to make money from the State, but it is hoped and requested that the proposed dam be built on another property. Citrus production is a labour intensive agricultural operation which can provide highly necessary employment to hundreds of people in the Thabazimbi area.</p>	Marius Coetzee	Email (23/06/2016)	<p>The position of the desilting works, balancing dams and high lift pump station is largely determined by the topography, founding conditions, property boundaries and flood lines.</p> <p>The following alternative sites were initially identified for the proposed balancing dam:</p> <ul style="list-style-type: none"> Option 1: Portions 1 and 2 of the Farm Mooivallei 342 KQ; and Option 2: Portions 5, 6, 7 and 23 of the Farm Mooivallei 342 KQ. <p>Option 2 was discarded due to geotechnical constraints (dolomitic conditions) associated with the underlying geological conditions.</p> <p>Refer to No. 111 for the response to compensation.</p>
150.	<p><i>Linked to No. 92.</i></p> <p>Specific EIA process requirements include:</p> <ul style="list-style-type: none"> Provide exact information on where the servitude will run between the boundaries of the Farms Leeuwbosch and Zondagskuil. 	Dr L. F. Fouche	Reply Form (24/06/2016)	<p>An overview of the pipeline route options is provided in the Draft Scoping Report.</p> <p>The following aspects were considered in defining the MCWAP-2A pipeline alternative routes:</p> <ul style="list-style-type: none"> Abstraction and water supply locations; Existing linear infrastructure (e.g. roads, railway line, power lines) as well as boundaries between landowners along the routes; Environmental impacts; Social impact of pipeline location; Comments received from IAPs during the public participation for the Scoping phase and the broader Public Involvement Process; Existing servitudes; Historical and planned future mining activities in the area, both sub-surface and open cast; Site constraints, potential watercourse crossings,

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				<p>road and railway crossings; and</p> <ul style="list-style-type: none"> • Geotechnical overview. <p>In some instances where the pipeline follows linear infrastructure (e.g. railway line) and between farm boundaries, the exact route still needs to be finalised in terms of which side of the aforementioned features it will run. All feasible alternatives will be investigated in greater detail during the EIA phase through a technical and environmental comparative analysis. Note that it is not possible to locate the pipeline within servitudes or reserves of existing infrastructure of public utilities, and it will thus need to be constructed on the adjoining private properties.</p> <p><i>Additional Response</i> Refer to Appendix A of the Draft EIA Report for detailed locality maps of the proposed alternative pipeline routes.</p>
151.	What will be the duration of the construction period?	B. Enslin	Email (27/06/2016)	<p>Based on indicative implementation dates for the construction phase of MCWAP-2A WTI the duration of construction is 42 months.</p> <p>Refer to the indicative implementation programme Section 9.9 of the Draft Scoping Report.</p>
152.	When will the specialist be available for a meeting to discuss the planned dam wall at Vlieëpoort and the anticipated impact on water users?	B. Enslin	Email (27/06/2016)	<p>The details of the proposed Vlieëpoort Abstraction Weir on the Crocodile River (West) were discussed during the public meetings on 25 and 26 May 2016 and subsequent Focus Group meetings in January 2018, which included a presentation that provides an overview of the infrastructure proposed as part of MCWAP-2A. The details of further meetings still need to be confirmed, if needed.</p> <p><i>Additional Response</i> Refer to Section 9.3.1 of the Draft EIA Report, which includes an overview of the alternative sites considered for the abstraction weir as well as a description of the proposed infrastructure.</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
153.	<p><i>Linked to No. 94.</i></p> <p>Specific requirements in terms of the EIA:</p> <ul style="list-style-type: none"> • Specifications for game fences. I require that my area is restored to current fence and gates. <p>Potential issues include:</p> <ul style="list-style-type: none"> • Maintenance of servitude; • Road from railway line to Matjiesfontein dirt road; • Compensation for loss of income related to hunting; • My two water pipes that cross the railway line; • Road crossings or thoroughfares; • Excavations of 6-8 metre. <p>Between Matsulan and Matlabas there is a railway line approximately 6 to 8 metre excavation.</p>	T. Reyneke	Reply Form (28/06/2016)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 94 for response to fences; • No. 146 for response to impacts to existing infrastructure; • No. 111 for response to compensation. <p>Provision will be made in the EMPr for the following:</p> <ul style="list-style-type: none"> • Reinstatement and rehabilitation of the areas affected by construction activities; • Access control; • Fencing arrangements. <p><u>Additional Response</u> <i>Refer to the following sections in the EMPr (Appendix K of the Draft EIA Report):</i></p> <ul style="list-style-type: none"> • <i>Section 12.4.26 (Management of Reinstatement and Rehabilitation);</i> • <i>Section 12.4.5 (Management of Access and Traffic); and</i> • <i>Section 12.4.6 (Fencing Arrangements).</i> <p>One of the triggers for the Socio-Economic Impact Assessment, which will be undertaken during the EIA phase, includes the potential loss of income in the eco-tourism sector (hunting and game farming) (refer to Section 14.4.3.5 of the Draft Scoping Report).</p> <p>Refer to No.92 for response to impacts on ecotourism.</p> <p>Following site rehabilitation to the satisfaction of the landowner of the servitude area, the maintenance of the servitude reverts back to the landowner.</p>
154.	<p><i>Linked to No. 96.</i></p> <p>Do you still have my correspondence pertaining to the alternatives on my property?</p> <p>My farm has been ruined by all the Eskom lines that traverse the property. Two new lines are being constructed, which</p>	T. Roux	Email (24/10/2016)	<p>Section 10.3.3, which includes alternatives suggested by IAPs, notes the following based on previous correspondence: <i>Mr. T. Roux from the Remainder of the Farm Paarl 124 KQ recommended that the route follows existing roads along the western and northern boundary, rather than traverse the property alongside high voltage power lines. The lead to the adoption of the current</i></p>

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	<p>make it five lines in total.</p> <p>However, if you want to save time and money, use one of the alternative routes.</p> <p>I have also received legal advice which confirmed that it can become a feasible case, especially if alternatives exist and secondly my property value will depreciate such that it will no longer have any economic value.</p> <p>As you know a legal case such as this can considerably delay the project.</p> <p>I see that they have not yet discussed compensation.</p> <p>If they need to traverse my property, which would be the last option, my compensation should start at a minimum of R10 million, which is the current value of the farm.</p> <p>In the next 20 years I may want to sell the property, then the pipeline will be forgotten and all you interested parties will be well off and away and I get nothing for the property due to the power lines, pipelines and land transformation.</p>			<p><i>Alternative A1.</i> The various route alternatives will be assessed during the EIA phase through a comparative analysis, based on input from environmental specialists and technical factors, as well as input from IAPs.</p> <p><u><i>Additional Response</i></u> <i>Refer to Section 10.3.3 of the Draft EIA Report which provides the alternatives suggested by IAPs. In addition, refer to Section 14 of the Draft EIA Report which provides a comparative analysis of the pipeline route alternatives.</i></p> <p>Refer to response to No. 111 for response to compensation.</p> <p>Once the land is acquired the compensation payable is determined in accordance with prevailing legislation <i>at the time</i> and if an agreement is not reached in terms of monetary value the matter can be referred to a relevant court to determine the compensation payable.</p> <p><u><i>Additional Response</i></u> <i>Consideration must be given that TCTA are not purchasing the whole property but are securing servitude rights, which constitutes unlimited rights to land thereof. Therefore, It is important that TCTA wait for the process to unfold.</i></p>
155.	Enquired about the pipeline servitude that falls on farm boundaries.	P. Welgemoed	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	<p>J. Kroon explained that during the construction of the pipeline, the servitude (temporary and permanent) will be fenced off on both sides. After the construction period, the fences are removed and the permanent servitude protects the State's rights, but the landowner remains the legal landowner and can still conditionally use the land. Restrictions will be placed on the use of the land within the permanent servitude and access will be necessary for inspection and maintenance of the pipeline. As part of the EIA Process, a 100 m wide corridor was assessed to facilitate optimisation of the pipeline route. The servitude widths are 40 m during construction (temporary) and 25 m permanent.</p>

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156.	Asked whether the project team will conduct further consultation with the farmers, or will they proceed directly with the expropriation process?	G. Bauer	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	D. Henning explained that expropriation is a separate legal process that can only take place if Environmental Authorisation is obtained. The expropriation process will be undertaken by TCTA in accordance with the prevailing legal requirements <i>at the time</i> . Therefore, engagement with the affected landowners will take place before formal expropriation starts.

2.8 Borrow Pits

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157.	Requested that a CD with the application for the borrow pits be delivered to the regional offices of the Department of Mineral Resources (DMR). He also confirmed that all borrow pits can be included in a single application.	T. Kolani (DMR)	Authorities Meeting (25/05/2016)	To be actioned. <i>A CD was delivered to the DMR Regional Office.</i>
158.	What are the locations of the borrow pits?	B. Enslin	Public Meeting (26/05/2016)	A Nelwamondo also indicated that further geotechnical investigations need to be conducted to confirm the locations of the remaining borrow pits not yet identified.
159.	<i>Linked to No. 3.</i> Borrow pits.	J. L. Pretorius	Reply Form (22/06/2016)	Construction material will need to be sourced from approximately 30 borrow pits that will be located at about 5 km intervals along the project footprint. <i>Additional Response</i> <i>A separate consolidated application will be submitted to DMR, and a Scoping and EIA Process will be ensued in order to seek environmental approval for the proposed borrow pits.</i>
160.	<i>Linked to No. 92.</i> Specific EIA process requirements include: <ul style="list-style-type: none"> The damage of borrow pits and their exact locations must be indicated. 	Dr L. F. Fouche	Reply Form (24/06/2016)	The impacts of the proposed borrow pits will be assessed as part of the EIA. Details of the locations and proposed footprints of the borrow pits will be provided as part of a separate Scoping and EIA process for all the proposed borrow pits.

2.9 Socio-Economic Issues

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
161.	<i>Linked to No. 7.</i> Security.	H. Du Plessis	Reply Form (18/05/2016)	Specific measures will be included in the EMPr to manage security related matters. <i>Additional Response</i> <i>Refer to Section 12.4.1 (Management of Security) in the Draft EMPr (Appendix K of the Draft EIA Report).</i>
162.	Concerned about the security risks posed to landowners by the project.	J. Erasmus	Public Meeting (26/05/2016)	A Nelwamondo explained the security measures that will be employed were successful and mentioned that there were no security related incidents during the construction period of MCWAP Phase 1 that were linked to the project. D Henning indicated that provision will be made in the EMPr for security measures, such as fencing arrangements, access control, identification of construction staff, etc. S Pienaar noted that access will be strictly controlled in terms of the locking of gates and access to the servitude. Construction working times will also be managed.
163.	Recommends that the project team gets into contact with the Community Policing Forum that is active in the area.	J. Coetzee	Public Meeting (26/05/2016)	D Henning indicated that this can be included in the EMPr as an additional security measure. Refer to No.161 for responses to security measures.
164.	How will the security of landowners be ensured during the operational phase of the project. Noted the various security problems experienced due to poor practices by Eskom. It is requested that the relevant members of the operational team also attend the Community Security Meetings.	J. Erasmus	Public Meeting (26/05/2016)	A Nelwamondo explained the access control protocol to the permanent servitude during the operational phase. D Henning indicated that there will be mitigation measures dedicated to the operational phase in the EMPr, which will include security measures. Refer to No.161 for responses to security measures.
165.	Will land claims be taken into consideration?	K. Janse van Rensburg	Public Meeting (26/05/2016)	D Henning indicated that it will be considered as part of the EIA. <i>The status of land claims needs to be assessed when the</i>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<i>land is acquired.</i>
166.	Will local labour be used during construction?	D. Mochambi	Public Meeting (26/05/2016)	S Kelefetswe indicated that preference will be given to local labour as far as possible and that skills transfer will be promoted.
167.	As a small/medium size business in the Thabazimbi area I would like to register as an interested party for this project as we supply equipment, sit toilets, etc. to the contractors in similar projects. We would also like to be involved in the project to stimulate the local economy and keep the business in the area especially with the current economic situation in the land, province and especially in the Thabazimbi area.	J.C. Havenga	Reply Form (30/05/2016)	<p>Measures to promote opportunities for SMMEs will be included in the EMPr.</p> <p>Procurement also need to comply with Section 217 of the Constitution. When procurement is undertaken, the local communities around the project area will be appraised of the available opportunities through an accessible medium to the people concerned. All procurement will be done in line with the legislation, incorporating all the relevant procurement statutes like PPPFA and BBBEE.</p> <p><u>Additional Response</u> Refer to Section 12.4.7 (Management of Labour Force) in the Draft EMPr (Appendix K of the Draft EIA Report)</p> <p>Refer to Section 6.3.3 in the Socio-Economic Impact Assessment (Appendix I6 of the Draft EIA Report), which states the following: "It is recommended that the appointed contractor use local SMME's and local labour as far as possible during the construction phase to enhance any local economic impact. In addition, this would increase the skills in the area after construction is completed".</p>
168.	<p>Linked to No. 99.</p> <ol style="list-style-type: none"> 1. Theft of goods and wildlife by staff or their connections. 2. Thoroughfare. 3. Day visitors. 4. Increase in life risks. 5. Reduce the exclusivity of the farm and thus also the property value. 6. The value of our property is greatly dependent on its tourism value, which will be adversely affected by the above-mentioned issues and impact. The development 	Jan & Bertus Grobler	Reply Form (14/06/2016)	1 – 4. Specific measures will be included in the EMPr to manage security related matters. Security and control access will be monitored during the construction and operational phases. The low-lift pump station as well as the balancing dam, desilting works and high-lift pump station will be manned 24 hours a day, 7 days a week by both security personnel and operators. All structures will be fenced off (except the pipelines) with a permanent security fence.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	potential of the farm portions nearest to the site where construction will take place can be negatively affected which could reduce the property value. Compensation through assisting with the construction of alternative structures and landscaping.			Refer to No.161 for responses to security measures. 5 – 6. One of the triggers for the Socio-Economic Impact Assessment, which will be undertaken during the EIA phase, includes the potential loss of income in the eco-tourism sector (hunting and game farming) (refer to Section 14.4.3.5 of the Draft Scoping Report). Refer to No.92 for response to impacts on eco-tourism.
169.	<i>Linked to No. 3.</i> Loss of income due to project.	J. L. Pretorius	Reply Form (22/06/2016)	To be assessed as part of the Socio-Economic Impact Assessment (refer to Section 14.4.3.5 of the Draft Scoping Report). See No. 92 for response to compensation. <i>Additional Response</i> <i>Refer to Section 6.3.4 of the Socio-Economic Impact Assessment (Appendix I6 of the Draft EIA Report).</i>
170.	<i>Linked to No. 39.</i> 10. All potential impacts of MCWAP-2 must be fully assessed, and, as part of the requisite assessments, adequate consideration must be given to, amongst other things: 10.4 socio-economic aspects, such as livelihoods and health.	Centre for Environmental Rights	Email (24/06/2016)	Socio-economic aspects (such as livelihoods and health) associated with the project will be assessed as part of the Socio-Economic Impact Assessment and Social Impact Assessment. These studies will be undertaken during the EIA phase and the reports will be appended to the EIA Report. <i>Additional Response</i> <i>Refer to the following sections of the Socio-Economic Impact Assessment (Appendix I6 of the Draft EIA Report) with regards to the impact assessment of livelihoods and health:</i> <ul style="list-style-type: none"> • Section 6.3.4 (Land Values); and • Section 6.3.1 Health and socio-economic well-being.
171.	I thought we would finish with the selling of a portion of Julius Erasmus' land, but the transaction has run aground due to MCWAP. Julius will thus please appreciate your consideration of his situation and that he must not be in the way of infrastructure development and that any current use of land can at a stage become useless. TCTA can possibly purchase	B. Enslin	Email (27/06/2016)	Landowners are advised to continue with their farming activities to maintain the market value of their land as the project may only proceed once/if EA is granted by DEA.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	his property to use as a construction camp as currently there are buildings, power and water available and it is centrally situated for some labourers.			
172.	Another major concern is that planning will need to be done for farms where hunting takes place prior to construction, where many clients book ahead. How will Eco-tourism be addressed?	B. Enslin	Email (27/06/2016)	Refer to No. 92 for response to impacts to ecotourism.

2.10 Climate

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
173.	<p><i>Linked to No. 39.</i></p> <p>10. All potential impacts of MCWAP-2 must be fully assessed, and, as part of the requisite assessments, adequate consideration must be given to, amongst other things:</p> <p>10.5 impacts of climate change on both the giving and receiving water systems over the life of the proposed project, with reference, inter alia, to: 'the ecological reserve', and flood patterns and flows.</p>	Centre for Environmental Rights	Email (24/06/2016)	<p>Refer to No. 40 for response to climate change.</p> <p><i>Additional Response</i> Refer to the Greenhouse Gas Emissions Study (Appendix 19 of the Draft EIA Report).</p>

2.11 Hartbeespoort Dam

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
174.	<p>Negative impact on properties or residents represented by Pecanwood Estate.</p> <p>Require regular communication and feedback and factual information regarding the process as relating to Pecanwood Estate.</p>	Francois Schoeman & Japie Steenkamp	Reply Form (26/09/2016)	<p>A broader Public Involvement Programme will be undertaken as part of the proposed River Management System, which extends beyond the scope of the EIA's public participation process. This will entail engaging with the relevant interest groups, which include Hartbeespoort Dam IAPs.</p> <p>Contact details were included in the IAP database.</p> <p><i>Additional Response</i></p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<i>A public meeting was held with IAPs situated by Hartbeespoort Dam on 13 March 2018 during the public review period of the Draft Scoping Report. Minutes of the meeting contained in Appendix U of the Final Scoping Report.</i>
175.	<p>As discussed at the time of the email below – herewith my comments:</p> <ol style="list-style-type: none"> 1. Please register me as an IAP. 2. Please include the stakeholders that are captured on the DWS Hartbeespoort Dam Remediation Programme’s (HBPDRP) database – so as not to leave anyone out who has previously engaged with DWS regarding HBPD aspects. 3. As someone who was involved with the HBPDRP for several years (2007 – 2014) – and my involvement included Floating Wetlands, Shoreline Remediation, Biodiversity Improvement, Water Quality, Wetlands, Rivers & Water Courses, Operational Best Practices (OBP)’s and Site Plans – herewith my questions, comments and concerns: 4. What is the lowest level the dam is envisioned to drop to? 5. Surely the lower the level drops – this will negatively affect the structure/integrity of the dam wall? 6. Surely the level of the dam needs to be managed – to effectively balance the A) incoming volume of water and the B) outgoing volume of water – taking into consideration the seasons (summer rainfall etc.)? 7. My concerns include the impact/effects to: <ol style="list-style-type: none"> a. The current Floating Wetlands (FW)’s: They will have to be moved to a ‘lower’ contour, as I have included in the Site Plans, where FW’s were placed. Who will do this? b. The Shoreline vegetation surrounding HBPD: Certain plants need/flourish in certain conditions, this includes conditions such as the amount of water. If the water fluctuates too dramatically, this will detrimentally impact the vegetation. We all know that the vegetation ‘cleans/filters’ the water, therefore, the loss of vegetation will have a detrimental impact on the Water Quality. The Shoreline vegetation also is part of a crucial Food-Web – therefore, those species will be negatively impacted, resulting in ‘Un-Balance’ – thereby providing conditions for Toxic Blue-Green Algae to flourish. 	Gill Ledger	Email (20/10/2016)	<ol style="list-style-type: none"> 1. Contact details were included in IAP database. To be informed as the EIA process unfolds. 2. Refer to No. 190 and 198 for responses to engagement with the Hartbeespoort Dam IAPs. 3. Noted. <i>Introductory note for 4 - 7.</i> 4. The water levels have been modelled for various scenarios. Further information to be provided in the EIA Report and during the meeting scheduled with the Hartbeespoort Dam community. Refer to the minutes of the meeting and presentation provided at the public meeting at Hartbeespoort Dam held on 13 March 2018, during the review period of the Draft Scoping Report (Appendix U of the Final Scoping Report). <p><i>Refer to copy of presentation by P. van Rooyen in Appendix Q of the Final Scoping Report.</i></p> <ol style="list-style-type: none"> 5. The water level will be managed during flooding to ensure structural integrity. 6. This will form part of the Operating Rules and River Management System. <p><u><i>Additional Response</i></u> <i>Refer to Section 9.12 River Management of the Draft EIA Report.</i></p> <ol style="list-style-type: none"> 7. <ol style="list-style-type: none"> a) Suitable mitigation measures will be evaluated during the EIA phase. <p><u><i>Additional response</i></u> <i>This was not identified as a project-related matter.</i></p> <p>b) Specialist studies to be undertaken during the EIA</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>c. The Ecological Reserve within the NWA: These are similar to the aspects mentioned above.</p> <p>Note: In about 2012, after 500 FW's where placed at Kurperoord (Metsiame's demonstration site) as well as the implementation of two Shoreline Remediation berms – I saw a new Water Grass in the shallows – it was at a 'clear water state' time period. I had not seen it previously and I documented it. Currently, at the Pecanwood estate shoreline, I have seen this Water Grass for a couple of weeks – it has been a 'clear water state' - and have been documenting it by collecting samples and taking photographs. I have contacted several of the Aquatic Vegetation Scientists who previously conducted Floristic Surveys at HBPD. With the photos I have sent, at this stage, it seems that this is a 'new' species to HBPD! – this is very exciting. Please, consider the good work which has been done at Harties – which was to establish Aquatic Vegetation – in the aim of the vegetation being in competition for nutrients and sunlight – with the Toxic Blue/Green Algae. This would enable longer periods where the Toxic Blue/Green Algae was not dominating the System.</p>			<p>phase to determine impacts and to consider mitigation measures.</p> <p><i>Additional response</i> <i>Refer to the Hartbeespoort Dam Specialist Opinion (Appendix 18 of the Draft EIA Report).</i></p> <p>c) Refer to No. 40, No. 79 and No. 80 for responses to the Reserve.</p>

2.12 Other Planned Developments

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
176.	Has the expansion of the railway line been taken into consideration and is there confirmation that it will proceed?	P Jordaan	Public Meeting (25/05/2016)	<p>O van den Berg mentioned that the MCWAP-2 technical team is in contact with Transnet.</p> <p><i>Refer to No. 178 for response to engagement with Transnet.</i></p>
177.	The pipeline routes follow the options of the power lines that form part of the proposed Namane Generation Power Station.	A Pugh	Public Meeting (26/05/2016)	<p><i>The proposed alternative routes for the 400 kV power line for the Namane Generation IPP Project were investigated further.</i></p> <p><i>Extracts from the EIA Report on the analysis of the</i></p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p><i>alternative routes follow:</i></p> <ul style="list-style-type: none"> • <i>Two alternatives are being considered for the 400 kV lines, referred to as the Spitzkop Line and the Steenbokpan Line.</i> • <i>The Spitzkop Line is economically and technically the preferred option for Namane due the more direct route to connect with the existing transmission line, at a length of approximately 39,7 km. Namane's preferred route will require less capital expenditure, thereby reducing over-all project costs. The Steenbokpan Line is a slightly longer route at approximately 50,6 km, but will result in the majority of the transmission line being constructed within an existing servitude.</i> • <i>Over all, the weighing system found the Steenbokpan Line to be the more suitable option.</i> <p><i>The Steenbokpan Line follows the MCWAP-2 Alternative D3 route. This was considered further as part of the EIA phase.</i></p>
178.	<p>With reference to the study you are currently doing. I do not know if you approached the following people as interested and affected parties. Their planning may significantly affect your proposed route.</p> <ol style="list-style-type: none"> 1. RCE Consultants are involved with the railway, and there is a possibility that they will build rail to load rocks on the farm Ruigtevlei KQ97, which may be required for the construction of a new railway line. Details are attached. 2. Then there is a mining group "Thubatse Community Mining Solutions" that applied for the mining of stone on the farm Ruigtevlei 1/97 KQ, to supply it to interested parties at the development of new projects such as the new mines, power stations, water pipeline, railway line, ESKOM power lines and other contractors. Details are provided below. 	D. Smit	Email (05/06/2016)	<ol style="list-style-type: none"> 1. Contact made with RCE Consultants. Shared spatial data for the proposed pipeline routes (including alternative alignments). Also made direct contact with Transnet to establish their plans to increase the capacity of the existing railway line, to determine how this will potentially influence the proposed MCWAP-2A footprint. 2. Contact made with Thubatse Community Mining Solutions. Awaiting feedback on status of proposed rock quarry on the farm Ruigtevlei 1/97 KQ to determine how this project may potentially influence the proposed infrastructure associated with MCWAP-2A.

2.13 EIA Process

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
179.	<p><i>Linked to No. 111.</i></p> <p>Safeguarding against possible pollution (e.g. oil, diesel, etc.) during site preparation.</p> <p>Are all the objections previously provided still in your possession (2011)?</p>	T. de Clercq	Reply Form (16/05/2016)	<p>Provision will be made in the EMPr to ensure that all known possible causes of pollution relating to water project are mitigated as far as possible to minimise impacts to the surrounding environment.</p> <p><i>Additional response</i> Refer to Section 12.4.19 (Management of Pollution Generation Potential) in the EMPr (Appendix K of the Draft EIA Report), where the management objective is to ensure that all possible causes of pollution are mitigated as far as possible to minimise impacts to the surrounding environment.</p> <p>Due to the time that has passed since the previous EIA, which exceeds 5 years, a new Comments and Responses Report has been compiled which focuses on the comments received under the new Application for MCWAP-2, starting from the notification (announcement phase) in May 2016. However, the issues raised under the previous EIA will be considered during the execution of the current environmental assessment.</p>
180.	Wish to be kept informed.	Ian Hall (Anglo Operations Limited)	Reply Form (17/05/2016)	Contact details were included in the IAP database. To be informed as the EIA process unfolds.
181.	Hard copies to be delivered and comments will follow.	Koogan Naidoo (Mogale City Local Municipality)	Reply Form (18/05/2016)	The project area does not fall within the Mogale City Local Municipality. Notification of the locations where the EIA related reports (hard and soft copies) can be obtained (including website link) will be provided.
182.	Will a site visit be held after the meeting?	S Phasha (DWS)	Authorities Meeting (25/05/2016)	D Henning indicated that the site visit can be held as part of the authorities meeting in the Scoping phase or if specifically requested by an authority.
183.	Had there been any engagement with the Department of Environmental Affairs (DEA) to date.	S Phasha (DWS)	Authorities Meeting (25/05/2016)	O van den Berg indicated that DEA had been invited to the authorities meeting. He further noted that the following two meetings have been held with DEA:

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<ul style="list-style-type: none"> • DEA Pre-Application Consultation Meeting (August 2015); and • DEA follow-up meeting to confirm the approach to the EIA (March 2016).
184.	Enquired about the notification of the public.	S Phasha (DWS)	Authorities Meeting (25/05/2016)	<p>D Henning explained that the EIA process for MCWAP-2 makes provision for engagement during the announcement, scoping and EIA phases. He further listed the various forms of notification undertaken to date, which primarily included:</p> <ul style="list-style-type: none"> • On site notices; • Newspaper notices; and • Direct notification via emails and registered mail.
185.	Noted the dissatisfaction of the landowners in terms of the protracted period since the last consultation regarding the project. It adversely affects their long-term planning.	J Erasmus	Public Meeting (26/05/2016)	<p><i>The MCWAP Environmental Module was originally initiated at the end of 2008 under the EIA Regulations of 2006. The EIA application was withdrawn following the Scoping phase due to uncertainty with regards to water demands.</i></p> <p><i>MCWAP-2A was resuscitated for the following reasons:</i></p> <ul style="list-style-type: none"> • <i>Government identified and approved 18 SIPs across the RSA to support economic development and address service delivery in the poorest provinces. SIP 1 entails the unlocking of the Northern Mineral Belt with Waterberg as the catalyst. Investment in rail, water and transmission infrastructure and energy generation will catalyse unlocking rich mineral resources in Limpopo resulting in thousands of direct jobs across the areas covered. The MCWAP includes the water infrastructure needed for SIP 1. Due to the priority accorded by Government to such SIP projects, it was prudent to give priority to the future water needs of the Lephalale area in support of the national development imperatives;</i> • <i>MCWAP-1 augments the supply from Mokolo Dam and is already operational since June 2015. It serves as an interim measure to supply in the growing water requirements of Lephalale, Eskom and Exxaro. The sustainable yield of Mokolo Dam is not sufficient to meet the increased needs of the users including the</i>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p><i>pollution abatement measures (FGD) which is an environmental and funding condition;</i></p> <ul style="list-style-type: none"> • <i>A suitably sized transfer pipeline from the Crocodile River (West) can be implemented timeously to meet the increased requirements to support the RSA's economy. The solution will over the long term optimally utilise the full yield from Mokolo Dam and will be operated as a system together with proposed MCWAP-2A when the latter is completed. MCWAP-2A will also serve to provide the necessary assurance of water supply to the large end users from independent sources; and</i> • <i>The water requirements have been finalised to the degree that is adequate to make informed economic decisions with respect to the transfer capacity of MCWAP-2A.</i> <p><i>In the meantime, landowners must continue with their farming activities to maintain the market value of their properties.</i></p>
186.	When will the various specialist studies be conducted?	G du Preez	Public Meeting (26/05/2016)	D Henning indicated that the landowners will be contacted to arrange access for the specialists during the EIA phase.
187.	The purpose of the EIA is to assess the impacts to the environment. MKWAP-2 will have a much wider impact on the bushveld due to the cumulative impacts associated with the water end users' developments.	E Greyling	Public Meeting (26/05/2016)	<p>D Henning stated that cumulative impacts will be assessed as part of the EIA. An Environmental Management Framework (EMF) has been developed for the Waterberg District Municipality. The purpose of the EMF is to facilitate environmental decision-making to promote sustainable development. As part of the EMF various Environmental Management Zones have been delineated. The WTI pipeline for MCWAP-2A aims to follow the major infrastructure corridors in the EMF, as far as possible.</p> <p><u><i>Additional response</i></u> <i>Refer to Section 13.23 Cumulative Impacts in the Draft EIA Report.</i></p> <p>A Nelwamondo noted that the Medupi Power Station</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				requires the water from MWAP-2A to implement technology (FGD) to improve its emissions to reduce air pollution.
188.	He was not aware of the public meeting in Steenbokpan. Requested that notifications be placed at the community centre and that the Lephalale Community Radio be used.	D Mochambi	Public Meeting (26/05/2016)	To be considered during the EIA Public Participation process. <i>Additional Response</i> A site notice was placed at the Lesedi Thusong Community Centre in Steenbokpan (Refer to Section 15.3.4 Notification of Review of Draft EIA Report).
189.	Please register Mr. Roland van Tonder as an IAP on the above-mentioned project. He wants to be kept updated on the progress and wants to attend all meetings. Please let us know when the next meeting will be held.	L. du Plessis	Email (30/05/2016)	Contact details included in IAP database. To be informed as the EIA process unfolds.
190.	<p>Thanks for the MCWAP-2 BID.</p> <p>We act for Earthlife Africa Johannesburg. Our client is concerned no public consultation meetings have been arranged for anywhere in Gauteng or in the North West. Yet, the BID proposes to look at the river management system (p 6 of the BID) and specifically at water requirements between the four upstream dams (i.e. Hartbeespoort, Roodekopjes, Klipvoor and Vaalkop) – all of which are based in the North West.</p> <p>While it is clear that this project will have far-reaching and broad impacts throughout the country – which necessitates geographically broad and substantial public consultation - it is our client's view that, at the very least, public consultation meetings should be held, at relevant and appropriate locations, in Gauteng and the North West, where many potentially impacted water sources and water users are based.</p> <p>Please ensure that additional public consultation meetings are arranged accordingly, and please provide us with the relevant dates and venues.</p>	Nicole Löser (Centre for Environmental Rights NPC)	Email (02/06/2016)	<p>Thank you for the correspondence. Your request for meetings in the North West Province and Gauteng are duly noted.</p> <p>We wish to bring it to your attention that the public meetings on 25 and 26 May 2016 were only the start of the Public Involvement Programme for MCWAP-2A.</p> <p>As part of the broader Public Involvement Programme for the River Management System, which extends beyond the scope of the EIA's Public Participation Process, we intend to schedule meetings with key interest groups, which include:</p> <ul style="list-style-type: none"> • Formal Agricultural Groups (including the Hartbeespoort Irrigation Board, Crocodile-West Irrigation Board, Makoppa Agriculture and the Transvaal Agricultural Union-SA; and • Hartbeespoort Dam Interested and Affected Parties. <p>The abovementioned interest groups were specifically identified based on the nature and scope of the River Management System.</p> <p>Please bear in mind the following:</p> <ul style="list-style-type: none"> • An extensive stakeholder involvement process is

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>being followed in the development and continuation of the Reconciliation Strategy for the Crocodile River (West) and Marico River where the impacts of the transfer of water from the Crocodile River (West) to the Lephalale area were extensively communicated in the Strategy Steering Committee meetings. Refer to https://www.dwa.gov.za/Projects/crocodilemaintenance/default.aspx for further information pertaining to the aforementioned.</p> <ul style="list-style-type: none"> • Phase 2 of the water augmentation project aims to supply demands in the Waterberg Coal Fields by utilizing surplus return flows from Gauteng being discharged in the Crocodile River (West) Catchment. Map provided, which contextualizes the source of the surplus water in the Crocodile System. • The water requirements of the water users are secured through Existing Lawful Water Use in terms of the National Water Act, No. 36 of 1998, refer to No. 4. • Meetings are convened in other areas but this is done on an <i>ad hoc</i> basis. An example includes meeting with directly affected landowners who reside in Gauteng. • The project is presented regularly on a host of other forums and is well broadcasted in the greater public domain. • Key groups in various sectors in particularly Limpopo, North West and Gauteng were notified of the project and are included in the I&AP database. <p>Nemai Consulting will keep you informed as the EIA process unfolds.</p> <p><u>Additional response</u> <i>Note that a dedicated public meeting was held in Hartbeespoort in March 2018, during the review of the Draft Scoping Report. A public meeting will also be held in Hartbeespoort during the review period of the Draft EIA Report.</i></p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
191.	<p>In response to the request for Interested and Affected Parties to apply in relation to the MCWAP Phase 2 project EIA, please find attached completed form.</p> <p>I would also like to urge you to conduct public participation meetings in the Marapong area (and other formal and informal settlements associated with the pipeline route). This will go a long way to ensuring citizens of all walks of life have an opportunity to be consulted without being burdened with additional travel costs they cannot afford. Also, as a lesson learned from the Medupi EIA, I would recommend that farm labourers be expressly included in focus group meetings with farmers to ensure necessary effort to identify all potential heritage related issues are appropriately identified as part of the EIA specialist work.</p>	Emile Marell	Email (17/06/2016)	<p>The Marapong area is in excess of 20 km to the north-east of the project footprint (Pipeline Route Option D1). There is a settlement in the Steenbokpan area, which is located adjacent to the terminal point for Pipeline Route Option D3, and a dedicated meeting will be held with this community in the future. The first public meeting in Steenbokpan was held on 26 May 2016.</p> <p>Requirement to engage with farm labourers included in specific Terms of Reference for Heritage Impact Assessment (Refer to Section 14.4.3.3 of the Final Scoping Report).</p> <p><i>Additional Response</i> <i>A public meeting was planned to be held in Marapong as part of the review period of the Draft EIA Report, however due to the unavailability of public venues, a meeting could not be arranged. Refer to Section 15.3.8 which provides details of the public meetings held in the EIA phase.</i></p>
192.	<p><i>Linked to No. 3.</i></p> <p>Specific EIA requirements:</p> <ul style="list-style-type: none"> • Visits only by arrangements; • No heavy vehicles; • Visits only between 9:00 and 17:00 weekdays; • Speed limits of 40 km/h; • Numbers of personnel per visit as arranged; • All visitors must have an ID; and • All visitors must sign an indemnity form before access is granted to land. <p>Please note that these are not the last and only requirements.</p>	J. L. Pretorius	Reply Form (22/06/2016)	<p>Access protocols of formal agricultural groups will be adhered to for any access required by members of the EIA project team and specialists.</p>
193.	<p><i>Linked to No. 39.</i></p> <p>5. We note that no mention is made of the need to remedy negative impacts (through, for example, appropriate restoration, compensation, or offsets) – as required in terms of the National Environmental Management</p>	Centre for Environmental Rights	Email (24/06/2016)	<p>During the EIA stage a detailed assessment will be conducted to evaluate all potential impacts (paying particular attention to the significant issues listed in the Scoping Report), with input from the project team, requisite specialist studies and IAPs and through the application of the impact assessment methodology</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>principles encompassed in section 2 of the National Environmental Management Act, 1998 (NEMA). That must be addressed.</p>			<p>contained in Section 13.4 of the Draft Scoping Report.</p> <p>Suitable mitigation measures will be identified to manage the environmental impacts according to the following hierarchy:</p> <ol style="list-style-type: none"> 1. Initial efforts will strive to prevent the occurrence of the impact; 2. If this is not possible, mitigation will include measures that reduce or minimise the significance of the impact to an acceptable level; 3. Remediation and rehabilitation will take place if measures cannot suitably prevent or reduce the impacts, or to address the residual impacts; and 4. As a last measure, compensation will be employed as a form of mitigating the impacts associated with a project. <i>This will be apply to directly impacted persons within the construction domain.</i> <p>The mitigation measures will be incorporated into the EMPr, which will form part of the EIA Report.</p> <p><u><i>Additional Response</i></u> <i>Refer to Section 13 (Impact Assessment) of the Draft EIA Report for a detailed assessment of all potential impacts.</i></p> <p><i>Refer to the Draft EMPr in Appendix K of the Draft EIA Report, which contains mitigation measures to be adhered to during pre-construction, construction and operation phases of the proposed project.</i></p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
194.	<p><i>Linked to No. 39.</i></p> <p>6. The BID notes that MCWAP-2 consists of the following components: “1. <i>Water Transfer Infrastructure (topic of this BID) - transfer of water from the Crocodile River to Lephale; 2. Bulk Power Supply (topic of this BID); 3. Borrow Pits - sourcing of construction material; and 4. River Management System - manage abstractions from, and the river flow in, the Crocodile River (West) between Hartbeespoort Dam and Vlieëpoort Weir as well as the Moretele River from Klipvoor Dam to the confluence with the Crocodile River (West), and also the required flow past Vlieëpoort.</i>”</p> <p>7. It is not clear if, and how, components 3 and 4 above – which are clearly integral to the MCWAP-2 and will require environmental authorisation (Table 2 in the BID) – are to be addressed in a ‘combined application’ process, particularly given that separate applications will be submitted for different components. Our client requests clarity on this approach and an explanation of why there is a need for these ‘separate applications’ rather than one combined application.</p>	Centre for Environmental Rights	Email (24/06/2016)	<p>The EIA Regulations of 2014 (as amended) include a number of provisions in terms of the transition of the environmental regulation of mining from the Mineral and Petroleum Resources Development Act (MPRDA) (Act No. 28 of 2002) to NEMA. Amongst others, this is facilitated by the inclusion of mining activities under the 2014 Listing Notices (as amended). Separate approval thus needs to be sought from DMR for the Borrow Pits in terms of the activities triggered under the Listing Notices of 4 December 2014 (as amended). However, the intention is for the EIAs for the WTI and Borrow Pits to run concurrently, as far as possible.</p> <p>Refer to No.159 for the response on the separate EIA process for the proposed borrow pits.</p> <p>A River Management System is required to monitor, control and manage the releases into the river, the flows in the river and abstractions from the river. Not all of the associated components (e.g. existing dams, existing river gauging stations, smart metering of direct and indirect abstraction, new operating rules) will require authorisation. The components of the River Management System will be confirmed as part of the design phase of the project. It is anticipated that authorisation will need to be sought for components such as 4 new river gauging stations, possible new river outlets at Hartbeespoort Dam, Roodekopjes Dam, data communication network and integrated operational centre.</p> <p><i>Additional response</i> <i>Refer to Section 9.12 (River Management) of the Draft EIA Report, for additional information.</i></p>
195.	<p><i>Linked to No. 39.</i></p> <p>9. Our client is very concerned about the impacts that the proposed MCWAP-2 poses for human health and the environment. We note, in this regard, that the BID focuses on the engineering designs (which themselves are far from</p>	Centre for Environmental Rights	Email (24/06/2016)	<p>The BID only provides an overview of the project. Drawings and maps of the proposed MCWAP-2 infrastructure accompany the Draft Scoping Report.</p> <p>The potentially significant environmental issues associated with the project are included in Sections 11</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	clearly understandable), and provides very little information on potential environmental and social impacts.			and 13 of the Draft Scoping Report. Refer to No. 193 for response to the assessment of potential impacts.
196.	<p><i>Linked to No. 39.</i></p> <p>10. All potential impacts of MCWAP-2 must be fully assessed, and, as part of the requisite assessments, adequate consideration must be given to, amongst other things:</p> <p>10.7 section 24 of the Constitution, which guarantees a right to an environment not harmful to health or wellbeing and the right to have the environment protected for the benefit of present and future generations; and</p> <p>10.8 the National Environmental Management principles set out in NEMA's section 2; including, in particular, the precautionary, preventive and "polluter pays" principles.</p>	Centre for Environmental Rights	Email (24/06/2016)	Refer to No. 193 for response to the assessment of potential impacts.
197.	<p><i>Linked to No. 39.</i></p> <p>11. In relation to the proposed specialist studies set out in the BID:</p> <p>11.1 a land use impact assessment, rather than an "agricultural" assessment should be conducted;</p> <p>11.2 a freshwater ecologist could be appointed to conduct both the "aquatic and riverine impact assessment" and the "wetland assessment and delineation"; and</p> <p>11.3. if biodiversity components of concern arise either from a terrestrial or freshwater aquatic system perspective, additional, more focussed taxa studies would need to be conducted; and</p> <p>11.4 the socio-economic impact assessment must assess the impacts of both 'giving' and 'receiving' water systems on livelihoods, health and safety of affected communities.</p>	Centre for Environmental Rights	Email (24/06/2016)	<p>The proposed infrastructure is mostly located on privately-owned properties that are primarily used for agricultural practices and game-farming. An Agricultural Impact Assessment is triggered by various aspects associated with the project, including:</p> <ul style="list-style-type: none"> • Loss of cultivated land and grazing land within the construction domain; • Loss of stock watering points within the construction domain; • Disruptions to farming operations as a result of construction-related use of existing access roads; and • Loss of fertile soil through land clearance. <p><i>Additional response</i> Refer to the Agricultural Impact Assessment (Appendix I3 of the Draft EIA Report).</p> <p>Sections 14.4.3.1 and 14.4.3.2 of the Draft Scoping Report provide an overview of the Aquatic Impact</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
				<p>Assessment and Terrestrial Ecological Impact Assessment, respectively. No trigger for a species-specific study has been identified to date.</p> <p><u>Additional response</u> Refer to the following specialist studies conducted as part of the EIA phase, and appended to the Draft EIA Report:</p> <ul style="list-style-type: none"> • Baseline Aquatic and Impact Study (Appendix I1); • Wetland Impact Assessment (Appendix I5); and • Terrestrial Ecological Impact Assessment (Appendix I2). <p>Provision is made in Section 14.4.3.5 of the Draft Scoping Report for a Socio-Economic Impact Assessment, which will include the assessment of 'giving' and 'receiving' water systems.</p> <p><u>Additional response</u> Refer to the Socio-Economic Impact Assessment in Appendix I6 of the Draft EIA Report.</p>
198.	<p><i>Linked to No. 39.</i></p> <p>12. We point out that the MCWAP-2 has potential to have significant and far-reaching impacts on water sources which will affect substantial portions of the country, and not only Limpopo. In particular, it appears from the BID that it will, at the very least, impact on water sources in North West and Gauteng. In this regard, we record that, on 2 June 2016, we wrote to you to request that additional public consultation meetings be arranged for, at the very least, the North West and Gauteng. You responded on 3 June 2016, advising that, as part of the broader Public Involvement Programme for the River Management System - which extends beyond the scope of the EIA's Public Participation Process - meetings would be scheduled with key interest groups, which include: Formal Agricultural Groups (including the Hartbeespoort Irrigation Board, Crocodile (West) Irrigation Board, Makoppa Water Users and the Transvaal Agricultural Union); and</p>	Centre for Environmental Rights	Email (24/06/2016)	<p>Public meetings are only earmarked in the MCWAP-2A's area of influence in terms of the following:</p> <ol style="list-style-type: none"> 1. Hartbeespoort Dam; 2. Water users downstream of Hartbeespoort Dam, namely Hartbeespoort Irrigation Board, Crocodile (West) Irrigation Board and Makoppa Water Users (<i>i.e. Makoppa Agriculture</i>) (refer to Section 11.8.4 of the Draft Scoping Report); and 3. The physical footprint of the project's proposed infrastructure. <p>Due to the nature of the discussions, the Focus Group meetings with the Formal Agricultural Groups will not be open to all IAPs. Separate public meetings will be held as part of the EIA, where all IAPs are welcome to attend.</p> <p><u>Additional Response</u> Refer to Appendix Q of the Final Scoping Report, for the minutes of the Focus Group Meetings held with the</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	Hartbeespoort Dam Interested and Affected Parties. You advised that the abovementioned interest groups were specifically identified based on the nature and scope of the river management system. Kindly confirm that these invitations will be sent to all I&APs, and not only these interest groups.			<p><i>Irrigators in January 2018.</i></p> <p><i>Refer to Appendix U of the Final Scoping Report, for a copy of minutes of the public meetings held in March 2018, in Thabazimbi, Steenbokpan, and Lephalale as part of the review of the Draft Scoping Report.</i></p> <p><i>Public meetings will be held at the following areas, as part of the review of the Draft EIA Report in October 2018:</i></p> <ul style="list-style-type: none"> • <i>Hartbeespoort Dam;</i> • <i>Thabazimbi;</i> • <i>Steenbokpan; and</i> • <i>Lephalale;</i>
199.	13. We trust that you will give due consideration to the above recommendations as you prepare the scoping report for MCWAP-2.	Centre for Environmental Rights	Email (24/06/2016)	Refer to individual responses to matters raised in the correspondence from Centre for Environmental Rights.
200.	12. Kindly respond to our queries regarding the separate EIA applications and regarding the expansion of the I&AP interest groups as set out above in paragraphs 7 and 12 respectively	Centre for Environmental Rights	Email (24/06/2016)	<p>Refer to No. 194 for response to separate EIA applications.</p> <p>Refer to No. 190 and No. 198 for responses to the expansion of the IAP interest groups.</p>
201.	<p><i>Linked to No. 94.</i></p> <p>Potential issues include:</p> <ul style="list-style-type: none"> • Timeframes. <p>Please send Tarentaal Pan NG church correspondence to me. The Church Council has appointed me as negotiator.</p>	Tuffy Reyneke	Reply Form (28/06/2016)	Refer to the indicative implementation programme Section 9.9 of the Draft Scoping Report.
202.	Asked in the comments provided in 2016 will be included in the Comments and Responses Report.	N. Fourie	Focus Group Meeting – Hartbeespoort Irrigation Board (24/01/2018)	<p>D. Henning confirmed that will be the case. Comments received in writing or during meetings will be included in the Comments and Responses Report.</p> <p>J. Kroon added that the Comments and Responses Report will be appended to the draft Scoping Report that will be lodged in the public domain in March 2018. This will allow the parties that commented to determine whether the responses provided are adequate.</p>
203.	Stated that the Irrigation Board will convene a meeting with its	J. Swanepoel	Focus Group	<i>Awaiting formal comments from the Crocodile River</i>

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	members and thereafter their formal comments will be forwarded to D. Henning for inclusion into the EIA process.		Meeting – Crocodile River (West) Irrigation Board (24/01/2018)	<i>(West) Irrigation Board. Refer to No. 345.</i>
204.	Requested that the minutes of public meetings held in 2016 be sent together with the minutes of the focus group to all the attendees.	G. Bauer	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	D. Henning said that previous minutes of the public meetings and the minutes of this focus group meeting will be distributed. <i>Attached as Appendix O of the Scoping Report.</i>
205.	Asked what the purpose of the meeting was, and whether it was to inform the attendees about the proposed project or whether the project had already commenced.	A. Pieterse	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	F. Vogel explained that the focus group meeting is part of the Scoping phase of the EIA process. The meeting serves to provide information and to obtain comments and concerns from the affected parties which will be included in the EIA.
206.	Asked whether the final decision to build the weir at Mooivallei had been made.	A. Pieterse		F. Vogel explained that the final decision on whether the project could be implemented depends on whether Environmental Authorisation is obtained for the project. J. Kroon added that there is a proposed project layout, with options regarding the pipeline routes. The DEA will need to review the EIA and make a decision. D. Henning explained that a separate Focus Group meeting will be convened with the owners of Mooivallei to discuss all their specific concerns about the project. He added that different options for the location of the weir were investigated but were discarded due to geological and topographical conditions. <u><i>Additional response</i></u> <i>Refer to Appendix V of the Final Scoping Report for minutes of the focus group meeting held with the landowners of Mooivallei in March 2018, as part of the review of the Draft Scoping Report.</i> <i>Another Focus Group Meeting will be held with the</i>

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				<i>Mooivallei landowner as part of the review of the Draft EIA Report in October 2018. Minutes of the meeting will be appended to the Final EIA Report.</i>
207.	Proposed that all the questions and issues from the Makoppa Farmers be discussed and formally captured at their next internal Makoppa Agricultural Meeting in February 2018. This will then be sent to D. Henning for feedback from the project team.	W. Potgieter	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	F. Vogel mentioned that this is a positive proposal. The proposal was accepted by the attendees. Formal comments received on 28 February 2018. See No. 214 below.
208.	Mentioned that the general sentiment is that the project has already been approved and cannot be changed. Is the purpose of the focus group meeting to say what will happen or that changes can still take place?	A. Pieterse	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	J. Kroon explained that it is a proposed project with alternatives to be assessed as part of the EIA Process, including specialist studies. D. Henning added that various options to supply the required water were considered during the Technical Pre-Feasibility and Feasibility Studies. The proposed water transfer scheme was identified to be the most preferable due to a variety of factors, and it is now being assessed as part of the EIA. Only layout alternatives are under consideration.
209.	Asked whether this implied that he needed to speak to the person who initially undertook these investigations to enquire how the weir site at Mooivallei was identified.	A. Pieterse	Focus Group Meeting – Makoppa Agriculture (Irrigators) (25/01/2018)	D. Henning explained that all comments, questions and issues raised during public participation will be incorporated into the Comments and Responses Report and that feedback would be sought from the relevant members of the project team to provide responses. This includes the members of the technical team.

2.14 Comments received from Makoppa Agriculture

Due to the nature of the comments contained within the letter received from Makoppa Agriculture on 26 February 2018, it was deemed necessary to create a separate sub-section for these comments and responses.

No.	COMMENT	RAISED BY	SOURCE	RESPONSE
210.	<p>REGARDING: CONSTRUCTION OF VLIËPOORT WEIR ON THE CROCODILE RIVER, AT MOOIVALLEI, THABAZIMBI, LIMPOPO PROVINCE</p> <p>Project: MCWAP Phase 2</p> <p>1. Before we deal with the abovementioned project, we would like to place the following on record:</p> <p>1.1. We are a voluntary association of sowing, game, cattle and irrigation farmers with members ranging from Thabazimbi to Rooibokkraal along the Crocodile and Limpopo Rivers.</p> <p>1.2. The total number of members, which include members of co-operatives, cattle farmers, game farmers and large as well as small emerging farmers with irrigation, is currently 69. The total area currently irrigated by our members' amounts to approximately 3 500 to 4 000 hectares, which mainly involves pivot irrigation.</p> <p>1.3. As you know, the water flow and supply in the Crocodile River is the main source of water for all the sowing and irrigation farmers in this district, and supply and availability of water is absolutely essential for the survival of these farmers, their families, the workers, their families, businesses, schools and churches. The economic progress and existence of the broader community of Thabazimbi is dependent on local agricultural activities, and the Thabazimbi district is now also mainly an agricultural area, especially after several mines, including KUMBA mine, have finally closed their doors. The participation of various businesses, shops, industries and</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>1.1 Noted.</p> <p>1.2 Noted.</p> <p>1.3 Existing Lawful Water Use in accordance with the NWA will continue. See No. 4.</p> <p>1.4 During the Announcement Phase of the EIA a database of IAs was compiled. From an agricultural perspective, it included representatives and the chairmen of the Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board, Sentrum Agricultural Union, Thabazimbi District Agricultural Union and Makoppa Agriculture (amongst others). The full scope of the proposed MCWAP-2A Water Transfer Infrastructure was conveyed in the Background Information Document that was circulated, notifications that were placed in newspapers and on site, as well as in the presentations during the public meetings in the Announcement Phase. From an agricultural perspective, two primary areas of concern emerged during such consultation with farmers, namely water related issues (irrigation) and land matters (properties affected by physical infrastructure). In acknowledging the critical nature of water related concerns, it was suggested during the public meeting on 25 May 2016 that separate meetings be convened with the irrigation groups (Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board and Makoppa Agriculture). Refer to the minutes of this meeting contained in Appendix O of the Draft Scoping Report. The EIA was then placed</p>

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	<p>suppliers in economic activity depends on the survival of sowing, cattle, and irrigation and game farmers. You can assume that the closure of the various mines and KUMBA mine in the area already has a drastic impact on employment and has already resulted in a large number of job losses. Much of this workforce has been absorbed in the area's agricultural sector.</p> <p>1.4. During 2016, a public meeting was held in the Thabazimbi Town Hall where the people present were informed of the intention to construct a weir on the Crocodile River at Mooivallei, Thabazimbi, to allow for the abstraction of water from the river and conveyance to Lephalale. During this meeting, a focus was placed on the route that the pipeline (from the position where the weir would allegedly be constructed up to Lephalale) would follow, to identify potential persons affected by such a pipeline. In addition, during this meeting, it was pointed out that no person who irrigates from the Crocodile River and who will be affected by the construction of the weir, including farmers with verified water use rights, have been contacted for any inputs, suggestions, alternatives and / or participation in the project. Mr. Donovan Henning indicated that such a meeting will still be arranged with Makoppa Agriculture.</p> <p>1.5. Despite several requests and inquiries from Makoppa Agriculture during 2017, such a gathering and / or meeting had never been arranged.</p> <p>1.6. During January 2018, it was suddenly decided to arrange an urgent meeting with the members of Makoppa Agriculture and this meeting took place on 25 January 2018 in the town hall in Thabazimbi.</p> <p>1.7. During this meeting, it was pointed out to our members that a weir would be constructed in the Crocodile River in the Mooivallei area at Thabazimbi to transfer water to Lephalale (formerly Ellisras). This weir is allegedly known as the Vlieëpoort weir.</p> <p>1.8. It was pointed out during this meeting that Makoppa Agriculture on behalf of its members object to the</p>			<p>on hold for technical matters to be resolved by the project proponent. A general email was forwarded to the IAPs as notification of the aforementioned. Once the project was resuscitated, the Focus Group Meetings were arranged with the chairmen of the Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board and Makoppa Agriculture. The respective chairmen were requested to forward the invitation to their constituents. The specific meeting with the Makoppa Agriculture was convened on 25 January 2018 (refer to minutes of this meeting contained in Appendix Q of the Draft Scoping Report). The minutes were also circulated to the meeting attendees.</p> <p>1.5 The EIA was placed on hold following the Announcement Phase to allow for technical matters to be resolved by the project proponent. A general email was forwarded to the IAPs as notification of the aforementioned.</p> <p>1.6 Noted. Refer to item 1.4 above.</p> <p>1.7 Noted. The same information pertaining to the proposed project layout and components were conveyed during the Announcement Phase (refer to item 1.4 above).</p> <p>1.8 Noted. The suggestion for a collective response from the Makoppa farmers was made by the chairmen of Makoppa Agriculture, which was supported by the meeting attendees.</p> <p>1.9 Noted.</p>

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	<p>construction of the proposed weir and the objection will be dealt with below. It was further suggested that the questions of the Makoppa Agriculture's members be sent to your office.</p> <p>1.9. During the monthly meeting of Makoppa Agriculture on 6 February 2018, the members were invited to finalize their questions before or on 16 February 2018.</p>			
211.	<p>2. Makoppa Agriculture therefore requests you to attend to the subsequent aspects and questions and you are further requested, where the answer to any question is supported by any document, report, impact study, resolution, decision and / or any other document in your possession, or in the possession of any Department, to send and make it available to us.</p> <p>The questions are as follows.</p>	Makoppa Agriculture	Letter (26/02/2018)	Introductory section. No response necessary.
212.	<p>3. Are you or your company and/or employer, employed by the Republic of South Africa and/or any government department of the Republic of South Africa?</p> <p>3.1. If so, where and in what department do you work?</p> <p>3.2. What is your company's and/or your employer's trade name with reference to the full name, registration number, if any and full address?</p> <p>4. If you are employed by any government department, do you state that you are authorised to make any proposals, presentations and/or suggestions on behalf of such government departments?</p> <p>5. If you are not an employee of the Republic of South Africa, do you act as a representative and agent of the Government of South Africa?</p> <p>6. If so:</p> <p>6.1. Which department and/or departments do you represent? A copy of your agreement, mandate, decision and resolutions is requested.</p> <p>6.2. When did you receive the mandate on behalf of the Government and/or Department and/or Departments?</p> <p>6.3. What are the terms of the mandate you received? If the terms are in writing, a copy is requested.</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>Response from the perspective of Nemai Consulting, in terms of the company's role as the Environmental Assessment Practitioner (EAP).</p> <p>3. Nemai Consulting was appointed by DWS (Applicant) and TCTA (implementing agent) as the independent EAP in accordance with EIA Regulations of 2014 (as amended) to conduct the EIA for the proposed MCWAP-2A.</p> <p>3.1. See above response. Further details of Nemai Consulting and the core members of the EIA are provided in Section 6.2 of the Draft Scoping Report.</p> <p>3.2. Nemai Consulting (CK 1999/066215/23) - Address: 147 Bram Fischer Drive Ferndale, 2194; Postal Address: PO Box 1673, Sunninghill, 2157.</p> <p>4. Nemai Consulting conducts the EIA process as the independent EAP. The Application Form includes a Declaration of Independence by the EAP. In addition, an Oath by the EAP is included as Appendix T of the Draft Scoping Report. The aforementioned declaration and oath are required by the EIA</p>

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	<p>7. As a result of the mandate and/or commission by any government department, did you appoint any person, institution, firm or company to perform any service in connection with the erecting and completion of the weir?</p> <p>8. If so, who is the person, when and what was the assignment given to the person, institution, firm or company? You are requested to provide us with copies of all investigations, inquiries, notices, results, research, reports and impact studies provided to you by any person referring to the construction and completion of the weir. This includes but is not limited to:</p> <p>8.1. All architectural designs;</p> <p>8.2. All engineering designs;</p> <p>8.3. All environmental impact studies;</p> <p>8.4. All impact studies related to noise and commotion before, during and after the construction;</p> <p>8.5. All reports on the socio-economic conditions of the area, especially with regard to job losses and the conduct of business operations.</p> <p>8.6. All reports regarding the costs of the project;</p> <p>8.7. All impact studies regarding the financial implications for affected persons (especially the owners directly adjacent to the river, including their labour force) if the weir is to be erected.</p> <p>8.8. Any other report, document, correspondence of any kind with reference to erecting the weir.</p> <p>9. If you and/or your company have not appointed any such person, we ask you to indicate whether you are aware of any person, institution, firm and/or company appointed to perform any service until the establishment and completion of the weir. If so, we ask you to indicate:</p> <p>9.1. Who was the person, institution, firm and/or company?</p> <p>9.2. Who appointed the person, institution, firm and/or company?</p> <p>9.3. When was the person, institution, firm and/or company appointed?</p> <p>9.4. Do you possess any report, document, result or investigation of such a person, institution, firm and/or</p>			<p>Regulations of 2014 (as amended).</p> <p>5. See response to item 4 above.</p> <p>6. Responses provided.</p> <p>6.1. The Applicant is DWS. See response to item 4 above.</p> <p>6.2. Nemaï Consulting was appointed in 2015.</p> <p>6.3. See responses to items 3 and 4 above.</p> <p>7. As the EAP, Nemaï Consulting appoints the relevant environmental specialists to assess the receiving environment. Technical specialists are appointed by DWS or TCTA. Technical studies presented during the Focus Group Meeting on 25 January 2018 primarily focused on outcomes from the Feasibility Study (access to technical reports via project website - www.dwa.gov.za/Projects/MCWAP/) (<i>the new link to the EIA Reports and Documents is as follows: http://www6.dwa.gov.za/MCWAP/EIAdocuments.aspx</i>) and the Crocodile River (West) System Reconciliation Strategy (access to technical reports via DWS website). Also see No. 3. Technical studies relevant to weir: Refer to report P RSA A000/00/9109 - Pre-feasibility Stage: Supporting Report 4: Dam, Weir and River Engineering;</p> <p>8. Response provided</p> <p>8.1. Drawings of the proposed Vlieëpoort Abstraction Weir are contained in Appendix H of the Draft Scoping Report and the reports under No. 3.</p> <p>8.2. See response to no. 8.1 above.</p> <p>8.3. An Environmental and Social Screening was conducted as part of the Technical Pre-Feasibility and Feasibility Studies. The proposed abstraction weir is one of the components of the MCWAP-2A Water Transfer Infrastructure that will be assessed during the EIA. The Draft Scoping Report provides a description of the receiving environment and lists the potential impacts associated with the project (including the proposed abstraction weir)</p>

No.	COMMENT	RAISED BY	SOURCE	RESPONSE
	<p>company? If so, a copy thereof is requested.</p> <p>9.5. If you do possess any correspondence between yourself and such person, institution, firm and/or company, copies thereof are requested.</p> <p>If you do not have this information yourself, we request that you obtain the necessary information from your principal and/or the appropriate Department. Alternatively, we request that you provide full details of the principal and/or the appropriate Department, in order to let us take the necessary steps to obtain the information.</p>			<p>that will be assessed via specialist studies, technical inputs and comments from IAPs during the EIA phase.</p> <p>8.4. See response to item 8.3 above. In addition, refer to No. 97 and No. 99 for responses to noise.</p> <p>8.5. A Socio-Economic Impact Assessment (SEIA) will be conducted during the EIA phase (refer to Section 14.4.3.5 of the Draft Scoping Report for the triggers and scope related to this study). It is planned that the Existing Lawful Water Use as determined in accordance with the National Water Act will prevail as set out in the Act.</p> <p><i>Additional Response</i> See No. 4. Refer to the SEIA in Appendix I6 of the Draft EIA Report.</p> <p>8.6. See response to no. 12.1.</p> <p>8.7. See response to item 8.5 above.</p> <p>8.8. Refer to the following report: P RSA A000/00/9109 - Pre-feasibility Stage: Supporting Report 4: Dam, Weir and River Engineering (available on the project website www.dwa.gov.za/Projects/MCWAP/).</p> <p>9. See responses to item 8 above.</p>
213.	<p>10. With reference to the meeting held in 2016 in the town hall of Thabazimbi, the following is requested:</p> <p>10.1. Who convened the meeting?</p> <p>10.2. How were the members of Makoppa Agriculture or any other person informed of the meeting? Copies of all notices, together with dates of the placement and name of newspaper, magazine or any media used, are requested.</p> <p>10.3. How were the members of Makoppa Agriculture or any other person entitled to water use rights in terms of the 1998 Water Act, notified? Copies of such notices are requested.</p> <p>11. With reference to the meeting held on 25 January 2018 in the town hall of Thabazimbi, the following is requested:</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>10. Response provided.</p> <p>10.1. The meeting was convened by Nema Consulting as part of the EIA's Announcement Phase.</p> <p>10.2. A database of IAPs was compiled for the project (refer to Appendix I of the Draft Scoping Report), which included <i>inter alia</i> government departments, stakeholders, landowners and representatives from various sectors (including Agricultural, Environmental, Mining, Industry, Research, etc.). A Background Information Document (refer to Appendix K of the Draft Scoping Report) and Reply Form were forwarded to the parties on</p>

No.	COMMENT	RAISED BY	SOURCE	RESPONSE
	<p>11.1. Who convened the meeting?</p> <p>11.2. How were the members of Makoppa Agriculture informed of the meeting? Copies of all notices, together with dates of placement and the name of the newspaper, magazine or any media used are requested.</p> <p>11.3. Do you acknowledge that all members of Makoppa Agriculture or any other person who has rights to water use in terms of the 1998 Water Act have indeed been properly informed of the meeting? If so, you will be asked to indicate the process followed to inform such person and request that you provide copies of the notices to us.</p>			<p>the database. Notification was also provided via onsite notices (refer to Appendix L of the Draft Scoping Report), newspaper notices (The Star, The Daily Sun, Die Kwêvoël, Beeld and Mogol Pos - refer to Appendix N of the Draft Scoping Report) and bulk SMSs.</p> <p>10.3. See response to item 10.2 above.</p> <p>11. Response provided.</p> <p>11.1. The meeting was convened as a Focus Group Meeting as part of the EIA by Nemai Consulting to specifically discuss water related issues with Makoppa Agriculture. The context for the meeting is provided in the response to item 1.4 above (part of No. 210).</p> <p>11.2. As a Focus Group Meeting, it was not openly publicised. The chairman of Makoppa Agriculture was requested to forward the invitation to his constituents. The details of the meeting were initially communicated to the chairman of Makoppa Agriculture on 1 December 2017, which included a copy of the draft agenda. The same approach was followed with the chairmen of the Hartbeespoort and Crocodile River (West) Irrigation Boards. A series of public meetings were subsequently held during the review of the Draft Scoping Report. Notification of these meetings included onsite notices, newspaper notices, emails and bulk SMSs. These meetings were open to all and water related matters were also raised during these meetings.</p> <p>11.3. See response to item 11.2 above.</p>
214.	<p>12. During the meeting on 25 January 2018, you suggested to our members how the Department of Water Affairs intends to manage the water flow and supply of water in the Crocodile River, to provide adequate water to be pumped and transferred to Lephale as well as for the sowing farmers and their irrigation purposes if the weir is to be</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>12. Response provided.</p> <p>12.1. DWS initiated a feasibility study in 2008 entitled "Mokolo and Crocodile River (West) Water Augmentation Project (MCWAP) Feasibility Study". The feasibility study was commissioned to augment the water supply to</p>

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	<p>constructed in the Crocodile River. You indicated that the weir will be 6 metres high with a foundation of 9 metres deep. In light of this, you are requested to provide the following:</p> <p>12.1. Has the decision to build the Vlieëpoort weir on the Crocodile River in the Mooivallei district of Thabazimbi already been decided?</p> <p>12.2. If so:</p> <p>12.2.1. When was such a decision taken?</p> <p>12.2.2. Where was the decision taken?</p> <p>12.2.3. Which departments made this decision?</p> <p>12.2.4. Who was present when the decision was made?</p> <p>12.2.5. Copies of the minutes of the meeting and / or meetings where the decision was made are requested.</p> <p>12.2.6. Has the decision been published in any Government Gazette? If so, the number of the Government Gazette is requested.</p> <p>12.2.7. What process did the Department and / or Departments that made the decision follow to inform any person affected by the decision that such a decision is being considered and that such a decision could be made? In case it was in the form of verbal discussion, when, by who, to whom and where did this verbal notification take place? If it was in writing, copies of it are requested.</p> <p>12.3. In light of your information on the specifications of the weir:</p> <p>12.3.1. When was the decision made about the specifications?</p> <p>12.3.2. Who made the decision about the specifications?</p> <p>12.3.3. Where was the decision made about the specifications?</p> <p>12.3.4. Who were all present at the decision about the specifications?</p>			<p>the Lephalale area. The reports were completed in September 2010. Thereafter, DWS initiated a Post Feasibility Bridging Study <i>in 2015</i> to review and update the Feasibility Study findings for MCWAP-2A. The following technical reports are of particular relevance to the information contained within the Scoping Report (refer to MCWAP website):</p> <ul style="list-style-type: none"> • P RSA A000/00/8809 - Pre-feasibility Stage: Supporting Report 1: Water Requirements; • P RSA A000/00/8909 - Pre-feasibility Stage: Supporting Report 2: Water Resources; • P RSA A000/00/9109 - Pre-feasibility Stage: Supporting Report 4: Dam, Weir and River Engineering; • P RSA A000/00/9309 - Pre-feasibility Stage: Supporting Report 6: Crocodile River Transfer Scheme Options; • P RSA A000/00/8109 - Feasibility Stage: Main Report: MCWAP Feasibility Study Technical Module Summary; • P RSA A000/00/8609 - Feasibility Stage: Supporting Report 10: Requirements for the Sustainable Delivery of Water; • P RSA A000/00/8309 - Feasibility Stage: Supporting Report 12: Phase 2 Feasibility Stage; and • P RSA 000/A00/18413 - Feasibility Bridging Stage: MCWAP-2: Post Feasibility Bridging Study; Review Report. <p>Section 9.3.1 of the Draft Scoping Report explains the various options considered for the proposed abstraction weir and the selection criteria used as part of the Conceptual and Pre-feasibility stages of the project. The EIA is</p>

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	<p>12.3.5. Copies of the minutes regarding the decision of such specifications are requested.</p> <p>12.4. In addition to your information of the specifications and as previously stated above, you are requested to provide us all architectural reports, drawings, engineering reports, drawings and any other documents referring to the specifications of the weir.</p> <p>12.5. What process did the Department and / or Departments follow to inform the community of Thabazimbi and / or any other person affected by the construction and completion of the weir that a decision has been made to erect the weir? If it was written in writing, copies are requested.</p> <p>12.6. With regards to the period prior to when the decision was made, did you or your company, or are you aware that the Department that made the decision to construct the weir, inform any affected person and / or institution and / or community that such a decision is considered and that any person has the opportunity to their own investigation, inquiries, research and / or impact studies and to obtain advice:</p> <p>12.6.1. With reference to the location where the weir should be constructed;</p> <p>12.6.2. With reference to the costs of the project;</p> <p>12.6.3. With reference to the impact on the community of Thabazimbi, especially business operations and industries;</p> <p>12.6.4. With reference to the financial losses, whether income, depreciation and / or job losses.</p> <p>13. If so:</p> <p>13.1. How was the person notified?</p> <p>13.2. Who is the person that was notified?</p> <p>13.3. Where and when was this person notified?</p> <p>If done in writing, a copy is requested.</p>			<p>assessing the proposed layout that emanated from the Technical Studies. <i>This includes the proposed location of the abstraction weir at Vlieëpoort.</i></p> <p>12.2. Response provided.</p> <p>12.2.1. The decisions to proceed with the Vlieëpoort Abstraction Weir to the EIA phase were made by DWS: Integrated Water Resources Planning at the end of the pre-feasibility and feasibility phases towards the end of 2010. The reports under No. 3 provide the detail.</p> <p>12.2.2. It acted within its delegated authority under Section 109 of the NWA.</p> <p>12.2.3. At DWS following submittal and assessment of reports by consultant.</p> <p>12.2.4. DWS' delegated officials.</p> <p>12.2.5. DWS' delegated officials signed the reports of No. 3.</p> <p>12.2.6. Not required by law. Section 110 requirements will follow after the EIA process.</p> <p>12.2.7. The MCWAP Environmental Module was originally initiated at the end of 2008 under the EIA Regulations of 2006. Over-and-above public participation associated with the EIA protocol, a broader Public Involvement Process (PIP) was also conducted. The Agricultural Sector was recognised as the most prominent interest group, considering the issues surrounding water availability and the land use type encountered in the project area. The project team engaged with this sector prior to the initiation of the EIA</p>

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	<p>14. Was the said person also further requested and / or invited to make any submission and / or presentation and / or suggestions to the Department and / or Departments who are considering making a decision about the weir?</p> <p>15. Was there any person with the above mentioned knowledge that made alternative suggestions and / or submissions before the decision was made to construct the weir? If so, who is the person, when and how did the person suggest alternatives and what are the alternatives suggested? If the proposal and / or presentation is in writing, a copy thereof is requested.</p>			<p>process. On 27 January 2009 a meeting was convened with representatives from the Agricultural Sector, in order to establish an Agricultural Forum. This forum granted the Agricultural Sector an opportunity to collectively engage with the then DWA and the project team regarding planning aspects and the impacts of MCWAP on this interest group. Focus Group meetings were also held with the irrigation boards, which allowed for more technically-orientated discussions. Focus Group meetings were convened on 24 April 2009 in Thabazimbi and Lephalale for MCWAP. The purpose of these Focus Group meetings were primarily to assist with understanding the potential concerns before the formal EIA public participation process commenced. However, the EIA application was subsequently withdrawn following the Scoping phase due to the uncertainty with regards to water demands in the Lephalale area. The current EIA process also held Focus Group Meetings with the Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board and Makoppa Agriculture in January 2018, prior to the commencement of the formal EIA process. The Public Participation process that forms part of the current EIA also affords IAPs the opportunity to comment on the proposed project layout. As part of this process, feedback is provided from the</p>

No.	COMMENT	RAISED BY	SOURCE	RESPONSE
				<p>relevant members of the project team on the comments received, including the suggestions pertaining to alternative sites for the proposed abstraction weir. Section 9.3.1 of the Draft Scoping Report explains the options considered and selection criteria employed in terms of the proposed abstraction weir.</p> <p>12.3. Refer to response to item 12.1 above.</p> <p>12.4. Drawings of the proposed Vlieëpoort Abstraction Weir are contained in Appendix H of the Draft Scoping Report.</p> <p>12.5. Refer to response to item 12.2.7 above.</p> <p>12.6. Refer to response to item 12.2.7 above.</p> <p>13. Refer to response to item 12.2.7 above.</p> <p>14. Refer to response to item 12.2.7 above.</p> <p>15. The Issues/Comments and Response Report that accompanied the Draft Scoping Report of MCWAP-2 (application subsequently withdrawn – see response to item 12.2.7 above) lists various options suggested by IAPs (see Section 2 of the Issues/Comments and Response Report) and the responses from the project team. A copy of the Issues and Response Report is available on the project website.</p>
215.	<p>16. As you should be aware, the Department of Water Affairs utilises weirs to measure overflow water in the Crocodile River at the Hugo gauging weir and the Makoppa gauging weir. You are requested to provide copies of all measurements of all overflow water for the Hugo gauging weir (between Koedoeskop and Thabazimbi) as well as the Makoppa gauging weir (between Thabazimbi and Rooibokkraal) for the past 5 years. Full copies of each and every measurement in this period are requested with specific reference to:</p> <p>16.1. When was the measurement done?</p> <p>16.2. Where was the measurement done?</p> <p>16.3. By whom was the measurement done?</p> <p>16.4. What exactly was the measurement?</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>16. It is confirmed that DWS operate the gauging stations mentioned in the letter. The Haakdongdrift Gauging Weir (Paul Hugo) is numbered A2H132 and is in operation since 14 October 1987. The Faure Gauging Weir (Makoppa) is numbered A2H128 and is in operation since 29 July 2002.</p> <p>16.1. Since the opening of the stations. Data are continuously updated and reviewed.</p> <p>16.2. At the stations. (Haakdongdrift: Lat: -24,69508 & Long: 27,409; Faure: Lat: -24,39619 & Long: 27,08983).</p> <p>16.3. Electronic instrumentation.</p> <p>16.4. The flow data for the abovementioned gauging weirs were provided to Makoppa Agriculture.</p>

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	<p>17. Do you allege that the results of the measurements taken over the last 5 years at the Hugo gauging weir and the Makoppa gauging weir have been taken into account before the decision was made to construct the weir? If so:</p> <p>17.1. Who on your behalf or the Department of Water Affairs had the results under his control?</p> <p>17.2. What process was followed to incorporate the results of the 2 gauging weirs with the consideration of where and how high the weir should be built? A detailed breakdown is requested.</p>			<p>Additionally verified data until 31 May 2018 is available at the following link: https://www.dwa.gov.za/Hydrology/Verified/.</p> <p>17. The MCWAP-2A uses the return flow generated in the Crocodile River (West) catchment. The process set out in the National Water Act (Chapter 4) is used to determine the Existing Lawful Water Use which will be released. See No. 4. The qualifying periods are set out in Section 33 of the NWA.</p>
216.	<p>18. As you are aware, Makoppa Agriculture members are not part of the Crocodile River (West) Irrigation Scheme, and our members are solely dependent on the overflow as it is provided, mainly from Hartbeespoort Dam, which provides the Roodekopjes Dam and thereafter the Vaalkop Dam. You stated at the meeting on 25 January 2018 that there is an expectation of a water shortage already in 2026. For this exact reason, Phase 2 to Phase 4 are planned to provide water for the Crocodile River if such a shortage occurs. In view of your own prediction that there will be a shortage of water, you are requested to provide reasons as to why there is no immediate proceeding of Phases 2 to 4, but rather waiting for a shortage to occur before going ahead with these phases. You are requested to provide detailed reasons.</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>18. The Existing Lawful Water Use (see No. 4) which will be honoured is determined in terms of the National Water Act. It would take at least 8 years to implement Phase 4, i.e. long after Medupi's FGD should be functional. The Minister can also manage the allocation of water through the Reconciliation Strategy to delay the re-use of water by Municipalities.</p>
217.	<p>19. You are requested to provide us with all the environmental impact reports, research, queries, investigations, results, and / or any processes of whatever nature and what is being done about the various options and alternatives to transfer the water to Lephalale.</p> <p>20. You are requested to provide detailed reasons why the Departments and / or Departments have decided to construct the weir at Mooivallei, Thabazimbi.</p> <p>21. You are also requested to provide detailed reasons as to why the Department and / or considerations referred to in paragraph 19 above have been rejected and dismissed.</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>19. See response to item 8.3 above. The proposed MCWAP-2A Water Transfer Infrastructure is the topic of the current EIA that is underway, and the process is currently in the Scoping Phase.</p> <p>20. Refer to the following sections of the Draft Scoping Report:</p> <ul style="list-style-type: none"> • Section 3 – Project Background and Motivation; • Section 8 – Need and Desirability; • Section 9.3 – Abstraction Weir; <p>21. Section 9.3.1 of the Draft Scoping Report explains the options considered and selection criteria employed in terms of the proposed abstraction weir. In addition, also refer to the following report: P RSA A000/00/9109 - Pre-feasibility Stage: Supporting</p>

No.	COMMENT	RAISED BY	SOURCE	RESPONSE
				Report 4: Dam, Weir and River Engineering (available on the project website www.dwa.gov.za/Projects/MCWAP/).
218.	<p>22. Have any impact studies been carried out and reports received regarding the handling and removal of the silt after completion of the weir? If so:</p> <p>22.1. Who conducted these studies?</p> <p>22.2. When did impact studies take place?</p> <p>22.3. Were the results of the impact studies taken into account before the decision was reached to construct the weir?</p> <p>If so, you are asked to explain how the Department intends to deal with the silt. Copies of all impact studies, reports and results in this regard are requested.</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>22. Sediment Management is discussed in Section 9.3.4 of the Draft Scoping Report (also refer to Appendix J).</p> <p>22.1. Mokolo Crocodile Consultants.</p> <p>22.2. Interim Sediment Quality Report dated 26 October 2015 (Appendix J of the Draft Scoping Report).</p> <p>22.3. See item 22.2 above.</p>
219.	<p>23. Do you allege that an alternative proposal of building a dam in the Crocodile River, although with a lesser capacity than the Roodekopjes Dam, was considered and if it has been considered, you are requested to provide reasons as to why it was rejected? If such an alternative proposal has not been considered, you are requested to indicate why there was a failure to investigate this before a decision was made to construct the weir at Mooivallei.</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>23. The Klipvoor and Vaalkop Dams were completed in the 1970's, Mokolo Dam was completed in 1980. The raising of Dams such as the Klipvoor Dam and Mokolo Dam, as well as the construction of additional dams on the Crocodile River (West) system remains an option to be considered in the future for further water resources development. The creation of storage poses the following challenges:</p> <ul style="list-style-type: none"> • It does not provide adequate yield; • It is costly and not viable in current circumstances; • It also has the further challenge in that the Crocodile and Mokolo catchments are part of the international river basin shared with three other countries. Agreement will have to be secured in terms of the Revised SADC Protocol on Shared Water Courses that will take a significant period of time to obtain; • In the Crocodile River (West) System with a high percentage of return flows passing through, the ability of the Dam to store high flows (floods) for later use is diminished and make it less effective, and • Filling times required.

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				<p>These items were extensively discussed during the Crocodile Working Group Meeting and the Agri-Forum meeting (refer to response to item 12.1 above).</p> <p>The available storage in the <i>Hartbeespoort Dam on the Crocodile River (West)</i> are not being used optimally at this stage due to the steady stream of return flows that has kept Hartbeespoort Dam spilling most of the time during the past decade and a half. This storage capacity will be better utilised once water transfer of water to the Lephalale area commences.</p> <p>MCWAP-2A uses the return flow generated throughout the year. It produces a steady stream and therefore is no balancing storage is needed.</p>
220.	<p>24. We further remind you that our members reserve all their rights in respect of the actions of the officials of the respective Departments, and we also reserve our rights to fully respond to the responses that you submit to us in terms of this letter.</p> <p>25. If you believe that any of the questions must be comprehensively responded to by Government Departments, then you are requested to forward it and to inform us accordingly.</p> <p>26. If you prefer that this letter must be addressed to any Government Department that is responsible for any aspect related to the construction of the weir, we request that you provide the contact details, either a contact number or e-mail address of the contact person of such Departments to whom we must send this letter.</p> <p>27. We want to assure you that these issues are the source of grave concern to our members and that you can count on our co-operation to find a prompt solution to these concerns.</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>24. Noted without prejudice.</p> <p>25. Noted.</p> <p>26. As part of the EIA's Public Participation process any correspondence received is directed to the relevant members of the project team, which in this case is DWS (Applicant).</p> <p>27. Noted. Follow-up Focus Group Meetings will be convened with the three irrigation groups (Hartbeespoort Irrigation Board, Crocodile River Irrigation Board and Makoppa Agriculture) during the EIA phase.</p> <p><u>Additional response</u></p> <p><i>A Focus Group Meeting will be convened with the Hartbeespoort Irrigation Board and Crocodile River (West) Irrigation Board in October 2018 as part of the review period of the Draft EIA Report. Minutes of the meeting will be attached to the Final EIA Report.</i></p> <p><i>The above Focus Group Meeting with the Hartbeespoort Irrigation Board and Crocodile River (West) Irrigation Board was held on 2 October 2018. In addition, a Focus</i></p>

No.	COMMENT	RAISED BY	SOURCE	RESPONSE
				<i>Group Meeting was held with the Makoppa Agriculture AD HOC Committee on 3 October 2018.</i>
221.	<p>28. Makoppa Agriculture on behalf of all its members is not in favour of the construction of a weir at Mooivallei, Thabazimbi, and our members believe that alternative proposals and options should be considered, especially considering:</p> <p>28.1. The location where the weir should be built, together with the shortening of the pipeline to be constructed;</p> <p>28.2. The stipulated number of servitudes that are likely to be registered;</p> <p>28.3. The associated cost savings;</p> <p>28.4. The disruption and negative impact on the environment and business operations with associated job losses;</p> <p>28.5. The sustainability of the supply of water to the crop and irrigation farmers.</p> <p>In addition, with the consideration of the alternative proposals and options, there should still be sufficient water to be transferred to Lephale.</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>28. Refer to response to item 21 above.</p> <p>The water requirements of the lawful water users are secured through Existing Lawful Water Use in terms of the National Water Act, No. 36 of 1998. Existing Lawful Water Uses were accounted for in assessing the availability of water for the transfer scheme. DWS does not guarantee the assurance of supply in accordance with the National Water Act.</p> <p>The Vlieëpoort Abstraction Weir will make provision for a gauging facility to monitor flows at the abstraction works.</p>
222.	<p>29. We also kindly request, especially in light of the exclusion of our members' participation and input with regards to the project, that you keep us informed of any further developments and / or decisions and / or continuation and / or progress and / or any other steps taken whatsoever by you or any Department in connection with the project. As you should be aware, this project will greatly influence the continuation of most of our members' farming operations due to the shortage of water supply that will be directly caused by this project. Major financial losses with associated job losses as well as property losses are predicted and this matter is viewed in a very serious light by our members.</p> <p>We thank you for your cooperation and request for a response within 30 days of this. Should you fail to respond within 30 days, Makoppa Agriculture will consider legal advice and further legal action.</p>	Makoppa Agriculture	Letter (26/02/2018)	<p>29. See responses to items 10.2 and 11.2 above with regards to the engagement with Makoppa Agriculture.</p> <p>30. Receipt of the letter from Makoppa Agriculture was acknowledged on 28 February 2018. It was noted in the acknowledgement that the comments in the letter will be incorporated into the Comments and Responses Report and feedback will be sought from the project team. In accordance with the EIA process the updated Comments and Responses Report (this current version of the document) will be submitted to DEA with the Final Scoping Report. The public participation timeframes are stipulated in the EIA Regulations of 2014 (as amended).</p>

No.	COMMENT	RAISED BY	SOURCE	RESPONSE
	30. We await your feedback.			

3 COMMENTS AND RESPONSES – SCOPING PHASE

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
223.	If wetlands can be avoided then the project could be a GA, otherwise a water use licence is required. Perhaps the Risk Matrix should be completed.	P Ackerman	Email (05/03/2018)	A meeting was held with the DWS Limpopo North Proto CMA in December 2017. The DWS officials indicated that an IWULA needed to be compiled and submitted.
224.	<p>Thank you for the email received and copied below for ease of reference.</p> <ol style="list-style-type: none"> 1. I refer to the last consultation meeting where a request was made for copies of minutes of that meeting together with minutes of the previous meetings. An undertaking was given that these would be forthcoming soon after the meeting. As far as I am aware, this has not been received by anyone in our list of affected parties. 2. Secondly, I also requested a copy of the PowerPoint presentations, if this could also be forwarded at your earliest convenience. 3. Thirdly, after the previous meeting (now roughly 2 to 3 years ago), it was relayed to Mooivallei landowners that a meeting would be convened with us to discuss the details of the project as it pertained to the 10 or so landowners in the Mooivallei area. This was intimated and referred to again at the last meeting, but has not yet happened. 	G. Bauer	Email (05/03/2018)	<p>The minutes of the previous Focus Group Meeting held with the Makoppa Irrigation Farmers, was provided to the IAP on 06/03/2018.</p> <p>A PDF copy of the presentation was sent to the IAP on 06/03/2018.</p> <p>An invitation to the focus group meeting that was held with the Mooivallei landowners on 13/03/2018.</p> <p><i>Refer to Appendix V of the Final Scoping Report for a copy of the minutes of the focus group meeting held with the Mooivallei landowners.</i></p>
225.	We would like to provide equipment/plant; site toilets; etc. to the contractors and sub-contractors on site as we located in this affected area and service this area on a daily basis. As this project falls within the core area of our local economy we believe that this can uplift the local economy as we employ local people in this area.	JC Havenga	Email and Reply Form (05/03/2018)	TCTA has a Supply Chain Management (SCM) Transformation Policy that embraces principles of local economic empowerment amongst other requirements. Some of the principles of this Policy will be translated into contractual obligations for the contractor(s) appointed for the implementation of this project. TCTA will strongly monitor the implementation of these contractual obligations to ensure optimum benefits to the beneficiaries.
226.	<p>Thanks for the conversation today regarding the attached documents. I would like to request that we arrange a meeting on the farm as soon as possible.</p> <p>I would like to discuss the following:</p>	G du Preez	Email (05/03/2018)	<p>A landowner consultation meeting was held with Mr. du Preez on 05 May 2018. The purpose of the meeting was to provide:</p> <ul style="list-style-type: none"> • More information regarding the project and its background;

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	<ul style="list-style-type: none"> • Timing of the project; • Impact of the burrow; • Impact on farming activity high value game; and • Access on and of the Farm. <p>Your assistance in this matter will be appreciated.</p>			<ul style="list-style-type: none"> • More information on the current state of the Environmental Impact Assessment Process; • An opportunity to submit further concerns and objections; • An opportunity to deliver inputs; • An opportunity to directly consult the project team to what extent they will be affected, e.g. Construction process, servitudes, etc. <p>Responses include:</p> <ul style="list-style-type: none"> • Refer to the indicative implementation programme Section 9.9 of the Draft EIA Report. • The potential impacts associated with the borrow pits will be identified and assessed as part of the separate Scoping and EIA Process. Suitable mitigation measures will also be identified. • Refer to No. 111 for the response to compensation. • Refer to Sections 12.4.5, 12.4.6 and 12.5.1 of the EMPr for the protocol for accessing farms, which will be aligned to the TAU-SA protocol.
227.	<p>Dear Johann</p> <p>Unfortunately I cannot attend the EIA for Phase 2 of MCWAP. Attached please find a presentation by Department Water Affairs at a TUT / HIF workshop in 2011 when we considered the potential impact of developments in Ellisras (Lephalale) on the Hartbeespoort Dam. Also see surface area of HBPD at reduced levels. This was part of the HBPD resource management Plan documentation and it was part of the Metsi-a-me programme that started in 2006.</p> <p>The percentage time the dam level will drop to 60%, as and when water is released from the HBPD to augment the Mokolo Dam level, was our major concern. The basis for the concern is the quality of water in the HBPD which is highly eutrophic at times and this would stimulate hyacinth propagation especially on the muddy plains (beach) that will be exposed when water level is at 60% for long periods of time. The figure indicates how the surface area of water in the dam will reduce until 60% level, as seen as the yellow water mark. The dam was in the red zone during the 1992 to 1975 period when the dam wall</p>	F.J. Botha	Email (05/03/2018)	<p>Potentially significant impacts to Hartbeespoort Dam were identified in the Draft Scoping Report, which need to be assessed further in the EIA phase.</p> <p><i><u>Additional response</u></i> <i>A Dedicated Focus Group Meeting was held with representatives from the Dam on 25 April 2018, to discuss the key issues (refer to the minutes of the public meeting held in Hartbeespoort Dam on 13 March 2018, in Appendix U of the Final Scoping Report)</i></p> <p><i>A Socio-Economic Impact Assessment (SEIA) (refer to Appendix I6 of the Draft EIA Report for a copy of the SEIA)</i></p> <p><i>Refer to Appendix I8 of the Draft EIA Report for a copy of the Hartbeespoort Dam Specialist Opinion)</i></p> <p><i>Refer to Appendix N for a media statement of the DWS</i></p>

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	<p>was raised and then again in 1983 during the drought. For the past 10 years the dam level never dropped below 87%. Please note the concern is not the fact that developments in Medupi etc. will be supplied with water from the HBPD (this is a typical augmentation policy of DWS to transfer water from one catchment over natural barriers to another catchment) but the concern is that the supply will come from increased recycle which will come from the HBPD catchments, where population is increasing and no green drop enforcement is evident, as well as the fact that non-point source pollution is on the rise. The result will be that hyper eutrophication in HBPD will be stimulated and hyacinths will take over. This is the type of problems which were treated by Metsi-a-me programme that was abandoned. One can thus say that the 2008 augmentation decision was based on the fact that Metsi-a-me programme would implement the necessary Resource Management Plan which was assumed by the MCWAP that would be in place. Now the local community is facing the same situation that existed before the Metsi-a-me programme was approved and a general deterioration will seriously affect property values etc. around the dam.</p>			<p><i>Ministers' visit to Hartbeespoort Dam.</i></p>
228.	<p>Linked to No. 229.</p> <p>A climate change impact assessment. Since the Thabametsi case this is compulsory. As most of this water will go to coal mining / coal fired power generation, this project directly fuels climate change - burning water and coal to fuel climate change.</p>	Adam Gunn	Email (06/03/2018)	<p>Refer to No. 40 for response to climate change.</p> <p>The climate change impacts associated with the power stations, coal mines and other intended water users need to be assessed as part of the respective environmental assessments conducted for each of these developments, as they are the sources of the impacts.</p> <p><u><i>Additional Response</i></u> <i>Refer to the Greenhouse Gas Emissions Study in Appendix I10 of the Draft EIA Report. The aforementioned study concluded that "the expected GHG emissions from the new MCWAP-2A and the fluctuating water levels in Hartbeespoort Dam are considered small. The construction emissions will cease once the project is complete and the Hartbeespoort Dam will remain a net GHG emitter".</i></p>

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229.	<p>In the dam water levels, the year of study is limited to October to May months.</p> <p>Could you please provide me with the presentation in 3 formats for the applicable slides:</p> <ol style="list-style-type: none"> 1. As presented, i.e. October to May 2. Scenario June to September 3. Scenario of entire 12 months, i.e. October to September. <p>I would appreciate having access to this before the meeting on 13th.</p>	G. Bauer	Email (06/03/2018)	<p>A response was provided from the Water Resources Specialist as follows:</p> <p><i>“As I explained at the meeting when the issue was raised the label indicated on the graphs “(Planning Year: October to May)” is incorrect. The analysis was carried out using simulation for 12 months in each year of the planning period.”</i></p>
230.	Donavan, I see there is correspondence again with regards to this matter. What is the latest with regards to the pipeline?	T. Roux	Email (06/03/2018)	<p>The EIA process, which was placed on hold, has commenced. There are various public meetings that are planned for next week and the Draft Scoping Report is out for public review. The preferred option for the pipeline has not been chosen yet and will only be determined in the EIA phase.</p> <p><i>Additional Response</i> <i>The Best Practicable Environmental Option (BPEO) for the pipeline is as follows (refer to Section 14.6 of the Draft EIA Report):</i></p> <ul style="list-style-type: none"> • Section 1 – Central Route; • Section 2 – Central Route; • Section 3 – Central Route; and • Section 4 – Alternative D1.
231.	Ok, are all of our previous concerns still valid? Please keep me informed.	T. Roux	Email (06/03/2018)	Your previous concerns raised in October 2016 have been incorporated into the Comments and Responses Report (Appendix M of the Draft EIA Report).
232.	<ol style="list-style-type: none"> 1. What is the total projected transfer per day? The annual figures are difficult to digest. 2. The most important studies are: <ol style="list-style-type: none"> 2.1 A study of the hydrological impact (especially downstream of the weir and in the Winter months). I cannot see that this is being done. And it must be done. 2.2 A climate change impact assessment. Since the Thabametsi case this is compulsory. As most of this water will go to coal mining / coal fired power generation, this project 	Adam Gunn	Email (06/03/2018)	<ol style="list-style-type: none"> 1. Nominal $75 \text{ million m}^3/\text{a} = 2,4 \text{ m}^3/\text{s}$. 2.1 This was conducted as part of the Reconciliation Strategy (refer to Appendix Q of the Draft Scoping Report for a copy of the presentation). 2.2 Refer to No. 40 for response to climate change. The climate change impacts associated with the power stations, coal mines and other intended water users need to be assessed as part of the respective

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	<p>directly fuels climate change- burning water and coal to fuel climate change.</p> <p>3. Who is financing this project? Please provide a detailed organogram of the investors and institutions involved.</p>			<p>environmental assessments conducted for each of these developments, as they are the sources of the impacts.</p> <p><i>See No. 228 for response on climate change.</i></p> <p>3. The Minister directed TCTA to co-finance and implement MCWAP subject to environmental authorisation. The water users repay such off-budget loans for the project after concluding off-take agreements.</p>
233.	<p>Meanwhile another 250 m Eskom servitude has been placed on my farm with 2 new lines, which is in total 4 lines. So please keep the pipeline off of the farm, I will appreciate it very much. There are many detours. If not, we will talk about the farms replacement (R) value. The place will be worth nothing. It is 570 ha in size and there is no place on the farm where the lines cannot be seen.</p>	T. Roux	Email (07/03/2018)	<p>To minimise impacts to the receiving environment and current land uses, the proposed pipeline route attempts to remain alongside existing linear-type infrastructure, such as roads (main roads and dirt roads), the railway line (i.e. section of approximately 56 km), transmission lines, industrial corridors and farm boundaries. This is also aligned with the Environmental Management Framework (EMF) for the Waterberg District Municipality.</p> <p>Compensation is payable in accordance with prevailing legislation <i>at the time</i>.</p> <p><u>Additional response</u> <i>The issue related to farm replacement value may be considered at the later stage, if indeed the encumbrance found reasonable after a due diligence exercise by the valuer.</i></p>
234.	<p>ACKNOWLEDGEMENT OF RECEIPT OF THE NEW APPLICATION FOR ENVIRONMENTAL AUTHORISATION (ENVIRONMENTAL IMPACT ASSESSMENT PROCESS) AND SCOPING REPORT FOR THE PROPOSED DEVELOPMENT OF THE MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJCT (PHASE 2A) (MCWAP-2A): WATER TRANSFER INFRASTRUCTURE IN THE LIMPOPO PROVINCE</p> <p>The Department confirms having received the Application for Environmental Authorisation and Draft Scoping Report for the</p>	Department of Environmental Affairs (DEA)	Letter (08/03/2018)	Acknowledgement received.

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	<p>above-mentioned project on 05 March 2018. You have submitted these documents to comply with the Environmental Impact Assessment (EIA) Regulations, 2014, as amended.</p> <p>Please take note of Regulation 40(3) of the EIA Regulations, 2014, as amended, which states that potential Interested & Affected Parties, including the Competent Authority, may be provided with an opportunity to comment on reports and plans contemplated in Regulation 40(1) of the EIA Regulations, 2014, as amended, prior to the submission of an application but must be provided an opportunity to comment on such reports once an application has been submitted to the Competent Authority.</p> <p>Note that in terms of Regulation 45 of the EIA Regulations, 2014, as amended, this application will lapse if the applicant fails to meet any of the time-frames prescribed in terms of these Regulations, unless an extension has been granted by the Department in terms of Regulations 3 (7) of the EIA Regulations, 2014, as amended.</p> <p>All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which are available on the Departmental Website (https://www.environment.gov.za/contacts/national_office). No faxed and e-mailed applications; applications delivered to Security or applications placed in the Departmental Tender Box will be accepted.</p> <p>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.</p>			
235.	<p>I just want to know if they going to start with that pipeline with Crocodile and Mogol and where it will happen? From where to where? I have the Plaashek Pub and Grill on Steenbokpan and also want to know if it is going to happen and if there is somewhere we can hand in our CV's?</p>	Fransie Beukes	Email (08/03/2018)	<p>The anticipated commencement of construction is the fourth quarter of 2019, if Environmental Authorisation is obtained.</p> <p>I've attached an overall map of the proposed project as well as a zoomed-in map of the proposed project footprint</p>

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				<p>in the north, in the Steenbokpan area.</p> <p>We are only busy with the Environmental Impact Assessment at this stage, as this is our company's function. Please contact TCTA, who is the Implementing Agent, for queries pertaining to the construction phase.</p>
236.	<p>Please could you ask the relevant person or provide me his number so I can get the input I am requiring, i.e.</p> <ol style="list-style-type: none"> 1. October to May 2. June to September 3. Scenario of entire 12 months, i.e. October to September. 	G. Bauer	Email (08/03/2018)	<p>The specialists' details were provided to the IAP on 08/03/2018.</p> <p>A response was provided by the water resources specialist, as follows:</p> <p><i>"The storage projection results presented at the meeting in Thabazimbi on 25 January 2018 were based on simulations of all the months in the projection period and therefore contains the information requested by Dr Bauer. This is shown in the attached slides using the storage projection of Hartbeespoort Dam as an example with the last slide a zoomed in view of the long-term graph annotated to indicate the month in the simulation."</i></p>
237.	<p>I apologize for appearing to be pedantic and difficult, but on a presentation of this magnitude if such a typographical error is discovered it needs to be corrected ASAP, and the presentation resubmitted to all who saw it with the corrected error. I assumed that once this had been highlighted at the meeting it would have been corrected before being included in the minutes and sent to interested parties.</p> <p>Kindly request that the entire presentation with the correct annotation is forwarded so we have the correct graphs with the correct depiction of months, i.e. October through September.</p>	G. Bauer	Email (09/03/2018)	Copy of presentation was provided to the IAP on 18/04/2018.
238.	<p>Did you look at shifting the weir to Stockpoort? The route will be 35 km where you will install the pipeline in 170 days, as opposed to the current route which will take 555 days. In addition to the volume of water which must be pumped, you can use a 1 400mm pipe which has a pressure of 18 bar or 180 head metre, where on the current route 45 bar or 450 head metre must be pumped to transfer the same volume.</p>	S Engelbrecht	Email (09/03/2018)	Section 9.3.1 of the Draft Scoping Report explains the various options considered for the proposed abstraction weir and the selection criteria used as part of the Conceptual and Pre-feasibility stages of the project.

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	<p>As a consequence, you will use less power and smaller transmission lines would need to be constructed.</p> <p>Could you please provide reasons as to why the dam cannot be built at Stockpoort, with all the financial savings that the dam's shift can allow for the project and the time it takes for the project can be completed faster?</p>			
239.	Which routes are proposed 20 km outside Thabazimbi?	J Wilkinson	Email (09/03/2018)	Two locality maps were provided via email to the IAP showing the proposed pipeline routes and options north of Thabazimbi.
240.	Which route orange, green or turquoise or is it not final yet?	J Wilkinson	Email (13/03/2018)	<p>The green route (Alternative B) is no longer feasible and has since been omitted (as explained in the Draft Scoping Report).</p> <p><i>Additional Response</i> The Best Practicable Environmental Option (BPEO) for the pipeline is as follows (refer to Section 14.6 of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 1 – Central Route; • Section 2 – Central Route; • Section 3 – Central Route; and • Section 4 – Alternative D1.
241.	My farm is just south of the planned pipeline on the farm Vlakplaas. There is an existing digging where they took gravel for the construction of the railway line. Please consult me when you start with the planned location of the borrow pits.	A Venter	Email (13/03/2018)	<p><i>Additional Response</i> To be considered as part of the separate Scoping and EIA Process which will be undertaken for all the proposed borrow pits.</p> <p><i>Spoil material may be used to rehabilitate old borrow pits.</i></p>
242.	Topsoil must be stripped and correctly stored. Large pertinent trees must be protected. Borrow pit must be shaped afterwards with 1:3 or flatter side slopes, free drained, topsoil must be re- distributed, erosion protection measures must be put in place, ripped and scarified and re- vegetated with same kind of natural indigenous vegetation.	P Ackerman	Email (13/03/2018)	<p>The EMPr will include these mitigation measures.</p> <p><i>Additional Response</i> Refer to the following sections from the EMPr (Appendix K of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 12.4.12 (Management of Topsoil); • Section 12.4.20 (Management of Flora); • Section 12.4.26 (Management of Reinstatement and Rehabilitation).
243.	Please add me too the email group.	B. Grobler	Email (13/03/2018)	Acknowledged. IAP was added to the IAP Database.

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	FYI: I am one of the beneficiaries of a Trust that owns one of the affected farms. Owner: Jan & Marita Trust Farm: Grootfontein 714 KQ			
244.	I stay in the Cape, is it possible to get the minutes of the meeting?	V van den Berg	Email (13/03/2018)	Copy of minutes of public meeting were provided to the IAP.
245.	<ol style="list-style-type: none"> 1. We address this letter to you on behalf of our client, Thaba Tholo (Pty) Ltd and refer specifically to the Draft Scoping Report dated February 2018. 2. Page 26 of the abovementioned Scoping Report states that critical issues related to the project will be the subject of a separate Water Use Licence (WUL) process. Specifically it states that: "An Integrated Water Use Licence Application will be submitted separately to the DWS Limpopo Regional Office. The following requirements of the NWA will be catered for: Provision for the Reserve requirements of the Crocodile River (West); and ensure that existing lawful use is respected and protected." 3. Please provide us with full details of the WULA and specifically how we may register, on behalf of our client, as an Interested and Affected Party in that process. 	Gunn Attorneys	Letter (13/03/2018)	<ol style="list-style-type: none"> 1. Noted. <i>Introductory statement.</i> 2. Correct. 3. Will be processed later.
246.	<ol style="list-style-type: none"> 1. The increase in runoff water in the Crocodile River since the year 2000 had greatly increased due to the steady development in Gauteng and the water from the Rand Water Board. <ol style="list-style-type: none"> a. Are you only going to use the water from the Rand Water Board or are you also going to use the water that we make a living from as landowners along the river? b. Will my risk of water supply be increased due to this scheme? c. You will take water from one area and use it in another area. You will indicate that it is of national interest. Why must the Makoppa irrigation area on their own have these risks and/or pay for power supply which benefits the whole country? d. The banks are already concerned about our water 	CJ Lee	Comment Sheet (14/03/2018)	<ol style="list-style-type: none"> a. Opening conclusion is correct. The proposed transfer scheme is targeting only the return flow. b. Refer to response to No. 259 and No. 4 with regards to Existing Lawful Water Use and availability of water for the proposed water transfer scheme. c. The irrigation downstream of Vlieëpoort is not entitled to water from storage in the upstream dams and takes place from surplus water (natural flows) in the Crocodile River (West). The tributaries contributing to the flow in the Crocodile downstream of "Hugo" Weir will be passed through and/or be released at the Vlieëpoort Abstraction Weir. The structure will be designed to create the minimum storage required to enable the abstraction of the water to be transferred, which will be released from

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	<p>supply. Why? What are you going to do in the case of there not being an increase in risks with our water supply to reassure them?</p> <p>e. Do you measure the water that goes through Gauteng and comes from Rand Water?</p>			<p>the dams upstream. The new water demands will be provided from the additional return flows, and not from natural flows from the intermediate catchment. A network of existing and new gauging stations will also be utilised to manage and monitor the flows, which will form part of the River Management System.</p> <p>d. Refer to response to No. 259 and No. 4 with regards to Existing Lawful Water Use and availability of water for the proposed water transfer scheme.</p> <p>e. Yes, this is measured by DWS and/or Rand Water.</p>
247.	<p>Will farmers upstream of the weir site be affected in any way? When the flow of water in the Crocodile River stops at the Haakdoorn drift weir (Paul Hugo Weir), what will happen? Are you going to buy out any water rights, or stop pumping, above the proposed weir at Mooivallei?</p>	C White and M White	Comment Sheet (14/03/2018)	<p>The River Management System is required to monitor, control and manage the releases into the river, the flows in the river and abstractions from the river enabling honouring Existing Lawful Water Use (see No. 4) requirements.</p> <p>Refer to No. 142 for response to flood hydrology in terms of the impoundment associated with the proposed abstraction weir</p>
248.	<p>As a member of the community and ward committee residing at Steenbokpan I think this will affect us a lot as a community. Based on the issue of social labour plan (SLP). Firstly as a community we will be affected by the influx of people seeking employment.</p> <p>This will affect our health services in terms of disease, pregnancy and other related diseases.</p> <p>Skills development. The community in this area lack education as we only have a combined school ending at grade 9. We need our community to be given skills as a way of ploughing back to the community.</p>	D Mochambi	Comment Sheet (15/03/2018)	<p>Although the influx of people to Steenbokpan cannot be single handily be attributed to this project due to other developments earmarked in the nearby areas, TCTA together with its development partners, e.g. Lephalale Local Municipality will establish mechanisms for dealing with potential social impacts of this project on the local communities. In terms of Health Services, TCTA's Contractor will be required to implement adequate health services to its workers to reduce the pressure on existing public facilities or support the provision of additional support to the existing health facilities.</p> <p>Education and skills development is one of the key pillars of TCTA's Transformation Policy. As indicated in No. 244 above, skills development will form part of contractual obligations to appointed contractor(s) and failure to achieve set targets would lead to penalties.</p>
249.	<p>1. I want to know what the date of starting time is; 2. Will your company be offering us a social labour plan e.g.</p>	B Mabula	Comment Sheet (15/03/2018)	<p>1. Refer to the indicative implementation programme Section 9.9 of the Draft Scoping Report.</p>

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	<p>Skill development;</p> <p>3. I'm talking on behalf of the community because most of us we didn't get the opportunity to finish school because poor services during that time e.g. job loss and many more.</p> <p>4. If your company is offering skill development, when will it start?</p>			<p>2. TCTA is not a mining company, therefore TCTA will not be offering a Social & Labour Plan (SLP), but TCTA has a SCM (<i>Supply Chain Management</i>) Transformation Policy that covers employment, enterprise and supplier development, education and skills development. This might be equated to the SLP in the mine, however, the development of this is TCTA's mandate and this policy could be customised for each specific project.</p> <p>3. Refer to 2 above.</p> <p>4. TCTA through its contractor(s) will offer skills development to some of the members of the community and this will commence as soon as a contractor(s) are appointed.</p>
250.	<p>An EIA study needs various inputs to cover all aspects of Social, Economic and Political dimensions.</p> <p>Environmental aspects must be based on scientific facts while the SEP effects usually include a fair amount of emotional flavour.</p> <p>The Mokolo Dam was built some forty years ago south-east of Lephalale (previously Ellisras) on the Mokolo River, a tributary of the Limpopo River, to supply water to the Grootegeluk coal mine and Matimba, Eskom's first dry-cooled power station. Irrigators downstream and the Lephalale town also received water from the dam (DWA, 1979). The dam, with its gross storage capacity of 145 million m³, or 68% of the mean annual runoff (MAR), still remains today the only major impoundment in the Mokolo River catchment. An increase in water demand will occur soon when the 4 800 megawatt Medupi Power Station, currently under construction, comes on stream. This will be followed by further increases in water requirements as more coal-fired power stations, coal-based industries and mines are developed and urban growth follows. To investigate the options of water supply to the area the DWA embarked on a detailed study in 2008. The Mokolo and Crocodile (West) Water Augmentation Project (MCWAP) study was undertaken in two phases; a pre-feasibility first phase,</p>	Frikkie Botha	Email (15/03/2018)	<p>Potentially significant impacts to Hartbeespoort Dam were identified in the Draft Scoping Report, which need to be assessed further in the EIA phase. Dedicated Focus Group Meeting to be held with representatives from the Dam to discuss the key issues (refer to Appendix U of the Final Scoping Report for the minutes of the public meeting held in Hartbeespoort Dam on 13 March 2018).</p> <p>There is no link between the Mokolo and Crocodile Rivers. Medupi is designed to take water from Crocodile River (West).</p> <p><u><i>Additional Response</i></u> <i>Refer to the Hartbeespoort Dam Specialist Opinion in Appendix 18 of the Draft EIA Report.</i></p> <p><i>A Focus Group Meeting was held with representatives from the Hartbeespoort Dam to discuss their key issues on 25 April 2018.</i></p> <p><i>A public meeting will be held by Hartbeespoort Dam in October 2018 as part of the review period of the Draft EIA Report.</i></p>

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	<p>followed by the feasibility phase (DWA, 2010b).</p> <p>During this time, the Metsi-a-me programme was well under way (started in 2006 but abandoned in 2015).</p> <p>My intention is to point out that water quality to Mokolo Dam was not considered in the augmentation study and that make-up of any shortfall on the assumptions would be from the Vaal river system, firstly in the form of increased recycle due to population growth in the Johannesburg area and secondly by additional transfer from the Vaal River by pumping across the watershed.</p> <p>The effect of eutrophication in the HBPD and the associated growth of water hyacinth was not a deciding consideration. Tourism etc. was not considered and a second home was not even mentioned.</p> <p>The EIA study will focus on “Reimagining Water systems in and around the HBPD” to fill the gaps left open when the augmentation study was approved in 2010. These will include sustainability, eutrophication and integrated water quality. From the work done by the HRSC over the past year we have seen that water hyacinth do play a big role in water quality control. However this must be properly managed to avoid deterioration of biodiversity in and around the dam.</p> <p>Natural ecosystems also provide many services that are crucial for sustainability and health of human society, such as people dependant on quality of life around the HBPD. Ecosystem services are the benefits people obtain from ecosystems (i.e. goods and services) and can be classified into provisioning (e.g. fibre, fuel wood); regulating (e.g. water and climate regulation); supporting (e.g. soil retention) and cultural (e.g. aesthetic value).</p> <p>I trust that we can work together as a team to justify the need for developing a long term resource management plan (RMP) for the HBPD that will be fully aligned with the long term socio</p>			

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	political developments around Lephalale.			
251.	<p><u>Impact on farm: Schilpadfontein: U RE/328: as affected by the proposed water pipeline to Steenbokpan</u></p> <p>I would like to start by thanking you for an informative meeting held on 2018/03/15.</p> <p>I would like to assure you that I am not opposed to working together and to ultimately find a middle ground where both parties will be satisfied.</p> <p>The letter is intended to inform you about how the above mentioned pipeline does not only affect my property, but my business, future and life of my employees and family, as well as my son and his family.</p> <ol style="list-style-type: none"> 1. I bought the property in August 2017 from a Mr Hennie Smit. 2. I was not aware of the possibility of the abovementioned pipeline and that it would affect my property. 3. If I had known about the pipeline or possibility thereof, I would not have bought the farm and occupied it as it is disruptive to my business and life. 4. Considerable reasons that lead to the purchasing of the farm was its location and buildings. 5 I thus request whether your office informed Mr Smit about the pipeline and construction and if he attended any meetings. (Any documented proof, for example: an attendance register?). <p><u>1 Direct impact and degradation to life and business</u></p> <ol style="list-style-type: none"> 1. I Operate a successful tourism and hunting safari business within the premises of the farm, and use the entire property and the buildings for that purpose (On average 100 international hunters per year). 2. The business operates on the farm for 12 months of the year, with peak periods between April and October. 3. Hunting is also undertaken on the farm during this time, 	K de Meyer	Letter (15/03/2018)	<ul style="list-style-type: none"> • Refer to No. 92 for response to impacts to ecotourism. • Refer to No. 146 for response to impacts to existing infrastructure. • Refer to No. 82 for response in terms of the Wildlife Impact Assessment. Further details in terms of the approach to dealing with sensitive game and the related mitigation measures will be included in the EIA Report. <p><i><u>Additional Response</u></i> A landowner consultation meeting was held with Mr. de Meyer on 4 May 2018, on his farm Schuldpadfontein RE/328 (refer to Appendix P of the Draft EIA Report for the minutes of the meeting).</p>

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	<p>where guns are used which might place the workers on site in danger.</p> <p>4. The full extent of the farm is used for this purpose.</p> <p>5. Game has been relocated to this farm (not in big numbers). Works on the pipeline will impact the business and game on the farm. Just the possibility of the pipeline affects my business and purchases, as well as my daily existence, due to the uncertainty that comes with it and the path forward. It affects me, my family, business and all my workers. Management decisions can therefore not be made due to this as the future is unsure.</p> <p>It has a negative impact on my business (for example where will my current and future clients be hosted?).</p> <p>6. Buildings are situated close to the road and will be impacted by the construction of the pipeline. All buildings will not be able to be utilised during the construction process and thereafter.</p> <p>7. The construction and associated processes (such as fencing off of construction area) will lead to my property becoming unusable for the reason why it was purchased.</p> <p>8. With regards to my marketing of my clients to get them to come to South Africa, the existence of my premises and buildings are critical It will be heavily degraded by the construction of the pipeline on the premises, seeing as everything occurs on the doorsteps of the buildings.</p> <p>9. No construction can take place during the period between March and October. These are my busy months during which it will detrimentally affect my business and can also lead to the total collapse thereof.</p> <p>10. The farm is permanently occupied by me and my partner, as well as my son and his family in a separate house. Then there is also my labourers who also reside on the farm and will also be negatively impacted by this.</p> <p>11. Outside of my normal business, I also do Nyala farming/breeding in the corridor of the camp which falls within the zone of the pipeline.</p> <p>12. The following buildings and fences will be affected by the construction in case of the 40 m zone is applied and used: (the buildings will have to be demolished):</p> <p>1. 1.8m fence with electronic gates;</p>			

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	<p>2. building: entertainment area and swimming pool; The building consists of the following: bar area, kitchen, 2 toilets, lounge, dining room, inverter lighting supply (2), braai area, swimming pool area;</p> <p>3. On-suite room with inverter light supplier;</p> <p>4. A water system consisting of pumps, tanks an big water reservoir, surrounded with fibreglass;</p> <p>5. Big solar panel system for pumps as well as a borehole (equipped for usage);</p> <p>6. Buildings with rooms for labourers, showers and toilets;</p> <p>7. Some of the outside buildings possibly within demolished area;</p> <p>8. Camp for Nyala farming (1 in use and 1 fenced off but not yet in use);</p> <p>9. Building with rooms not currently in use; and</p> <p>10. Vehicle washing bays, currently being built.</p> <p><u>2 The following buildings are also directly or close to the proposed working zone and will also have to be demolished to your discretion</u> The buildings will be very close (10 to 30m) from the work area.</p> <p>1. Housing/buildings for clients (lodge) consist of the following:</p> <p>2. 12 on-suite rooms with light system (inverted);</p> <p>3. An entire dining table;</p> <p>4. A complete fully equipped kitchen;</p> <p>5. One house with 4 bedrooms (3 x inverter light system)</p> <p>2 bathrooms</p> <p>Dining room and lounge;</p> <p>6. Thatch roof lapa area with swimming pool and braai area;</p> <p>7. 2 Wood house with 4 bedrooms (2 x inverted light systems)</p> <p>Dining room and lounge Fully equipped kitchen Washing room Thatch roof lapa area with swimming pool and braai area Parking area for 4 vehicles</p>			

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	<p>8. Outside buildings consist of the following: Covered parking and parking for 4-5 vehicles Slaughtering facilities (even in building for expansion) Butchery Cooling room Storage room 1 Storage room 2 Storage room 3 Storage room 4 9. Water tank and borehole; 10. Housing/buildings for labourers: Rooms 2 x showering facilities Dining hall and kitchen 11. 2 x wooden buildings (Zozo)</p> <p><u>The following buildings and facilities will fall within 30 m to 50 m from the working area and thus not be available for use</u></p> <ol style="list-style-type: none"> 1. Big solar panels and pump and water tank (currently in use) 2. On-suite hut which is used as a room; 3. Diesel generator; 4. Building with fully equipped kitchen; 5. Washing room (on-suite); 6. On suite building with 3 sleeping rooms; 7. On-suite wooden house by the watering hole (currently busy with the building of more rooms) <p><u>The following building is situated in the back of the farm but is not equipped to house international clients, only used by local clients</u></p> <ol style="list-style-type: none"> 1. 3 thatched roof rooms; 2. 1 thatched dining room; 3. 1 thatched building with 2 x showers and bathrooms; and 4. Wooden building by the 2nd watering hole. <p>Due to the nature of the proposed construction, it will be impossible to live my life and continue with my business on the</p>			

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	<p>premises, in case the construction goes ahead. I kindly invite you to please visit me to discuss the circumstances. I also ask that speedy decisions will be taken as this directly affects the lives of me and various labourers (white and black).</p> <p>This currently affects my marketing possibilities directly. The future possible clients want to know and see where they will be accommodated. I cannot show one place online and then accommodate them in another place...this will be negative effect on my clients and can lead to work and business losses. Your co-operation will be appreciated.</p>			
252.	<p>Just a few questions:</p> <ol style="list-style-type: none"> 1. How big is the borrow pit? 2. What is the compensation? 3. Can I oppose it? 	H Hills	Email (16/03/2018)	<ol style="list-style-type: none"> 1. Details of all the borrow pits will be provided as part of separate Scoping and EIA process for all proposed borrow pits, which still needs to commence. <p><i>Additional Response</i> There are 2 proposed borrow pits that directly affects Mr. Hills' properties, namely Vergulde Helm 321 LQ which contains the proposed BP 14 (12,6 ha); and Pontes Estates 744 LQ, which contains the proposed BP 13 (7,7 ha).</p> <ol style="list-style-type: none"> 2. Refer to No. 111 for the response to compensation. 3. The EIA process undertaken to seek Environmental Authorisation for the proposed borrow pits makes provision for public participation, which includes the opportunity for Interested and Affected Parties (IAPs) to raise their concerns. If authorisation is received for the borrow pit the will be an opportunity to appeal the decision.
253.	<p>Tloukola is a local company which offer services of plant (earthmoving equipment) hire. Our interest is opportunities available for us.</p>	M Makola (Tloukola Pty Ltd.)	Reply Form (16/03/2018)	<p>Such opportunities will be published through local media for local companies to explore. However, this will only commence once a contractor(s) are appointed by TCTA.</p>
254.	<ol style="list-style-type: none"> 1) I would like to know whether the entire water flow downstream of the river will become blocked during the construction of the weir. 2) Planned period from construction to completion. 3) Our livelihoods as irrigation farmers depend on the flow of 	B. v. d. Linde	Email and Reply Form (17/03/2018)	<ol style="list-style-type: none"> 1. Existing Lawful Water Use will be released. River diversion works will accommodate such releases <i>during construction</i>. 2. Refer to the indicative implementation programme, Section 9.9 of the Draft Scoping Report.

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	<p>water in the river. Currently there are long periods during which the river does not flow. How are you going to convince the community that more water will flow than the current flow with the pipeline? Excuse my pessimism, but I do not believe you can convince us now. Let the river flow constantly for a 2 year period before construction and then we might be convinced.</p> <p>4) Before any construction can start, financial Compensation MUST be reached between the Department of Water Affairs and registered Water Users, with regards to their permitted water use. Will financial compensation be negotiated before the construction begins?</p> <p>5) We have NO guarantee that we will get water flow on a semi-regular basis in the future. The graphs and presentations are on paper, and paper is very patient. Practically it is not feasible if we currently look at the history of water supply.</p> <p>6) I paid a premium for my farm due to my registered water registration from the Department of Water Affairs. Even the banks see the water registrations as a fixed asset on the value of my property. My registered water use is my license for water to be allowed to use within my limitations. Now I am unable to expand the capacity, due to the uncertainty about future water supply.</p> <p>7) How will the affected water users be financially reimbursed for the loss of property value, as well as loss to future income? If you have read the letter, I thank you in advance for the attention given and expect confirmation thereof.</p>			<ol style="list-style-type: none"> 3. Refer to response to No. 259 with regards to Existing Lawful Water Use (see No. 4) and availability of water for the proposed water transfer scheme. 4. No compensation involved as Existing Lawful Water Use will prevail. See No. 4. 5. See response above to No. 3. It demonstrates the need for the River Management System involving the agricultural sector. 6. See response above to No. 3. An Existing Lawful Water Use is not a Water Use Licence. 7. See response above to No. 3 and No. 4.
255.	We have no concerns if you make the pipeline go along the Enkeldraai border.	T Sauer	Reply Form (19/03/2018)	<p>Noted.</p> <p><i>Additional Response</i> <i>The BPEO for the pipeline is as follows (refer to Section 14.6 of the Draft EIA Report):</i></p> <ul style="list-style-type: none"> • Section 1 – Central Route; • Section 2 – Central Route; • Section 3 – Central Route; and • Section 4 – Alternative D1.
256.	I want to respond to the meeting held with the Mooivallei farmers on 13 March 2018 and what I think may or might be applicable.	W d Clercq	Email (19/03/2018)	<ol style="list-style-type: none"> 1. Only a servitude, not a public road. 2. Provision will be made in the EMPr for the

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	<p>1. Access road along the pipeline – Can the road be constructed so that users next to the river can use the same road as the construction team? This is due to the land being used along the river and unnecessary roads will influence the use of the cultivated land.</p> <p>2. The access road from the tar road to the road along the river is always in poor condition. Additional traffic may significantly deteriorate the road. The request is that the road needs to be maintained regularly, considering that the vehicles are cars or smaller SUVs and not 4x 4s or larger vehicles.</p> <p>3. My property (Portion 9 of the Farm Mooivallei 342 KQ) is such that the water for the house and borehole will become separated by the pipeline and I have to pump 6 out of the 7 days of the week outside the rainy season. I have to be connected to my borehole at all times. The power supply for the borehole is also by means of an overhead power line.</p> <p>4. There is a further request that the first row of citrus trees should be used as a boundary for the servitude.</p> <p>5. The service road after the completion of the project must be the same road used by the maintenance teams and residents. Should the investigation / maintenance teams regularly use the road, assistance must be provided with the maintenance of the road from the tar road. A well-built road can limit unnecessary complaints.</p> <p>The road must accommodate all types of vehicles.</p> <p>If there are any further requests / inquiries, I will contact you again.</p> <p><u>NOTE:</u> Anton van den Berg's e-mail address is krimpvarkies@gmail.com and cell numbers 082 775 6768, 063 805 2555 & 083 926 7039. We only have signal at certain areas and he works in different areas. Can't you help Vodacom equip its existing tower here in our area? Cell C and Vodacom's reception is currently unusable and MTN's signal is only available at certain spots, which makes communication difficult and the work teams will also be hindered by this which leads to many frustrations.</p>			<p>maintenance of the roads used as part of the project.</p> <p><u>Additional Response</u> Refer to Section 12.4. (Management of Existing Services and Infrastructure) and Section 12.4.5 (Management of Access and Traffic) of the EMPr (Appendix K of the Draft EIA Report).</p> <p>3. Refer to No. 146 for response to impacts to existing infrastructure. See No. 2 above.</p> <p>4. This will form part of the discussions to be held during the land acquisition process. The Land Acquisition process is discussed in Section 9.12 of the Draft Scoping Report. Also refer to No. 111.</p> <p>5. To be investigated further. Provision will be made in the Operational Phase EMPr for the maintenance of the access road along the servitude.</p> <p><u>Additional Response</u> Refer to Section 12.5.1 (Management of Access, Routine Maintenance Inspections and Maintenance Works) of the EMPr (Appendix K of the Draft EIA Report).</p> <p>Further provision will be made in the EMPr regarding communication during construction, taking into consideration the poor signal.</p>

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257.	Water use authorisation will be required if the borrow areas (I call them mining areas) are within the regulated areas of watercourses and if they pose a quantum of risk to the characteristics of the watercourses. If there are sand mining areas there also need to be a sand buffer kept at the bottom and sides to still ensure as natural as possible movement of water through the landscape.	P Ackerman	Email (20/03/2018)	To be determined as part of specialist studies for the delineation of watercourses. <i>Additional Response</i> To be incorporated in the EMP in the EIA phase of the Borrow Pits separate Scoping and EIA Process.
258.	Please could you urgently provide us with the full contact details of the person/s responsible for the WULA. Our client requires us to fully engage in the WUL process. On what date will you provide answers to the questions below?	Adam Gunn	Email (20/03/2018)	Refer to response to No. 259 with regards to the IWULA process.
259.	With respect, the sequencing of the authorisations is then illogical and probably illegal. NEMA is asking the DWS to authorise aspects of the Scheme (transfer infrastructure and pits) before the most important details of the Scheme (and even whether there is enough water in the catchments) have been made known. Please seriously consider this request - Postpone the commencement of the infrastructure and pit EIA until the WUL has been through proper public participation. The WUL (if approved) will then deny or confirm whether there is enough water in the catchments and if the latter, will inform what infrastructure is required. Otherwise the EIA may be blocked in court or you may end up re-doing certain aspects because the WUL changes/optimises the design of the Scheme.	Adam Gunn	Email (20/03/2018)	The Verification and Validation of Existing Lawful Water Uses in the Crocodile River (West) is underway in accordance with the National Water Act (see No. 4). The findings to date were presented by DWS during the Focus Group Meetings with the irrigation groups in January 2018 (refer to Appendix Q of the Draft Scoping Report for a copy of the presentation and minutes of these meetings). The availability of water for the proposed transfer of water as part of MCWAP-2A was modelled during the Reconciliation Study, which took into consideration the Existing Lawful Water Uses (including the Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board and the Makoppa Irrigation Area). The return flows from growing urban areas that feed into the Hartbeespoort Dam provide surplus water that is available and targeted for the proposed water transfer, which is more than the natural yield of the Crocodile River (West). Standard principles applied by DWS for water transfer schemes, including provisions for Existing Lawful Water Use as set out in the NWA, will be adhered to. The Water Use Licence Application and Appeals Regulations (GN No. R. 267 of 24 March 2017) prescribe the procedure and requirements for IWULA, as

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				<p>contemplated in section 41 of the NWA, as well as an appeal in terms of the NWA. The intention was to undertake the IWULA in parallel with the EIA, however, during a meeting with the DWS Limpopo North Proto CMA in December 2017 the DWS officials indicated that an IWULA needed to be compiled and submitted separately due to the timeframes indicated in the aforementioned regulations.</p> <p>Considerations from DWS' draft NW&SMP: Volume 2 (March 2018):</p> <ul style="list-style-type: none"> • The supply interventions to meet future needs in the Limpopo Water Management Area North have been identified in the Reconciliation Strategy, as listed below – <ul style="list-style-type: none"> ○ Monitor observed flows and storage levels at strategic points as well as water quality and monitor water use to confirm water requirement projections before implementing options. ○ Plan and implement WC/WDM in all water use sectors. ○ Continue with the implementation of planned bulk water distribution systems, such as the MCWAP-1, ORWRDP phases and water supply systems from Nandoni Dam. • The Crocodile West River System (Crocodile West River Reconciliation Strategy, DWS, 2015) – <ul style="list-style-type: none"> ○ The catchment area of the Crocodile West River is one of the most developed in the country. It is characterized by the sprawling urban and industrial areas of northern Johannesburg and Pretoria, extensive irrigation downstream of Hartbeespoort Dam and large mining developments north of the Magaliesberg. As a result, the Crocodile River is one of the rivers in the country that has been most influenced by human activities, and where more specific management strategies are of paramount importance.

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				<ul style="list-style-type: none"> ○ The water resources that naturally occur in the catchment have already been fully developed and most of the tributaries as well as the main stem of the Crocodile River are highly regulated. Much of the water supplied to the metropolitan areas and some mining developments is transferred from the Vaal River system via Rand Water. This in turn results in large quantities of effluent from the urban and industrial users, most of which is discharged to the river system after treatment, for re-use downstream. In many of the streams and impoundments, water quality is severely compromised by the proportionate large return flows. The effluent return flows constitute a large portion of the water availability in the catchment and are an important resource. ○ The growing water requirements in the Lephalale area in the Mokolo River catchment to the north and north-east of the Crocodile River catchment exceed the available water from the Mokolo River system. The transfer of surplus water in the Crocodile River system to the Lephalale area (Mokolo-Crocodile Water Augmentation Project) will be implemented 2019/2020. ○ The following interventions have been identified in the Strategy – <ul style="list-style-type: none"> ▪ The Rand Water service area in the Crocodile West River catchment will in future continue to be supplied from the Vaal River System and additional re-use will be considered only when surplus becomes available. ▪ The areas north of the Magaliesberg outside the Rand Water supply area will receive increased treated effluent from the metropolitan areas as a future source of water. ▪ In the Waterberg area (north of Crocodile West catchment) the optimal utilisation of local resources will continue and surplus

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				<p>water in the Crocodile West River System will be transferred to the Lephalale area. Intervention to supply short-duration shortfall will be evaluated by investigating demand side management and/or potential augmentation by transferring treated wastewater from the Vaal River System to the Crocodile West River System.</p> <ul style="list-style-type: none"> ▪ Available groundwater resources should be utilised in all areas and opportunities for conjunctive surface / groundwater utilisation should be explored. ▪ Continue with the Crocodile (West) Annual Operating Analyse.
260.	Thank you very much. Where can we hand in CV's and when? Our work is coming to an end at Medupi and would like to hand it in.	F Beukes	Email (20/03/2018)	Recruitment will only commence once contractor(s) are appointed. This is envisaged to commence towards end of 2019. Contractors will establish sites where CVs could be submitted.
261.	<p>Here are a few points we would like to add to the petition.</p> <p>1.1. The scoping report does not make it clear that the most critical issue is studying the impact on the Crocodile River, especially, impact on downstream users such as Thaba Tholo in periods of low flow.</p> <p>1.2. Obtaining accurate transfer figures (the scoping report uses millions m³ per annum). This needs to be broken down into m³ per day to understand the seasonal impact.</p> <p>1.3. Climate change impact. This is compulsory since the Thabametsi case, but they do not mention it anywhere.</p> <p>1.4. Whether other alternatives have been properly considered.</p> <p>1.5. Whether alternative positions for the weir have been considered. It is surely easier and far more cost effective to place the weir/abstraction on the Limpopo River near Lephalale. Why is it being placed as planned at Vlieëpoort?</p> <p>1.6. What are the international water law impacts/ obligations because the Crocodile / Limpopo is an international water course?</p>	D Stander	Email (20/03/2018)	<p>1.1 Refer to response to No. 259 and No. 4 with regards to Existing Lawful Water Use.</p> <p>1.2 75 million m³/a = 205 479 m³/day = 2,4 m³/s.</p> <p>1.3 Refer to No. 40 and No. 302 for responses to climate change.</p> <p>1.4 Refer to No. 2 for response to alternatives.</p> <p>1.5 Section 9.3.1 of the Draft Scoping Report explains the various options considered for the proposed abstraction weir and the selection criteria used as part of the Conceptual and Pre-feasibility stages of the project.</p> <p>1.6 The Crocodile River (West) and Mokolo River catchments form part of the Limpopo River Basin, which is shared by Botswana, Mozambique, South Africa and Zimbabwe. All the basin states are signatories to the Revised Protocol on Shared Watercourses in the South African Development Community (SADC) Region (SADC Revised Protocol). In general, it is incumbent upon the RSA to pursue and establish close co-operation with the neighbouring states with regard to the study and</p>

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	<p>1.7. Involvement / opinion of other downstream countries- Botswana, Zimbabwe, Mozambique.</p> <p>1.8. Finances of the scheme. If this is very expensive water (which it probably is –I recall a figure of between R10 and R20 per m³) then this will just be passed back to the public via Eskom tariff's.</p> <p>1.9. Whether the study will be in line with World Bank environmental and equator Principles.</p> <p>1.10. Who is financing the MCWAP? They need some pressure and need to be involved and aware of the issues.</p>			<p>execution of all projects likely to affect the regime of a shared watercourse such as the Limpopo. South Africa must therefore exchange information with the other Watercourse States and, if found necessary, negotiate the possible effects of planned measures on the condition of the Limpopo Watercourse. MCWAP-1 entail the yield of the existing Mokolo Dam and MCWAP-2A utilise return flows originating from the Vaal River. It is therefore considered that the scheme does not fall within the conditions contained in the SADC Revised Protocol of a planned measure with possible adverse effects for other states in a shared watercourse as indicated in Article 4(1)(b) of the SADC Revised Protocol. As such, it is not considered to be necessary to negotiate the use of the water with the neighbouring states.</p> <p>Notifications in terms Article 4(1)(a) of the SADC Revised Protocol of the RSA's intention to proceed with implementation of the MCWAP, were therefore given to the co-basin states. In the February 2010 letters to the co-basin states RSA stated that the RSA perspective is that there will be no significant adverse effect to any one of the LBPTC members as a result of the MCWAP, for the reasons given above.</p> <p>South Africa has therefore complied with the SADC Revised Protocol and international best practices, and can proceed with the development.</p> <p>1.7 Refer to 1.6 above.</p> <p>1.8 See 1.10 of No. 256. The National Energy Regulator (NERSA) to decide on Eskom tariffs.</p> <p>1.9 The study will be in line with South African environmental legislations (NEMA) and implementation will be guided by the same legislations and funding covenants signed with the funders. The World Bank funds Medupi, FGD a WB</p>

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				<p>requirement. World Bank is not funding the proposed MCWAP-2A.</p> <p>1.10 The project will be funded partly from the Fiscus and from commercial sources for the loans. At this stage of the project, it is not possible to know the funders of the project as funding is sourced later just <i>after Environmental Authorisation (if issued)</i> / before construction commences. TCTA is co-financing through commercial loans and implementing on the back of off-take agreements with the commercial users. DWS react to the need of the users to comply with Medupi EA and World Bank loan. <i>It includes the obligation on the RSA Government that there is sufficient water for the power station.</i></p>
262.	<p>We met at the public meeting at the NG Church in Hartbeespoort. I would just like to check when you will be circulating the minutes of the meeting, as well as the presentations.</p>	M. Heyneke	Email (21/03/2018)	<p>Thank you for having attended the meeting. We are still busy compiling the minutes of the series of meetings held. We will distribute the draft minutes and a copy of the presentation in due course.</p> <p><i>A Copy of consolidated presentation was sent to the IAP on 29 March 2018.</i></p>
263.	<p>Here are the concerns for Gerhard Hans of the Farm Honingvley KQ99 Thabazimbi:</p> <ol style="list-style-type: none"> 1. Wall; 2. Entrance of the farm (Built-in gate / entrance); 3. Garden; 4. Bungalows (Accommodation); 5. Shop (Farm stall); 6. Nut trees (Macadamias); 7. Eskom Site Camp Entrance; 8. 7 Labourers homes; 9. Petrol station; 10. International Hunting; 11. Marsh (Wetland Area); 12. Irrigation Pumps; 13. Irrigation System; 14. Irrigation Dam (Cement); 15. Irrigation Dam (Ground Dam); and 	G. Hans / N. Spies	Email (28/03/2018)	<ul style="list-style-type: none"> • Refer to No. 146 for response to impacts to existing infrastructure. • Refer to No. 92 and No. 111 for the responses with respect to compensation.

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	16. Fish Hatchery System (Streams, Dams and channels).			
264.	Please let me know when it will be possible to circulate the documents below. Please also confirm the deadlines for: 1. Registering as an I&AP; and 2. Submitting comments / questions.	M. Heyneke	Email (28/03/2018)	The IAP was added to the IAP database. A Copy of consolidated presentation sent on 29 March 2018. The minutes will be forwarded separately to all the attendees. The deadline for comments and registration is 11 April 2018.
265.	<p>COMMENTS ON THE DRAFT SCOPING REPORT FOR THE PROPOSED MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJECT (PHASE 2A) (MCWAP-2A): WATER TRANSFER INFRASTRUCTURE, LIMPOPO PROVINCE</p> <p>The application form and draft Scoping Report (SR) received by this Department on 05 March 2018, refer.</p> <p><u>This Department has the following comments on the abovementioned application:</u></p> <p>i. A clear and detailed description of each and every activity applied for must be included in both the application form and final Scoping Report. The description of these listed activities and sub-activities must clearly indicate how they relate to or link to the proposed development, and exact thresholds or capacities for materials and infrastructure must be indicated. If these cannot be provided in the final Scoping Report, reasons must be provided. Please ensure that the listed activities and sub-activities that are applicable and relevant to the proposed development are include in both the application form and the final Scoping Report. The description of the activities included in the application form and the application refers to “various infrastructure” within 32m of watercourse(s). Kindly provide a specific description of the various infrastructure triggering these listed activities. Furthermore, please ensure that activities that are still to be confirmed as stated in the application form are confirmed in the final Scoping Report.</p> <p>ii. Should the activities applied for in the application form differ from those mentioned in the final SR, an amended</p>	DEA	Letter (28/03/2018)	<p>i. Refer to Table 4 and Section 9 of the Final Scoping Report.</p> <p>ii. It was not deemed necessary to submit an amended Application Form.</p> <p>iii. Refer to Appendix Y (comments received during the Sopping Phase) and Appendix Z (Comments and Reponses Report) of the Final Scoping Report.</p> <p>iv. Refer to Section 10 of the Final Scoping Report.</p> <p>v. Refer to Appendix A of the Final Scoping Report.</p> <p>vi. Refer to Section 2 of the Final Scoping Report, which shows the alignment between the content of the report with the requirements of Appendix 2 of GN No. R 982 of 4 December 2014 (as amended).</p> <p>vii. EIA timeframes noted.</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>application form must be submitted.</p> <p>iii. Please ensure that all issues raised and comments received during the circulation of the draft SR from registered interested and affected parties (I&APs) and organs of state which have jurisdiction (including this Departments Biodiversity & Conservation Unit) in respect of the proposed activity are adequately addressed in the final SR. Proof of correspondence with the various stakeholders must be included in the final SR. Should you be unable to obtain comments, proof must be submitted to the Department of the attempts that were made to obtain comments. The Public Participation Process must be conducted in terms of Regulation 39, 40, 41, 42, 43 & 44 of the EIA Regulations 2014, as amended.</p> <p>iv. Please provide a description of any identified alternatives for the proposed activity that are feasible and reasonable, including the advantages and disadvantages that the proposed activity or alternatives will have on the environment and on the community that may be affected by the activity as per Appendix 2 (1) (c) (d) and 2 (h) of GN R.982 of 2014 (as amended). Alternatively, you should submit written proof of an investigation and motivation if no reasonable or feasible alternatives exist in terms of Appendix 2 (2) (x) (xi).</p> <p>v. Please ensure that the final SR includes a legible site layout map; an environmental sensitivity map indicating all environmental sensitive areas and features; a map combining a layout map superimposed (overlain) on the environmental sensitivity map; and a regional map of the area. Please be informed that Google maps will not be accepted for decision-making purposes.</p> <p>vi. You are further reminded that the final SR to be submitted to this Department must comply with all the requirements in terms of the scope of assessment and content of Scoping reports in accordance with Appendix 2 and Regulation 21 (1) of the EIA Regulations, 2014, as amended.</p> <p>vii. Further note that in terms of Regulation 45 of the EIA Regulations 2014, as amended, this application will lapse if the applicant fails to meet any of the timeframes prescribed</p>			

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	<p>in terms of these Regulations, unless an extension has been granted in terms of Regulation 3(7). 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 environmental authorisation being granted by the Department.</p>			
266.	<p>Here are a few points:</p> <p>Firstly in TCTA's meeting it was acknowledged that an industrial corridor was created and that all future expansions would take place there.</p> <p>Secondly is that when TCTA is done, I cannot farm economically anymore and the farm just gets smaller every time and even where there is a servitude, I also have to share it and the road of the servitude has to be kept clear.</p> <p>Thirdly the dam which will be built is and stays a problem due to there been no plan made with the effluent and this portion will be expropriated.</p> <p>Fourthly is the borrow pit which will remove even more ground that cannot be used to farm.</p> <p>Fifthly every time someone is finished, the farms value becomes less. From the first time till now, has the farms value decreased by more than R4 million, so when TCTA is done will it be even less.</p> <p>There is already 4 huge powerlines which move through the heart of the farm plus a small powerline which moves over the ground. The road cuts the farm into two plus I have already lost land with the Lephalale road. The railway line also cuts a piece off of the farm. And also heard of is the expansion of the railway line. So the farm is now split into three sections.</p> <p>I am a Brahman stud farmer and the buyers don't like to see all the development taking place on the farm as they think that I am an untidy farmer that can't qualify as a stud farmer, so my</p>	J. Erasmus	Email (03/04/2018)	<p>The industrial corridor refers to the zone demarcated as part of the EMF for the Waterberg District Municipality (refer to No. 187).</p> <p>Provision is made in the EIA Report for the adequate management of water discharged during the maintenance of the reservoirs and pipeline.</p> <p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 111 for the response to compensation; • No. 273 for response to land matters. <p><i><u>Additional response:</u></i> <i>Your request has been noted and it will be evaluated further during TCTA's formal discussion to see if it fits outright purchase. At this point in time is still premature to commit.</i></p>

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	<p>sales decline.</p> <p>I also allow hunting by a professional hunter that brings tourists and shoot pigs right where the pipeline will come. So that income falls away completely.</p> <p>I ask that TCTA buys my land at market value plus solatium costs as well as costs involved in clearing everything (moving costs)</p>			
267.	<p>I refer to the last meeting held with Mooivallei property owners re the pipeline.</p> <p>Our comments have to be in by 11 April. We were expecting the following after the meeting so as to better enabled us to make informed input:</p> <ol style="list-style-type: none"> 1. Google Earth data so we can use this to view the weir and pipeline details as it pertains to our area. 2. A visit to a pump station was to be arranged so as to be able to determine the extent of the operation and noise levels. 	G. Bauer	Email (05/04/2018)	<p>Spatial data was provided to the IAP.</p> <p>Details of site visit to be confirmed by the Mooivallei landowners.</p> <p><i>Additional Response</i> A site visit was held with the Mooivallei Landowners on 4 May 2018 at the MCWAP-1 Pump Station at the Mokolo Dam. The purpose of the site visit was to provide landowners of an idea.</p>
268.	<p>The property Buffelsvley 127 KQ Ptn O is an extensive buffalo and exotic game breeding facility. 2 X Buffalo bulls alone on this 170 strong herd of buffalo are ranging from R60 million to R187 million. This excludes numerous other expensive Buffalo and other exotic game species.</p> <p>The buffalo camps host arguably 2 of the most expensive sought after Buffalo breeding herds in the country and as a specialist study on these herds and other game is of utmost and critical importance w.r.t the fact that this breeding herds are next to and close to the intended water pipeline servitude.</p> <p>On the farm Karoobult 126 KQ Ptn 0 directly next to the breeding camps on Buffelsvley the borrow pit creates another huge concern. The intended borrow pit with all its infrastructure, offices and activities will most certainly have to be investigated w.r.t the buffalo and other game on the farm Buffelsvley 127 KQ Ptn.</p>	J. L. Pretorius (K P Trust)	Comment Sheet (07/04/2018)	<p>Refer to No. 82 for response in terms of the Wildlife Impact Assessment. Further details in terms of the approach to dealing with sensitive game and the related mitigation measures will be included in the EIA Report.</p> <p><i>Additional Response</i> Refer to the Wildlife Impact Assessment (Appendix 17 of the Draft EIA Report). Extract from Section 8 Discussion of the abovementioned report states the following: "the Central Route from Paarl 124 KQ follows a servitude road that can be exploited in reducing the impact on affected properties. However, both Buffelsvley 127 KQ and Karoobult 126 KQ are wildlife farms that will require that internal fence-lines on the properties be moved to achieve the desired buffer zone from construction activities".</p>

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	The servitude road between Buffelsvley 127 KQ P 0 and Karoobult 126 KQ P 0 must be investigated.			
269.	<p>This property is an international hunting outfitter with top class lodge facilities and eco-tourism. The property has several breeding camps for exotic game next to or close to the intended servitude and construction area. This property must be properly investigated as there are several activities that may be impacted on during and after construction. As hunting and eco-tourism occurs year round, a just and equitable solution must be investigated and all impacts must be investigated.</p> <p>THE IMPACT ON GAME IN CAMPS NEEDS PROPER INVESTIGATION AND MITIGATION. THE IMPACT ON HUNTING AND ECO-TOURISM NEEDS PROPER INVESTIGATION AND MITIGATION.</p> <p>This property has several Eskom servitudes that already cause havoc for the owner and the cumulative impact of the intended servitude must be investigated. Specialist studies on all factors must be conducted on this property (unit).</p> <p>THE IMPACT OF BORROW PITS CLOSE TO THIS PROPERTY NEEDS PROPER INVESTIGATION AND MITIGATION.</p>	P. G. Bothma (C G N B Boerdery Beleggings PTY Ltd.)	Comment Sheet (07/04/2018)	<p>Refer to No. 82 for response in terms of the Wildlife Impact Assessment.</p> <p>Refer to No. 92 for response to impacts to eco-tourism.</p>
270.	<p>This is an irrigation property down river from the intended weir/wall at Vlieëpoort on the Crocodile River. The owner is concerned about pollution, silting, water availability and the impact the construction may have on his water availability. The fear and uncertainty created by this intended MCWAP project may impact on current and future decisions and the fact that this impact on potential buyers who will have the same fears. These fears and uncertainties may not only impact on the market value of the property but may prevent the owner to expand or progress. Any business plans ahead, and this factor may be impeded upon. The impact of this project and the water issue is a huge concern and as mentioned above reaches much further than meets the eye and must be addressed and studied. The fact that this MCWAP project</p>	A. J. Nel	Comment Sheet (07/04/2018)	<p>Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA.</p> <p>The EMPr will include a Water Quality Monitoring Programme as well as measures to manage sedimentation and pollution during construction. An Aquatic Impact Assessment will also be undertaken during the EIA phase.</p> <p><i>Additional Response</i> Refer to the following sections of the EMPr (Appendix K of the Draft EIA Report):</p> <ul style="list-style-type: none"> Section 7.1.4 Environmental Parameters (Table 6) – states that biomonitoring needs to be undertaken in

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	<p>enjoys higher priority for water than irrigation further concerns the owner. This is the issues that needs attention in the studies for valuers to base their opinion on.</p>			<p><i>terms of aquatic health;</i></p> <ul style="list-style-type: none"> • <i>Section 7.2 Environmental Monitoring – provision is made for water quality monitoring and biomonitoring during construction phase;</i> • <i>Section 12.4.19 Management of Pollution Generation Potential – Water quality: construction activities must be limited to high flow season and may not cause an adverse impact that results in more than a 10% change in baseline values.</i> • <i>Section 12.4.22 Management of Watercourses – target of the measures in this section is to allow the downstream water quality to remain within acceptable ranges, as determined through the baseline monitoring.</i> <p><i>Refer to the Baseline Aquatic Impact Assessment (Appendix 11 of the Draft EIA Report):</i></p> <ul style="list-style-type: none"> • <i>Section 7.4 for all recommendations and mitigation measures provided by the specialist in order to minimise impacts on watercourses;</i> • <i>Section 7.6 aquatic monitoring programme recommended by the specialist.</i> <p><i>A Socio-Economic Impact Assessment earmarked for the EIA phase will need to consider impacts to property value and uncertainty further.</i></p> <p><i><u>Additional Response</u></i> <i>Refer to Section 6.3.4 Land Values in the Socio-Economic Impact Assessment (Appendix 16 of the Draft EIA Report).</i></p> <p><i>Refer to DWS' draft NW&SMP (March 2018) on website with regards to water for irrigation.</i></p>
271.	<p>This property is situated directly next to the intended water works and related infrastructure of the MCWAP project.</p> <p>Mr. du Plessis uses this property as his head office for his extensive farming operations on numerous farms in the</p>	L. du Plessis	Comment Sheet 07/04/2018)	<p>Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA.</p> <p>The EMPr will include a Water Quality Monitoring Programme as well as measures to manage</p>

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	<p>Crocodile River (West) Irrigation Board area and for his irrigation on the Makoppa section (see list). This property is also used as a game breeding farm for Buffalo, eco-tourism, mountain biking and hunting. This property is extensively developed and specialist studies on all factors must be conducted as the intended works on his doorstep will most certainly impact this property and the use and the value. Any impact on Hampton may impact his whole operation and any impact on his water rights or legal water use may have a dire impact on this extensive operation. All here is planned to the T and an extensive study must be conducted on Hampton and his other properties. The issue of compensation for water or compensation for the impact on the market value must be discussed.</p> <p>The owner is concerned about silting, water availability and the impact this intended construction and new water user may have on the use and value of his irrigation properties. The water study makes it clear that the Minister may impede on water use if needed or when in a critical stage water is needed to ensure water availability for the MCWAP scheme. We know that this water pipeline has higher priority guarantee than irrigation farming and use. This factor and the impact this may have on the market value of these properties must be addressed and investigated. We are aware that Water Affairs and TCTA cannot guarantee water, but can they guarantee that the availability as it has been for many years will not change – this remains a huge concern and is not good for the marketability of these properties. Who will buy these properties and what will they pay with the knowledge of what may happen due to this project.</p>			<p>sedimentation and pollution during construction. An Aquatic Impact Assessment will also be undertaken during the EIA phase.</p> <p><i>See No. 270 above for responses to water quality. Also refer to Section 7.4.6 mitigation for erosion and sedimentation.</i></p> <p>The relevant specialist studies will be conducted to assess the potentially significant impacts associated with the proposed project on this property.</p>
272.	<p>The property is a hunting farm with lodge facilities boasting numerous species of game. The use of this property will be severely impacted on during and after construction and must be thoroughly investigated w.r.t all factors that may impact on the use and the market value of this property. A servitude road between the farms Karoobult 126 KQ P 0 and Buffelsvley 127 P 0 must also be investigated with the final route of the intended pipeline servitude. The big concern with this property</p>	P. Visser	Comment Sheet (07/04/2018)	<p>Refer to the following responses:</p> <ul style="list-style-type: none"> • No. 94 for response to fences; and • No. 82 for response in terms of the Wildlife Impact Assessment. <p>Provision will be made in the EMPr to manage impacts with regards to the following matters raised (amongst others):</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>is the game breeding program that is situated near or close to the intended construction area, both water transfer pipeline and the intended borrow pit. The owner breeds with numerous species of exotic game and a specialist study covering all aspects mentioned must be conducted on this property.</p> <p>My biggest concern with the proposed project is as follows:</p> <ol style="list-style-type: none"> The game steel camp is approximately 100 m away from the border fence. <ul style="list-style-type: none"> I have a golden wildebeest breeding project; A king wildebeest breeding project; A black impala breeding project; A copper springbuck breeding project; An Inyala breeding project; A trophy impala breeding project; and A kudu trophy breeding project. The proposed sand mining projects must be approximately 200 m from the border fence and 200 m from my access road to the house to make it as unsightly as possible if applicable to me. The pipeline must be situated in the servitude road between the two farms Karoobult and Buffelsvley, since the servitude has fallen into disuse and consequently will cover the least space. Lockable gates have to be erected on farm boundaries; Planned operational sites have to be fenced off with game fencing before operation begins. 			<ul style="list-style-type: none"> • Access control; • Fencing arrangements; and • Wildlife. <p>See response in No. 268.</p>
273.	<p>This property is the direct receiver of balancing dams, storage dams and silt removal facilities. A pump station and Eskom substation and all related works and infrastructure will be on this property. The farm is used for irrigation and as an economic unit with all related water use letters, an impact of this scale will make this an uneconomic unit. The intended</p>	M. Coetzee and S. Coetzee	Comment Sheet (07/04/2018)	<p>A Socio-Economic Impact Assessment (SEIA) earmarked for the EIA phase will need to consider these impacts further.</p> <p>The valuer will perform valuations in terms of the prevailing legislation <i>at the time</i>.</p>

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	<p>construction and the infrastructure on this property must be investigated and the owner has already made peace with the fact that he will not be able to farm on this property no more. The fact that this farm is a very important part of his irrigation unit on the Crocodile River (West) Irrigation Scheme must also be investigated. A loss to him here may severely impact on the economics of his whole operation as a unit. A specialist investigation into this matter needs to be conducted and not left for valuers. Valuers must use such specialist studies in their reports to quantify damages and impacts. This property must be acquired as a whole.</p>			<p>Refer to No. 111 for the response to compensation.</p> <p><i>Additional Response</i> Refer to the SEIA in Appendix I6 of the Draft EIA Report.</p>
274.	<p>This farm receives a balancing dam, water line infrastructure and a borrow pit. This property is already severely impacted by several servitudes and infrastructure will render this property useless to the owner. Mr. Erasmus is a stud Brahman breeder and cannot continue in this state. The construction period, infrastructure and the already heavily burdened property if they purchase this property as a whole and would be just to the receiving owner. Proper facts and impact factors and the cumulative impact must be addressed in this situation.</p>	J. Erasmus	Comment Sheet (07/04/2018)	Refer to No. 273 for response to land matters.
275.	<p>This property is a game breeding farm with game camps close to or next to the intended servitude and construction of the water pipeline. There are 2 small koppies in the way of the servitude that needs investigation and properly a deviation around it. This property has international investors and the game breeding program must be investigated and all factors that may impact on this property must be investigated. Specialist studies must be conducted on all factors that may impact on this property. Any activities due to the borrow pits close to or next to this property needs investigation.</p>	D. van Niekerk	Comment Sheet (07/04/2018)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 111 for the response to compensation; • No. 273 for response to land matters; • No. 82 for response in terms of the Wildlife Impact Assessment; • Section 14.4 of the Scoping Report lists the various specialist studies identified.
276.	<p>This property is a cattle and game breeding property. The huge construction of balancing dam and water line infrastructure and the fact that most of this area is rock and koppies may have a huge impact during and after construction.</p> <p>A proper study must be conducted on this property as the rock in this area will entail massive construction noise and dust.</p>	J. Coetzee	Comment Sheet (08/04/2018)	<p>Refer to the following responses:</p> <ul style="list-style-type: none"> • No. 82 for response in terms of the Wildlife Impact Assessment. Further details in terms of the approach to dealing with sensitive game and the related mitigation measures will be included in the EIA Report; and • No. 83 for response to noise and dust.

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	<p>As part of this property is rented with the option to purchase and it is directly where the borrow pit is situated. We need a proper study here as well as this could have massive implications for this agreement.</p> <p>The person Mr. Marais, who rents with the option to buy is a game breeder and infrastructure in this regard has been erected. The construction of the water line infrastructure and the borrow pit on the property must be investigated.</p>			<p>Provision will be made in the EMPr to manage impacts with regards to the following matters raised (amongst others):</p> <ul style="list-style-type: none"> • Existing infrastructure; • Noise and dust; and • Wildlife. <p><i>Additional Response</i> Refer to the sections below from the EMPr (Appendix K of the Draft EIA Report):</p> <ul style="list-style-type: none"> • Section 12.4.4 Management of Existing Services and Infrastructure; • Section 12.4.19 Management of Pollution Generation Potential; • Section 12.4.21 Management of Fauna.
277.	<p>This property is used as a game and cattle farm. The hunting season is always fully booked and the fact that these activities must be halted during construction is a huge concern. For several seasons their usual clients must seek alternative hunting farms and they may end up losing their clients forever. These factors must be properly investigated as this may have huge financial impacts and loss to the owner. Specialist studies in this regard must be conducted. The impact on the value of the property during and after construction needs investigation and all factors must be addressed to assist the valuers to refer to your document.</p>	G. Erasmus (Meklenburg Trust)	Comment Sheet (08/04/2018)	Refer to No. 92 for response to impacts to eco-tourism.
278.	<p>The farm Welgevonden is a game breeding farm with the camps from border to border and are located right next to the intended water line construction and infrastructure. Expensive exotic and rare game species like Sable, Roan etc. are kept in these camps and the intended construction will have a huge impact on this operation. Specialist studies on all factors must be conducted w.r.t the above. The farm Grootfontein right next to the construction is part of an international nature reserve and the intended construction may have a huge impact on the use and value of this property. Specialist studies in this regard must be conducted.</p>	J. B van der Esthuizen (Matlabas Manzi Safaris PTY Ltd.)	Comment Sheet (08/04/2018)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 111 for the response to compensation; • No. 273 for response to land matters; • No. 82 for response in terms of the Wildlife Impact Assessment; • Section 14.4 of the Scoping Report lists the various specialist studies identified. <p><i>Additional Response</i> Refer to the Wildlife Impact Assessment, Appendix 17 of the Draft EIA Report, which assessed the impact of the proposed project on wildlife situated in the study area.</p>

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279.	<p>This property with local and international investors is a game breeding farm with very expensive Sable and Buffalo and various other exotic game.</p> <p>2 of the sable camps borders the road which will cause a direct impact on the animals in the camps. This whole operation will be in harm's way and the intended water line infrastructure construction and the balancing dam and borrow pit will have a huge impact on this operation.</p> <p>Specialist studies on all factors that may impact on the use and value during and after construction must be conducted. The game in camps next to, on or close to the construction is a huge issue of huge importance and how this will be mitigated. Again valuers needs a report with specialist studies to refer to when impact and financial loss is addressed in a "before-and-after" valuation report.</p>	D. Smith	Comment Sheet (08/04/2018)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 111 for the response to compensation; • No. 273 for response to land matters; • No. 82 for response in terms of the Wildlife Impact Assessment; • Section 14.4 of the Scoping Report lists the various specialist studies identified. <p>See No. 278 above.</p>
280.	<p>HUNTING AND GAME BREEDING NEAR OR AT BORROW PITS-SPECIALIST STUDIES</p> <p>The following properties will be impacted by borrow pits.</p> <p>Mecklenburg 310 KQ P 1-Game breeding and Hunting; Karoobult 126 KQ P 0-Game breeding and hunting; Buffelsvley 127 KQ P 0 - Game breeding -very expensive 170 herd strong Buffalo Project; Leeuwbosch 129 KQ P1-area of pit rented with option to buy; Rietfontein 15 KQ P 4- the pit is on Ptn 0 but next to my clients breeding camps and hunting concession; Inkerman 819 KQ P 0- game breeding camps; Zandfontein 382 LQ -THIS WIL DIRECTLY IMPACT JULIUS ERASMUS ON Rooipan 357 LQ P 4; Rooipan 357 LQ P 4- CUMULATIVE IMPACT WITH PIT ON Zandfontein 382 LQ P 0;</p> <p>Please ensure studies that takes all factors in account on these properties and the fact that these borrow pits may have a massive impact over a long period of time. Game will have to be relocated and big trees will be destroyed and all hunting will</p>	B. Enslin	Comment Sheet (08/04/2018)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 111 for the response to compensation; • No. 273 for response to land matters; • No. 82 for response in terms of the Wildlife Impact Assessment; • Section 14.4 of the Scoping Report lists the various specialist studies identified. <p>See No. 278 above.</p>

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	seize. Future potential losses on brand building for hunting concessions must be addressed and discussed and progeny loss must be dealt with.			
281.	<p>MCWAP WATER AUGMENTATION PROJECT</p> <p>To whom it may concern.</p> <p>SERVITUDEWATCH CC represents several land owners on the MCWAP water project and our participation is to inform and assist our clients w.r.t. to impacts on market values of properties and or rights, other actual financial loss and to request specialist studies on various factors of importance to refer to.</p> <p>Negotiations for the servitude rights for the pipeline infrastructure, balancing dams and borrow pits and the possible impact on market values of properties with irrigation and water use rights MUST be done with reference to a reliable independent source, namely the EIA and related specialist studies.</p> <p>The draft scoping report is in all aspects fairly complete but, an important factor which I did not see, is the discussion on market value impacts and other financial loss w.r.t the intended construction period and servitudes and related infrastructure taking all factors into consideration.</p> <p>My reason for this input is that when Valuers conduct “before-and-after” valuations, they must analyse, compute and motivate their reports.</p> <p>This is always a matter of dispute and the fact that TCTA or Water Affairs do have expropriation rights, it is the duty of the independent EIA consultants to address these factors and points of importance to assist in fair and equitable compensation as dictated by section 25 of our Constitution.</p> <p>A Valuer must refer to credible sources when analysing and motivating an opinion on impact on market value of the whole</p>	B. Enslin	Letter (08/04/2018)	<p>Refer to the following:</p> <ul style="list-style-type: none"> • No. 111 for the response to compensation; • No. 273 for response to land matters. <i>The valuer will amongst other consider the EIA;</i> • No. 82 for response in terms of the Wildlife Impact Assessment; • Section 14.4 of the Scoping Report lists the various specialist studies identified; • No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA; • No. 60 for response to assurance of supply for agriculture.

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	<p>remainder property outside the intended servitude and all other financial loss.</p> <p>In this scenario your report will be most helpful and a lot of time and effort can be saved to ensure a smooth acquisition process where all parties are treated just, equal, fair and consistent.</p> <p>Another point of importance is the following and this issue has never been answered or properly discussed, namely legal water use rights and water listings and how TCTA plans to compensate owners in this regard.</p> <p>The fact that a study on the water was conducted never addressed the fear or uncertainty that is created. As you are aware there have been many objections and the main fear is that water rights may be infringed upon.</p> <p>The study mentions that the Minister may, if necessary restrict use or legal water use rights in a situation when there is not enough water. We are also aware that this MCWAP project has priority of water use over that of for example irrigation use.</p> <p>If you put yourselves in the shoes of a potential buyer, will you buy a farm that may be subjected to these conditions and if yes, would you pay current market price or less?</p> <p>This fear or uncertainty regarding the water issue, it is my humble opinion that the EIA should conduct a study to address this. I have spoken to all the irrigators upstream and particularly downstream from the intended Vlieëpoort weir/wall and all of them are very very worried.</p> <p>Any situation that creates fear or uncertainty must surely impact on buyers decisions and this is what I am getting at. Buyers must be informed of this situation and most surely this information will create doubt.</p> <p>Another huge concern is the cumulative impacts on many of</p>			

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	<p>the properties. Game farms that are used for eco-tourism, hunting, game breeding and even cattle farming will be severely impacted and affected by this cumulative impact. At what stage does the impact on sense of place and the impact on the use of these properties and interference from servitudes and construction reach a point where agriculture and its related activities become obsolete?</p> <p>Loss of business in the future, due to land owners not being able to accommodate clients during the construction period. Hunting and eco-tourism clients will seek alternative venues and may never return- this is an important matter and must be addressed and is another factor of importance.</p> <p>The specialist study on game in camps and on game overall is welcomed and thank you for the effort. A point of concern is the time owners will have to move these game if found to be applicable. Game and game breeding programs rely on progeny and if you move or dart these animals progeny lost could have dire consequences for that farm or business.</p> <p>This must please be assessed and addressed.</p> <p>The intended rehabilitation of borrow pits and the servitude area can only partly fix the destruction of flora. Big trees will never grow back and will permanently alter and scar the properties.</p> <p>The clients I represent are on my comment forms attached to my documents and I am more than willing to assist if needed.</p> <p>I thank you in advance and hope we can find an amicable solution that is mutually agreed upon by all involved.</p>			
282.	<p>This is a game farm with a hunting concession and a game breeding section. Mr Badenhorst has contractual agreements with investors in the game breeding programs that is a huge concern. This needs investigation. He has an obligation to inform his investors about what is coming. The hunting business may also be impacted as there is no way he can</p>	A. Badenhorst	Comment Sheet (09/04/2018)	<p>Refer to No. 82 for response in terms of the Wildlife Impact Assessment. Further details in terms of the approach to dealing with sensitive game and the related mitigation measures will be included in the EIA Report.</p> <p>Refer to No. 92 for response to impacts to ecotourism.</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>continue with this business while construction is in process. The big concern what to do with the game breeding business as the intended burrow pit is in or on his game breeding section and progeny is the main objective – he may entail serious problems if his investors loose progeny or while moving the game, a top animal dies. We need a specialist to assist in this situation as there is a huge concerns and rightly so.</p>			
283.	<p>This is an irrigation property and the owner invested lots of money to maximise the return on his investment. The fear and uncertainty w.r.t the MCWAP project and the possible prospect of this project on his legal water use and future development is a huge concern to the owner. Exceptional beautiful camping sites next to the river was in his future plans but, these fears makes it a hard decision to further invest. We are aware that at the meetings it was said that the owners must continue but with expropriation right and valuers and specialists that have to compile reports and conduct investigations, it's a difficult decision.</p> <p>The other concerns are pollution, silting and of course what if the MCWAP system needs their amount of water in a critical situation. These are all factors that will also influence a potential buyers decisions to purchase such a property and what if crops fail due to the water situation of it change from historical availability.</p>	G. du Plessis (HENLO 139 PTY LTD)	Comment Sheet (09/04/2018)	<p>Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA.</p> <p>The EMPr will include a Water Quality Monitoring Programme as well as measures to manage sedimentation and pollution during construction. An Aquatic Impact Assessment will also be undertaken during the EIA phase.</p> <p><i>Additional Response</i> <i>Refer to the Baseline Aquatic and Impact Assessment in Appendix I1 of the Draft EIA Report.</i></p> <p><i>See No. 270 for responses to water quality monitoring.</i></p> <p><i>See Section 7.4.6 mitigation for erosion and sedimentation in the EMPr (Appendix K of the Draft EIA Report).</i></p>
284.	<p>This property is a share block registered company and the current use of this property is for country living and the eco facet, game breeding, cattle farming and hunting.</p> <p>The main income on this property is hunting and this income is detrimental for the running costs for this property and any interference in this regard may have a huge financial impact on this property. This issue here needs a proper investigation.</p> <p>The cumulative impact from MCWAP construction, existing servitudes and new water pipe infrastructure servitude on this property must be investigated. Hunters who cannot be accommodated during the construction period may seek</p>	A. Badenhorst (Mabulskop Boerdery Share Block PTY ltd)	Comment Sheet (09/04/2018)	<p>Refer to No. 92 for response to impacts to eco-tourism.</p> <p>Cumulative impacts to be assessed.</p> <p><i>Additional Response</i> <i>Refer to Section 13.23 Cumulative Impacts in the Draft EIA Report.</i></p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	alternative venues and may be permanently lost. This may have a huge impact on income loss and huge marketing costs to revive this business and income generating facet please investigate this scenario. The borrow pit on Diepspruit 386 LQ will impact this property as well – investigate			
285.	This is a game breeding property, eco-tourism and game hunting property with lodge facilities. The intended water line infrastructure and the construction period will have a major impact on this property. At the main entrance to this property are huge Knoppiesdoring and Apiesdoring Trees (other trees as well) that have been looked after by the owner for many years and is a huge concern to the owner. The destruction of these huge trees is non-negotiable – deviate. The game breeding program includes Sable, Red Oryx, Golden Gnu, Nyala etc. and a specialist study needs to be conducted on this breeding program and the potential impact during construction. The intended borrow pit is a disaster as it impacts on one of the hunting camps and the cumulative impact from construction on the pipeline and the borrow pit must be properly investigated and all factors that may impact on the use and value of this property must be investigated and addressed.	J. Prinsloo	Comment Sheet (09/04/2018)	<p>Refer to No. 92 for response to impacts to ecotourism.</p> <p>Impacts to flora to be assessed as part of the Terrestrial Ecological Impact Assessment (refer to Section 14.4.3.2 of the Draft Scoping Report), which will be undertaken as part of the EIA phase.</p> <p>Refer to No. 82 for response in terms of the Wildlife Impact Assessment. Further details in terms of the approach to dealing with sensitive game and the related mitigation measures will be included in the EIA Report.</p> <p><i>Additional Response</i> <i>Refer to the Terrestrial Ecological Impact Assessment (Appendix I2 of the Draft EIA Report). Refer to the specialists' findings of protected trees in Section 10.1.3 Protected Trees. Also refer to the mitigation measures provided in Section 12.2 Assessment of Environmental Impacts and Suggested Mitigation Measures.</i></p> <p><i>Refer to the following sections in the Draft EMP (Appendix K of the Draft EIA Report):</i></p> <ul style="list-style-type: none"> • <i>Section 12.4.20 Management of Flora;</i> • <i>Section 12.4.21 Management of Fauna; and</i> • <i>Section 12.4.21 Management of Reinstatement and Rehabilitation.</i>
286.	<p>Herewith my suggestions regarding the pipeline over my land, Mooivallei KQ342 Portion 8:</p> <p>Yellow line - Pipeline goes over my house.</p> <p>Red line - Pipeline cuts off 2 boreholes that supplies water for my farm and households; Pipeline cuts off 1 powerline that supplies electricity to my farm and household; Pipeline goes</p>	N. Roets	Email (10/04/2018)	<p>The red line is the route currently proposed in the Scoping Report for the proposed pipeline in the Mooivallei area. It may be possible and justified to shift the route within the 100 m corridor to minimise the impact, however, it deliberately attempts to follow the road as good practice. Standard protocol for dealing with existing infrastructure will apply (refer to No. 146 for response to impacts to existing infrastructure). Provision will be made in the</p>

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	over my butchery and storage area; and pipeline cuts over an orchard.			<p>EMPr for the reinstatement and rehabilitation of the areas affected by construction activities.</p> <p>Three alternative routes provided in the map (yellow, blue and purple lines). The blue and purple lines are not technically viable. The proposed abstraction point is on the right flank of the river, looking downstream. These routes (blue and purple) imply two additional river crossings, which will not be acceptable from a cost and risk perspective. The yellow route directly affects Mr Roets' house.</p> <p>Should the relocation of a route found to be unfavourable due to factors such as cost or whatsoever, the existing infrastructure can be relocated to an agreed position or compensation for the market value can be offered upon undertaking of a valuation per se.</p> <p><i>Additional Response</i> See Section 10.3.3 of the Draft EIA Report: The technical team investigated the suggested alternative routes and determined that the suggested blue and purple lines could not be adopted as they were deemed to not be technically viable. The reason being is that the proposed abstraction point is on the right flank of the river, looking downstream. These routes (blue and purple) imply two additional river crossings, which will not be acceptable from a cost and risk perspective. The yellow route is not viable as it will directly affect the farmhouse. Alternative E was subsequently included as an option for the pipeline route in the Mooivallei area following the Scoping phase.</p>
287.	<p><u>PROPOSED MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJECT (PHASE 2A): WATER TRANSFER INFRASTRUCTURE ("WTI") & BORROW PITS</u></p> <p>COMMENTS and OBJECTIONS – Mr. PN JORDAAN IN MY PERSONAL CAPACITY ("Jordaan") AND AS AN AUTHORISED TRUSTEE FOR AND ON BEHALF OF THE PN JORDAAN FAMILY TRUST, IT59/1998 (the "Trust") –</p>	P. N. Jordaan on behalf of PN Jordaan Family Trust	Reply Form (10/04/2018)	<p>Refer to response No. 237 with regards to the alignment of the proposed pipeline alongside existing linear-type infrastructure to minimise impacts. This is also aligned with the EMF for the Waterberg District Municipality.</p> <p>Formal notification for MCWAP-2A was provided during the project announcement phase. Refer to Section 12.5 of the Scoping Report.</p>

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	<p>Dated <u>10 April 2018</u></p> <p>This property was purchased – 10.07.2008</p> <p><u>FACT –</u></p> <ul style="list-style-type: none"> • <i>No notification prior to purchasing of the Farm was given</i> by any department that this Farm and others along this route are to be <i>earmarked to become an industrial servitude for future developments</i>, namely: Pipelines, Railway line extensions, Eskom Power line expansions etc. No such conditions contained in the title deed of the Farm. • I, PN Jordaan thus then undertook the planning, constructing and development of permanent structures (brick and tile) namely – <ol style="list-style-type: none"> 1. A bush camp complex for housing the hunters; 2. Housing facilities for myself and my family; 3. A house for the farm foreman; 4. Housing facilities for the farm workers; 5. A workshop – for farm vehicles; 6. Stores – for small wood business and animal feed; 7. Slaughtering facilities for game hunted, including a cold room and salt room; and 8. Bow hides and tower hides. Some of these facilities fall within 400 m of the proposed pipeline servitude. • <u><i>This development is my retirement plan</i></u> <p><u>TOPOGRAPHY –</u></p> <ul style="list-style-type: none"> • The farm is +/- 4.2 km in length from the south – north and only +/- 1,15 km in width east – west, it is situated directly adjacent to the western boundary of the existing railway line. • The ground contours from a higher elevation on the 			<p>Refer to the following responses:</p> <ul style="list-style-type: none"> • No. 92 for response to impacts to ecotourism; • No. 111 for the response to compensation; • No. 146 for response to impacts to existing infrastructure; • No. 82 for response in terms of the Wildlife Impact Assessment. Further details in terms of the approach to dealing with sensitive game and the related mitigation measures will be included in the EIA Report; and • No. 83 for response to noise and dust. <p><u>Additional Response</u> <i>Provision in the following sections of the EMPr (Appendix K of the Draft EIA Report) to manage impacts with regards to the following matters raised (amongst others):</i></p> <ul style="list-style-type: none"> • <i>Existing infrastructure (Section 12.4.4);</i> • <i>Construction traffic and access control (Section 12.4.5);</i> • <i>Fencing arrangements (12.4.6);</i> • <i>Noise and dust (12.4.19);</i> • <i>Security (12.4.1);</i> • <i>Wildlife (12.4.21);</i> • <i>Waste (12.4.16);</i> • <i>Ablution facilities (12.4.9); and</i> • <i>Reinstatement and rehabilitation of the areas affected by construction activities (12.4.26).</i> <p>A detailed pipeline route description is provided in Section 9.4.3 of the Scoping Report and detailed maps are contained in Appendix B. Maps of the proposed routes were also available during the public meetings.</p> <p>The need to transfer water from the Crocodile River (West) to the Lephalale area was already recorded in Appendix D3 of the gazetted First Edition of the National Water Resources Strategy (NWRS-1) in September 2004 as required by the National Water Act. It stated that:</p>

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	<p>western side of the Farm down towards a lower elevation on the eastern side of the Farm where two dams are located and where better grazing areas exist due to the natural flow of rain and surface water.</p> <ul style="list-style-type: none"> • The proposed new pipelines will be placed within the perimeters of (the eastern boundary of the Farm and that for the full length of the Farm +/- 4,2 km), there is also an alternative route planned along the (southern boundary of my Farm +/- 1,15 km) – across the main entrance to the Farm. • Two borrow pits have also been planned – to service a portion of the pipeline in this area. <ol style="list-style-type: none"> 1. One on my southern neighbour's farm – directly opposite my main entrance to the Farm; 2. Second one on my northern neighbour's farm. 3. FACT: The Farm shall be neighboured by 2 (two) borrow pits with the consequential volume of traffic, increase in noise and dust. <p><u>MATTERS OF CONCERN –</u></p> <ol style="list-style-type: none"> 1. The pipelines' exact position in relation to existing and future developments (has still not been made exactly known to us as Landowners), only stating that some 40 m in width is required – for the construction period and some 25 m in width will be permanently retained as a servitude to service the underground pipeline in the future – Upon which no structures maybe constructed and upon which no trees may be planted...once again. (I believe that a greater portion of property will be required for this purpose than is leading to believe!! In fact, I am of the opinion that during construction period and even thereafter the negative impact of the WTI shall be tantamount to a total expropriation of the total surface of the Farm!!) 2. The service road along the eastern and southern side of my Farm is presently serving the railway line (with very low traffic volumes over the past ten years) 			<p>“About 45 million m³/a may be required for developments in the Lephalale area in the Limpopo water management area”.</p> <p>Refer to No. 301 with respect to the purpose of the NWRS.</p>

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	<p>– <u>This route will now endure high traffic volumes (over a very long period)</u> for a greater portion of the pipeline and will serve as the main access point to the Northern and Southern sections – due to its proximity to the R510. <u>Higher traffic volumes equate to more noise and dust!!!</u></p> <p>3. This will <u>undoubtedly result in the closing down of major source of our income generated</u> through namely: (hunting) and (game breeding and sales thereof).</p> <p>4. This <u>will result in the loss of certain game species namely</u> built up over the past 9 years.</p> <p>5. This <u>will result in the loss of certain game species, namely</u> – (kudu, eland) – (fence jumpers) if disturbed due to the possible use of explosive materials in the excavations and the high traffic volumes and dust.</p> <p>6. This <u>raises major concerns around our security – and the possibility of an increase in crime and poaching</u> – Presently –zero problems experienced over the past 9 years.</p> <p>7. The <u>loss of vegetation (for browsers and grazers)</u> within the pipeline servitude during the construction period – along with the <u>high cost to supplement feed shortfall</u></p> <p>8. The <u>loss of (2X) watering holes – earth dams</u></p> <p>9. The <u>loss of (2X) towers hides and blinds for hunters</u> which already exist within the servitude line.</p> <p>10. This <u>will result in high dust volumes and noise created by vehicles, machine activities and movements</u> – will have an <u>adverse effect on the peace, security and tranquillity</u> of the region that is primarily the choice of my selection of this Farm and sort after by our visitors and ourselves.</p> <p>11. With <u>high numbers of (construction workers) comes the discard of litter</u> (plastic and spoils etc.), which at times is found to be within our fences and once <u>consumed by the game result in the death and loss thereof.</u></p> <p>12. The lack of proper and sufficient sanitation facilities</p>			

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	<p>along the route.</p> <p>13. SOCIO-ECONOMIC CONSEQUENCES: the negative impact of the construction of and the WTI itself on the Farm will also impact directly on the 2 (two) labourers and the family of my brother, the farm foreman, who stay and reside on the Farm and who is dependent on the Farm and its business activities for their livelihood. Furthermore, my spouse and I will lose our investment, income derived from the business activities on the Farm and our retirement dream.</p> <p><u>OVERVIEW/SUMMARY –</u></p> <ul style="list-style-type: none"> • <u>I am strongly opposed to this development</u> and any other that is unknown to us planned for the future – • <u>I do not foresee an amicable solution</u> and it is quite clear that the <u>Farm will become totally dysfunctional</u> and expensive to maintain without any income generated from it. • I have stated from the very first meeting held (2009) <u>that this development will not be of any benefit to me – that quite possibly a total buy out maybe the only solution.</u> • <u>I will simply lose my retirement plan</u> into which I have poured into all my funds to develop this Farm over the last ten years. • Above all <u>this undertaking will also diminish the opportunity for me to put this Farm back on the market – for sale</u> knowing that such a development is destined in the near future and will undoubtedly <u>result in a no sale</u> and major loss of time, energy and investment made. <p><u>It is my ultimate desire to keep the Farm and that there may be found an alternative solution.</u></p>			
288.	We hereby act on behalf of the Trustees of KP Trust, the registered owner of the Farm Buffelsvley 127. Our client has taken note of the preliminary scoping reports of the Water	S van der Merwe	Email (10/04/2018)	Refer to No. 82 for a response in terms of the Wildlife Impact Assessment. Further details in terms of the approach to dealing with sensitive game and the related

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	<p>Transfer Scheme and Borrow Pits that will have an impact on our client's property and we have been requested to send our client's preliminary comments to you.</p> <p>Our client operates an intensive buffalo farming operation on the property, and preliminary investigations show that the proposed works will have a significant impact on the animal's stress levels. We attach a provisional summary by our customer with maps to it, and reserve the right to supplement it with specialist reports and further information as well as obtaining more clarity about the intended work.</p> <p>We will appreciate it if you can take note of our client's concerns and engage with us in the matter. Preliminary indications are that our client will not be able to cover any losses incurred and alternatives will be discussed.</p> <p>We would like to hear from you for the preparation of the final report. To the extent that our client is not yet registered as an interested party, we request that you do so too.</p>			<p>mitigation measures will be included in the EIA Report.</p> <p><i>VFV Attorneys included in the IAP database.</i></p>
289.	<p>Concerns with regards to the proposed water pipeline In order to better understand our concerns, the following schematic presentation of Buffelsvley is given below. Note that the diagram is not according to scale. The symbols make it easier to refer.</p> <p>"A" is the main entrance to Buffelsvley (as well as four other properties) from the R501. Our concerns about the specific access will be given later. Schematic presentation of the farm Buffelsvley:</p> <p>Background to Buffelsvley: Buffelsvley is a 2 750 ha wild-proof, exempt game farm belonging to the JL Pretorius Trust. Buffelsvley is registered with the Department of Agriculture, Veterinary Centre for the keeping of disease-free buffalo. The main purpose and function of the farm is the breeding of rare wildlife (buffalo, sable antelope, roan antelope, and certain colour variations). The farm is currently in its second year of development and</p>	S. van der Merwe	Letter (10/04/2018)	<p>Refer to the following responses:</p> <ul style="list-style-type: none"> • No. 94 for response to fences; • No. 111 for the response to compensation; • No. 146 for response to impacts to existing infrastructure; • No. 82 for response in terms of the Wildlife Impact Assessment. Further details in terms of the approach to dealing with sensitive game and the related mitigation measures will be included in the EIA Report; and • No. 83 for response to noise and dust. <p>Provision will be made in the EMPr to manage impacts with regards to the following matters raised (amongst others):</p> <ul style="list-style-type: none"> • Existing infrastructure; • Construction traffic; • Access control; • Fencing arrangements; • Bio-security;

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	<p>should be fully operational by the end of 2019.</p> <p>In total, an amount of over R400 m has already been invested in the farm with re-establishment of game, and an additional R15 m for buildings and another R3.5 m for fencing, bush clearing and water points.</p> <p>The layout of the farm and camps are of such a nature that the two buffalo groups (about 170 animals) cannot come into contact with any border fences, blue wildebeest and / or cattle. The two breeding herds are also never closer than 1 000 m to each other.</p> <p>Buffelsvley is completely fenced off by double-fence game fences (for 20 of the 24 km) as part of our bio-security program. The last 4 km will be completed in the near future.</p> <p>Our concerns regarding Buffelsvley: The fact that there is not yet a final route makes it very difficult to comment completely because the impacts will vary depending on the route to be followed. The comments are based on what we generally expect, with the possibility that additional concerns will be added when the final route is laid out.</p> <p>1. Construction phase of pipeline: With regards to the excavations, the following: In the camp next to the planned pipeline is one of our main buffalo groups - marked as "Pymat" - which consists of 80 animals. The presumption is that the activities of heavy machinery and explosives (if used) will have a definite influence on their stress levels, which will have a definite influence on the breeding and general condition of the animals. The group can't move any further than 100 m away from the activities. At this stage, it is expected that the "Pymat" group will be more directly influenced while the Inyala group that is 2 000 m from the construction work, will also be affected. Indications are that the current main access route will be used</p>			<ul style="list-style-type: none"> • Noise and dust; and • Wildlife. <p>See No. 287 above</p> <p>It is not possible to provide exact details of the construction commencement and duration for specific sections of the proposed pipeline route at this stage.</p> <p><i><u>Additional Response</u></i> <i>Refer to the implementation programme (Section 9.9) of the Draft EIA Report.</i></p>

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	<p>as a servitude. This means that Buffelsvley will have to change the main entrance and access route, which will require two additional game fences (according to current specifications) to be erected. This means a minimum of 8 new double gates that will significantly complicate access and management. Furthermore, a servitude of 45 m means a loss of approximately 18 ha, which will again affect long-term carrying capacity and grazing in the rotation camps.</p> <p>Dust and noise caused by personnel, vehicles and equipment will have a definite effect on the overall stress levels of the animals.</p> <p>As mentioned, we are very strict on bio security and we expect that before any construction work begins, a double-fenced game fence will already be in place between Buffelsvley and any other neighbouring property.</p> <p>With regards to the access route to Buffelsvley: We must confirm in advance that at no stage during the construction phase may any vehicle involved at Buffelsvley become restricted in respect of access to Buffelsvley. This includes the total route from the tarred road to the main gate and further until the storage units etc. Specifically, this refers to construction vehicles, game transportation trucks and general farm vehicles.</p> <p>Is there a specific timeframe and dates for the construction phase on the access route to Buffelsvley?</p> <p>2. Implementation phase In order to implement our bio security program successfully, it is imperative for us to make no servitudes (maintenance routes) through any of our breeding camps. It is also the main reason why the buffalo camps were built in the eastern part of the farm and not in the western part where Eskom has a servitude. Should a servitude be registered in Buffelsvley, we will ask that the servitude fall along our border and be fenced with double-fences in order to ensure our biodiversity program remains in place. Compensation for loss of land will be further</p>			

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	discussed once final decisions have been taken on the routes.			
290.	<p>Concerns relate specifically to the River Management System and the impact of water abstraction from the Hartbeespoort Dam.</p> <p><u>PROPOSED MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJECT (PHASE 2A) (MCWAP-2A)</u></p> <p>COMMENTS FROM KEY WEST ESTATE</p> <p>1. The comment sheet provides only for comments relating to the “water transfer infrastructure” or ‘borrow pits’ but not for the “giving” environment of the Hartbeespoort Dam.</p> <p>2. Comments specific to the “giving environment” are:</p> <p>a. The impact of the project on the Hartbeespoort Dam and the I&AP’s around the dam or dependent on the Dam have only received cursory mention in the scoping report. Full consideration and specialist studies must be done during the environmental impact assessment phase. Impacts that immediately come to mind include: aquatic, avifauna, social (people living around the dam and business), socio-economic (private and business, directly or indirectly dependent on the dam, impact on property values, ability to sell property), groundwater, siltation effects, aesthetic (visual), impact on tourism and employment in the tourism industry or associated industry around the Dam.</p> <p>b. The water generation scenarios presented at the last public meeting (13 March 2018 at Hartbeespoort NG Kerk) are outdated. What are the latest projected transfer volumes from the Vaal via Rand Water to the Crocodile River (West) for domestic water supply:</p> <p>i. What impact will rain water harvesting in future business and domestic developments have?</p> <p>ii. Similarly impacts of new green buildings?</p> <p>iii. Recycle of treated water by WWTW?</p>	E. van Dongen	Reply Form / Letter (10/04/2018)	<p>1. Provision is made in the Comment Sheet for comments to be provided on the proposed project from the perspective of an IAP. This includes matters pertaining to Hartbeespoort Dam.</p> <p>2a. Potentially significant impacts to Hartbeespoort Dam were identified in the Draft Scoping Report, which need to be assessed further in the EIA phase. A dedicated Focus Group Meeting is to be held with representatives from the Dam to discuss the key issues (refer to the minutes of the public meeting held in Hartbeespoort Dam on 13 March 2018).</p> <p>2b. The Vaal River Reconciliation Strategy continuation process commenced and during the Strategy Steering Committee Meeting held on 27 February it was shown that the Rand Water growth trend is by large following the High Growth Projection which is what was used in the simulation risk analysis of the Crocodile River System (Presentation 13 March 2017).</p> <p>2b(i) Not deemed to be significant, if roof areas are compared with catchment area.</p> <p>2b(ii) Not deemed to be significant.</p> <p>2b(iii) Part of Reconciliation Strategy. Municipalities need a license to re-use for internal use.</p> <p>2c. Yes. This is informed by the IRP.</p> <p>The DWS planning processes are informed by the IRP process combined with consultations with the Department of Energy, Eskom and interest groups from industry.</p> <p>The IRP process reflects a reduction in coal fire electricity generation from the first IRP report of 2010, the update in</p>

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	<p>c. Has the Department of Energy considered a reduction in coal fired energy demand in favour of alternative sources of power supply from independent power producers?</p> <p>d. DWS will manage the “River Management System”, however, there is little faith that they can do this as they have a poor record of managing current water resources e.g. the eutrophic state of the Hartbeespoort Dam, cessation of Metsi a Me project due to lack of funding, serious invasion of the Dam by water hyacinth. There is no transparency in what they do and little information is provided.</p> <p>e. What is the latest Hartbeespoort Dam inflow data prediction and extraction volume linked with dam volumes for the lifetime of the Lephalale coal fields and growth of the surrounding areas including growth of the Hartbeespoort Dam catchment population and farming community?</p> <p>f. What is the impact of drought on the Hartbeespoort Dam inflow levels on its catchment area?</p> <p>g. What is the impact of drought in the “receiving” areas on the Hartbeespoort Dam drawdown and dam levels?</p> <p>h. Where do we find a copy of the Crocodile River (West) Water Supply System Reconciliation Strategy?</p> <p>i. What does the IDF and SDF for Hartbeespoort Dam say versus the drawdown of levels of the Dam – contradiction/conflict?</p> <p>j. What is the operating protocol if the transfer schemes are operated from one operational centre in terms of the Hartbeespoort Dam drawdown especially as the focus of the operational centre is to ensure the minimum downstream water requirements are met – to the detriment of business and homeowners around the Hartbeespoort Dam?</p>			<p>2013 as well as the latest draft distributed in 2016.</p> <p>The Draft IRP 2016 Base Case shows the following:</p> <table border="1"> <thead> <tr> <th>Electricity Production</th> <th>2016</th> <th>2030</th> <th>2050</th> </tr> </thead> <tbody> <tr> <td>From Coal</td> <td>85%</td> <td>71%</td> <td>31%</td> </tr> <tr> <td>From Other</td> <td>15%</td> <td>29%</td> <td>69%</td> </tr> </tbody> </table> <p>2d. The plan is to establish a consultative forum, including Hartbeespoort Dam residents, through the River Management System.</p> <p>2e. The risk analysis presented on 13 March 2018 is based on projection which incorporates growth in return flows (source Rand Water) as well as growth in water requirements in the Crocodile Catchment to account for population growth. The analysis also applies stochastic modelling to simulate the runoff over the full planning period. The scenarios are documented in the various Reconciliation Strategy Reports – references provided in the slides presented on 13 March 2018.</p> <p>2f. The risk analysis presented on 13 March 2018 applies sophisticated stochastic stream flow modelling where the complete hydrological distribution of wet and dry flows is simulated. This includes expected droughts – see storage projection slide that provides the probability distribution of Hartbeespoort Dam which contains the dry (low flow) events.</p> <p>2g. The probability distribution of Hartbeespoort Dam projected storage was provided in the presentation of 13 March 2018 and the projection shows the drawdown during all hydrological conditions including drought.</p> <p>2h. The Crocodile River (West) System Reconciliation Strategy can be accessed via the related DWS website.</p>	Electricity Production	2016	2030	2050	From Coal	85%	71%	31%	From Other	15%	29%	69%
Electricity Production	2016	2030	2050													
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	<p>k. The alternative water supply option to transfer water from Boschkop to Mokolo was discarded because of the water quality! Surely it is DWS' responsibility to ensure that the water quality from Boschkop is adequate for transfer to the Mokolo? What is DWS doing about this?</p> <p>l. Have all the water loss calculations been done downstream of the Hartbeespoort Dam, including drought conditions, so that there is correct information of the drawdown required from the Dam?</p> <p>m. Have the impacts of transferring poor quality water from the Vaal WWTW to the Hartbeespoort catchment system been determined?</p> <p>n. What is the cost of raising the walls of dams feeding Lephalale versus the cost of the Hartbeespoort Dam economy?</p> <p>o. Key West's sole water supply is from a borehole located close to the dam. What is the impact of reduced water levels in the dam on the water delivery from the borehole? Who will provide Key West with a water supply if this borehole dries up due to lowered Dam levels?</p> <p>p. When Sun City was being developed and water from Hartbeespoort Dam was used to supply Sun City with water for their water activities, this resulted in the dam level dropping to such an extent, that no water craft could be launched from Key West, as well as other estates around the dam. The water line receded to about 100 metre from the current shoreline, making it impossible for any water activities, or fishing to take place, from Key West side of the dam.</p> <p>q. A reduced volume in the Hartbeespoort Dam will result in muddy shorelines which in some areas will be quite extensive. This poses a security risk to the Estates on the shores of the dam and impacts on recreational activities such as boats.</p> <p>i. Will Estates be allowed to erect fencing in the dam?</p>			<p>2i. Neither the Madibeng LM SDF of 2015 nor the IDP of 2107-2021 mention MCWAP. Representatives from the Madibeng LM are included in the database of authorities for the EIA and were thus notified.</p> <p>2j. The River Management System will be used to manage the system operation plan prepared annually in consultation with the users.</p> <p>2k. Water from MCWAP-2A will be supplied directly to the users, i.e. not via the Mokolo River.</p> <p>DWS' draft National Water and Sanitation Master Plan (NW&SMP) (March 2018) is available on DWS website. It comments on the situation with regards to treatment plants.</p> <p>2l. This forms part of the River Management System.</p> <p>2m. MCWAP-2A aims to supply demands in the Waterberg Coal Fields by utilizing surplus return flows from Gauteng being discharged in the Crocodile River (West) Catchment. There is thus no direct transfer of water from the Vaal WWTW proposed as part of this scheme. If/when MCWAP-4 is implemented the impact will be determined.</p> <p>2n. MCWAP-2A utilises the return flows. The incremental yield in the case of raising dam walls is inadequate.</p> <p>2o. <i>Refer to the response to No. 411 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on boreholes.</i></p> <p>2p. Noted.</p> <p>2q(i). The rate at which the water level will drop is low. Motivation for fence to be clarified but fence usually not permitted.</p>

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	<p>ii. Will Estates be allowed to extend/relocate their jetties, or will an environmental authorisation be required? Who will pay for the extension and authorisation?</p> <p>iii. Will Estates be allowed to extend their slip-ways, or will an environmental authorisation be required. Who will pay for the extension and authorisation?</p> <p>r. Is access to the Hartbeespoort Dam from the shoreline of residential estates and recreational and commercial use not an existing lawful use that needs to be respected and protected?</p> <p>s. What is the impact of reduced Hartbeespoort dam levels on the hyacinth? For example, if the dam surface when the dam is 100% full is 50% covered by hyacinth, will it be 100% covered when the dam surface is reduced by 50%?</p> <p>t. Since much of the water transfer from Hartbeespoort Dam is for the development of coal mines, would they be prepared to contribute to funding the removal of the water hyacinth from the dam?</p> <p>u. Has increased water usage by downstream farmers for irrigation to feed the growing population been considered?</p> <p>v. Siltation in the dam has occurred since 1924. At a rate of 0.2%/yr. the Dam is now 19% silted! This means that the dam no longer has the same capacity as when it was originally constructed. What does this do to the Dam levels on drawdown? Where has the siltation occurred? What are the impacts of reduced Dam levels and siltation shelves on recreation, tourism, aesthetics and land values etc.</p> <p>w. Has the cost to tourism, the main income stream for the area and big employer been assessed?</p> <p>x. The Water Management Strategy is unclear.</p> <p>y. No approach has been provided to investigate the various impacts on the dam.</p>			<p>2q(ii). All legal requirements in terms of NEMA and NWA (or other) to be satisfied for activities triggering the need to approval. When residing alongside a dam it is always a possibility that water levels can drop. Examples were cited during the public meetings.</p> <p>2q(iii). All legal requirements in terms of NEMA and NWA (or other) to be satisfied for activities triggering the need to approval.</p> <p>2r. Use of water for recreational purposes require a Water Use Licence in terms of Section 21(k) of the NWA but it does not fall within the ambit of Part 3 of Chapter 4 of the NWA which define and address Existing Lawful Water Use.</p> <p><i>2s. <u>Additional Response</u> See Section 3.4.1.3 from the Hartbeespoort Dam Specialist Opinion (Appendix 18 of the Draft EIA Report): Water hyacinth die back in the winter periods. Its minimum temperature tolerance is 12 degrees C. The leaves are prone to frost. The impact of the MCWAP-2A in winter (when the lowest water levels will be experienced) is unlikely to affect the current status of hyacinth in the impoundment. As the temperature rises in spring, the hyacinth begin to recover and once temperatures reach the mid 20's, hyacinth is at its most productive. Hyacinth are prolific growers and can double in mat size within 2 weeks. Hyacinth reproduces with runners but seed production can be many thousand per plant and can survive for over 20 years. During this period it is expected that the impoundment water level will be 2 m shallower than the recent past. As per the area capacity curve in Figure 3.3, the reduction in area is relatively small and thus there is unlikely to be any significant change to the prolific growth of hyacinth on Hartbeespoort Dam.</i></p> <p>2t. No, Eskom's tariffs are set by NERSA.</p>

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	<p>z. There has been inadequate notification of this project to the people (I&AP's) surrounding the Hartbeespoort Dam.</p> <p>aa. More locations are required for the project reports for public consultation e.g. Hartbeespoort library and another location on the other side of the dam.</p> <p>bb. Feedback from numerous Unit Owners at Key West is that they oppose the transfer of water from Hartbeespoort Dam.</p>			<p>2u. Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA.</p> <p>2v. The dam was raised in 1971. Sedimentation mostly in upper reaches of reservoir and dead storage area below lowest outlets.</p> <p><i>2w. Additional Response</i> <i>Refer to Section 8 Hartbeespoort Dam Socio-Economic Impacts of the Socio-Economic Impact Assessment (Appendix 16 in the EIA Report).</i></p> <p>2x. Refer to response to No. 2h above. <i>A dedicated Focus Group Meeting was held with representatives from the Hartbeespoort Dam, on 25 April 2018, to discuss key issues.</i></p> <p>2y. Refer to response to No. 2a above.</p> <p>2z. A public meeting was held in Hartbeespoort Dam on 13 March 2018. The members of the Hartbeespoort Dam Rehabilitation Steering Committee and F. Ellis (Association of Residential Communities) were directly notified and requested to circulate the notification for the review period of the WTI draft scoping report to other community members surrounding the dam. F. Ellis distributed the notification to all the estate managers and residents surrounding the dam. A dedicated Focus Group Meeting to be held with representatives from the Dam to discuss the key issues.</p> <p>2aa. Other locations for lodging reports will be investigated during the EIA phase. Suggestions such as the Hartbeespoort library are welcome.</p> <p><i>Additional Response</i> <i>A hardcopy of the Draft EIA Report will be placed in the Kosmos Library, situated by Hartbeespoort Dam, as part</i></p>

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				<p><i>of the EIA phase public review period.</i></p> <p>2bb. Opposition from Unit Owners noted.</p>
291.	<p>Herewith our concerns, comments and questions regarding the above mentioned proposed project:</p> <ol style="list-style-type: none"> 1. What was the original plan for water for the Medupi project with the supporting mining activities and infrastructure? <ol style="list-style-type: none"> a. When was this additional water need identified? <ol style="list-style-type: none"> i. Medupi was constructed in a water scare area, close to the coal mines. What was the original thinking behind water supply? b. Please forward the original Water Needs study that was done. c. Confirm the current water usage (monthly / annual) for the greater Lephale-Medupi district. d. Please confirm that the grey water is recycled in Lephale e. What steps have been taken to build or extend existing dam capacity in Lephale area – i.e. raising Mokolo Dam wall or building new dam. 2. Confirm the additional demand needed. 3. What is the forecasted demand for the total Medupi project, including all mines and supporting infrastructure. 4. What other options have been considered within Limpopo? <ol style="list-style-type: none"> a. What are the options for a Dam in the Limpopo River? b. Waterberg – what options are available? 5. Have the other dams in the Crocodile River been considered as the possible bulk storage dams; to absorb the fluctuations instead of the Hartbeespoort Dam? <ol style="list-style-type: none"> a. Vaalkop Dam b. Roodekopjes Dam 6. What options are available from the Vaal Dam / Rand Wwater supply system? 7. Have you done a Social Impact Study for the Hartbeespoort Dam area, including: <ol style="list-style-type: none"> a. Tourism and Property Impact Assessment specific to the Hartbeespoort Dam. 	M. Heyneke	Email / Letter (11/04/2018)	<p>1. Refer to No. 296 and No. 315.</p> <p>1a. Refer to No. 296 and No. 315. DWS initiated a feasibility study in 2008 entitled “Mokolo and Crocodile River (West) Water Augmentation Project (MCWAP) Feasibility Study”. The feasibility study was commissioned to augment the water supply to the Lephale area. The reports were completed in September 2010. Thereafter, DWS initiated a Post Feasibility Bridging Study to review and update the Feasibility Study findings for MCWAP-2A.</p> <p>1a(i) The need to transfer water from the Crocodile River (West) to the Lephale area was already recorded in Appendix D3 of the gazetted First Edition of the National Water Resources Strategy in September 2004 as required by the National Water Act. It stated that: “About 45 million m³/a may be required for developments in the Lephale area in the Limpopo water management area”.</p> <p>The White Papers for the construction of the Roodekopjes Dam already identified the need that the water resulting from return flows will be used somewhere else.</p> <p>1b. The following technical reports are available on the MCWAP project website (www.dwa.gov.za/Projects/MCWAP/):</p> <ul style="list-style-type: none"> • P RSA A000/00/8809 - Pre-feasibility Stage: Supporting Report 1: Water Requirements; • P RSA A000/00/8909 - Pre-feasibility Stage: Supporting Report 2: Water Resources; • P RSA A000/00/9109 - Pre-feasibility Stage: Supporting Report 4: Dam, Weir and River Engineering; • P RSA A000/00/9309 - Pre-feasibility Stage: Supporting Report 6: Crocodile River Transfer Scheme Options;

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	<p>b. Have you done similar studies at the other possible options to compare the impacts?</p> <p>8. Hyacinth impacts</p> <p>a. What will the impacts be when the dam is at 60%?</p> <p>b. Seeds on the shoreline – what will the impacts be?</p> <p>9. Fish and aquatic life studies to be done on Hartbeespoort Dam and Crocodile River</p> <p>a. Potentially 30-40% less water during the dry months in Hartbeespoort Dam – what impacts will it have.</p> <p>10. Water quality study to be done</p> <p>11. Confirm the current silt levels in the dam, and the impacts on the actual holding capacity</p> <p>12. Confirm the current and projected inflow / outflow out of the Hartbeespoort Dam</p> <p>13. Confirm the estimated minimum water level of the Hartbeespoort Dam when this project is operational; during the dry season.</p> <p>a. Please confirm the direct impact on The Coves shoreline and the area west of the R512 bridge (Magalies River inflow).</p> <p>14. Confirm the estimated fluctuation between the maximum and minimum levels when this project is under full demand.</p> <p>15. We have irrigation rights allocations (Portion 177 of the Farm De Rust 478 JQ) linked to the Hartbeespoort Dam.</p> <p>a. Will our rights be affected by this project?</p> <p>b. With the dam level at 60%, how will we get access to the water source?</p> <p>c. Who will be responsible for our potential additional costs – moving pumps, additional energy costs, etc.</p> <p>16. What will the impact be on the Hartbeespoort Dam levels if Tshwane decides to recycle their grey water?</p> <p>17. What is the potential risks to Hartbeespoort Dam if this is done?</p> <p>18. Water transfer from Johannesburg South</p> <p>a. What will trigger this process:</p> <p>i. Minimum levels</p> <p>ii. Greater demand in Lephalale</p> <p>b. Where to is this water currently feeding?</p>			<ul style="list-style-type: none"> • P RSA A000/00/8109 - Feasibility Stage: Main Report: MCWAP Feasibility Study Technical Module Summary; • P RSA A000/00/8609 - Feasibility Stage: Supporting Report 10: Requirements for the Sustainable Delivery of Water; • P RSA A000/00/8309 - Feasibility Stage: Supporting Report 12: Phase 2 Feasibility Stage; and • P RSA 000/A00/18413 - Feasibility Bridging Stage: MCWAP-2: Post Feasibility Bridging Study; Review Report. <p>1c. Users via MCWAP-1 from Mokolo Dam licensed to abstract 29,4 million m³/a, if available.</p> <p>1d. See No. 29 for response to reuse of water.</p> <p>1e. See No. 219 for response to raising of dams.</p> <p>2. The water requirements of users in the MCWAP System were obtained from the Post Feasibility Bridging Study Report. They are reflected in Section 3.5 of the Draft Scoping Report and are aligned to a transfer capacity of 75 million m³/a, which is marginally (<10%) less than the maximum requirements beyond 2040.</p> <p>3. Refer to section 3.5 of the Draft Scoping Report.</p> <p>4a – 4b. Refer to No. 2 for response to alternatives.</p> <p>5. Refer to No. 1b above. Return flows generated in Hartbeespoort Dam's catchment.</p> <p>6. Return flows originate from Vaal Dam and Rand Water Supply System.</p> <p><i>7a – 7b. <u>Additional Response</u></i> <i>Impacts on Hartbeespoort Dam were assessed in the Socio-Economic Impact Assessment (Appendix I6 of the</i></p>

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	<p>c. Who will be impacted by this transfer and why will they agree to it? We presume it is feeding the greater schemes supplying Rand Water.</p> <p>d. If the process is triggered, how long will it take to get approval and construction before the water is actually transferred?</p> <p>19. What is the impact on the Crocodile River irrigation systems for agriculture?</p>			<p><i>Draft EIA Report) Section 8.</i></p> <p>8a – 8b. <u>Additional Response</u> <i>Extract from Section 3.2.3 of the Hartbeespoort Dam Specialist Opinion (Appendix I8 of the Draft EIA Report) states:</i></p> <ul style="list-style-type: none"> • <i>Smaller volume in the impoundment will increase the impact of the nutrient load to the impoundment as there is a smaller buffering capacity;</i> • <i>The lowered depth will impact on shoreline areas as more land would be exposed, external influences from wind and sun will increase and the stratification patterns within the impoundment may change; and</i> • <i>The reduction in surface area will provide less area for macrophyte infestation and thus the nature of compaction and removal may also change.</i> <p><i>See No.290 for responses on impacts on hyacinth levels.</i></p> <p>9a. <u>Additional Response</u> <i>A general limnological assessment was conducted as part of the Hartbeespoort Dam Specialist Opinion in order to assess the impact of the implementation of the MCWAP-2A on the limnology of Hartbeespoort Dam (Refer to Appendix I8 of the Draft EIA Report).</i></p> <p>10. <u>Additional Response</u> <i>Refer to Section 3.3 Water Quality of the Hartbeespoort Dam Specialist Opinion for possible impacts of the MCWAP-2A on the water quality of the Hartbeespoort Dam.</i></p> <p>11. Refer to minutes and presentation made during meeting held on 13 March 2018.</p> <p>12. The risk analysis presented on 13 March 2018 applies sophisticated stochastic stream flow modelling where the complete hydrological distribution of wet and dry flows is simulated. This includes expected droughts – see storage</p>

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				<p>projection slide that provides the probability distribution of Hartbeespoort Dam which contains the dry (low flow) events and account for all the abstractions from the dam.</p> <p>13a. See no. 12 above and presentations on 13th of March 2018.</p> <p>14. See presentations on 13 March 2018 – indicating the projected range of storage levels for all months of the year – wet and dry.</p> <p>15a. Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA. Has it been registered?</p> <p>15b. Same as before when water in the dam dropped to that level.</p> <p>15c. See response to No. 15b.</p> <p>16. The analysis presented on 13 March 2018 incorporates a scenario of re-use by Tshwane. All future planning will form part of the Reconciliation Strategy. The Municipality requires a WUL in terms of the NWA to re-use waste water for internal use.</p> <p>17. <u>Additional Response</u> Refer to Section 13.8.7.1 of the Draft EIA Report for an impact description on potential impacts associated with MCWAP-2A, as well as mitigation measures. Structural – none.</p> <p>18a Augmentation from the Vaal will be triggered if the risk of drought restrictions exceeds the set criteria. This will be determined through projection risk analysis to be carried out from time to time.</p> <p>18b Vaal system.</p>

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				<p>18c Similar risk analyses are carried out for the Integrated Vaal River System to ensure appropriate augmentation is put in place, such as further phases of the Lesotho Highlands Water Project and the proposed Thukela Water Project. This is a further endeavour by the Minister as custodian of the water resources.</p> <p>18d Approximately 5 to 8 years.</p> <p>19. Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA.</p>
292.	<p>1. There is an acknowledgment in section 11.3 of the uncertainty of climate modelling. With the impacts of climate change happening more quickly and more severely than previously anticipated, the additional review mentioned in the report seems necessary before the project commences.</p> <p>2. The higher percentage assurance of water availability granted to power generation over irrigation is a concern, given that the former will have a much greater contribution to climate change, thereby impacting all water availability in the area. See response 16 in the comments and responses in the Announcement Phase.</p> <p>3. In section 13.1.2 and in your reply to comments made during the announcement phase, you mention that mitigation of impact from the project will “include measures that reduce or minimise the significance of the impact to an acceptable level”, but don’t elaborate on to whom or what they will be acceptable.</p>	G. Tyler	Reply Form (11/04/2018)	<p>1. Refer to No. 40 and No. 302 for responses to climate change.</p> <p>2. Refer to the draft NW&SMP (March 2018). Agriculture consumes 60% of RSA’s water.</p> <p>3. The level of acceptance of mitigation will need to be determined by the relevant specialists (e.g. thresholds of acceptable change) and the significance of residual impacts after mitigation (amongst others).</p>
293.	<p>1. All factors that may impact the use, value and income of directly and indirectly affected properties must be investigated and discussed with suitable specialist studies;</p> <p>2. As the appointed valuer will have to refer to this document to determine impact during and after construction-can you please apply weights and rates for the valuers as reference;</p> <p>3. How will you address this cumulative impact-if you are aware of future developments?</p>	B. Enslin	Comments on Borrow Pits Draft Scoping Report (11/04/2018)	<p>1. The Socio-Economic Study will also take this into consideration.</p> <p><i>Additional Response</i> Refer to Section 13.12.2.4 of the Draft EIA Report for a summary of impacts on Economic and Material well-being.</p> <p>2. Clarity needed with regards to the “weights and rates” referred to. The <i>independent</i> valuation need to</p>

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	<p>4. Will the detailed design be available after EIA- this is important for planning for land owners;</p> <p>5. These cumulative impacts-will weights and rates be assigned. Very important;</p> <p>6. How will you deal with adjacent properties? Current law does not provide for such a landowner to claim damages - these adjacent owners will bear the brunt of these works. Some adjacent owners are hunting outfitters and surely they will have to cease operations which will directly affect them.</p> <p>7. As the tender meeting for the panel of valuers specifically entailed "BEFORE-AND-AFTER" Valuations, can it please be mentioned that these forms of valuations must be conducted. These valuations entails certain procedures and if conducted correctly by all valuers, the land owners will be treated fair and the discussions between 2 valuers will be from the same basis.</p> <p>8. Can a landowner request the borrow pit be put behind tree lines- specifically owners with game farms. Trees are removed and will take many years, if ever to return to current state.</p> <p>9. Valuers need to refer to this document. Valuers also need to quantify and the report is crucial for reference;</p> <p>10. Impact will be higher during construction but a permanent impact due to tree loss;</p> <p>11. Creates a fear with landowners as to the future of irrigation downstream from the weir. This fear must be taken into consideration as an impact on market value as the potential buyer of irrigation properties will have the same fear.</p>			<p>be performed meeting prevailing legislation <i>at the time</i>.</p> <p>3. Valuation done in terms of prevailing legislation <i>at the time</i>. It is a "voetstoots" transaction.</p> <p>4. No, final details only available at the end of the tender design stage. Refer to the indicative implementation programme Section 9.9 of the Draft Scoping Report. The preferred route will however be known after EIA.</p> <p><u>Additional Response</u> <i>Refer to Section 14.6 of the Draft EIA Report for a description of the preferred route.</i></p> <p>5. Refer to no. 3.</p> <p>6. Prevailing law will apply.</p> <p><u>Additional response:</u> <i>Matters of adjacent properties will be dealt with when matters arise and it will need substantive evidence to prove otherwise.</i></p> <p>7. Prevailing law <i>at the time</i> will apply. This is part of the project scope for the Consultant and the Contractor</p> <p>8. Depends on material characteristics and volume of available material. Land owners are consulted and informed when a decision is made.</p> <p>9. TCTA only appoints valuers registered with the Council for Professional Valuers. It is in TCTA's interest that valuers' reports are detailed and comprehensive as to comply with the prescripts.</p> <p>10. The value of some of the trees to be cleared could</p>

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				<p>be included into the valuation report but TCTA will also endeavour to reintroduce trees on disturbed areas by construction as long as it is outside the pipeline servitude. This will be done during rehabilitation.</p> <p>11. Prevailing law will apply. Need to use applicable comparable market transactions.</p> <p><i>See No. 4 - no compensation payable.</i></p>
294.	<p>1. <u>Introduction</u></p> <p>1.1 We refer to the above matter and the Draft Scoping Report dated February 2018 (“the draft Scoping Report”) and submit the following objections on behalf of our client, Thaba Tholo (Pty) Ltd.</p> <p>1.2 Due to the fact that there is only a high level of information available at the moment in the draft Scoping Report (see below) as well as the fact that some of the information available (especially on the DWS website is in certain cases, outdated), our client’s reserves its rights to add to the objections below as more up to date information about the Scheme becomes available.</p>	Gunn Attorneys	Letter (11/04/2018)	<p>Introductory section. No response necessary.</p> <p>Require an indication of what information is outdated, as stated in the letter.</p>
295.	<p>2. <u>Objections to the proposed MCWAP II Scheme - a fatally flawed Scheme as currently proposed</u></p> <p>2.1 <u>Incorrect sequencing of authorisations required for the Scheme and defective public participation process</u></p> <p>2.1.1 The critical issue to be decided in the authorisation of the proposed MCWAP II Scheme (“the Scheme”) is firstly whether there is enough water in the Crocodile West River and catchment to support existing lawful water users, secondly whether enough water can be expropriated for the Scheme (without unduly impacting existing lawful water users) and thirdly whether the best use of this water is to support coal fired power stations (and coal mines and associated industries) all of which are heavy climate change impact activities in a water stressed area.</p>	Gunn Attorneys	Letter (11/04/2018)	<p>2.1.1 Refer to the following:</p> <ul style="list-style-type: none"> • No. 4 and No. 259 for responses with respect to existing lawful water users as set out in the NWA; and • No. 6 and No. 259 for responses to water availability for the proposed water transfer scheme. <p>Reference is also made to the NWRS-1 (September 2004) and NWRS-2 (June 2013).</p> <p>2.1.2 Refer to response to No. 259 with regards to the IWULA process. Require an indication of what information is outdated, as stated in the letter. As mentioned in the Scoping Report, DWS conducted a Feasibility Study, which was completed in 2010. In addition, in order to address the impact of the reduced water demand from the revised energy planning process, DWS initiated a Post</p>

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	<p>2.1.2 The methodology employed by the consultants in the current instance is to first authorise (or party authorise) through the NEMA EIA process, the water transfer infrastructure and associated infrastructure such as borrow pits and only later to engage in the dissemination of accurate, up-to-date and relevant information through the water use licensing process.</p> <p>2.1.3 According to Page 26 of the abovementioned Scoping Report, critical issues related to the Scheme will be the subject of a separate Water Use Licence (WUL) process. Specifically it states that: “An Integrated Water Use Licence Application will be submitted separately to the DWS Limpopo Regional Office. The following requirements of the NWA will be catered for: - Provision for the Reserve requirements of the Crocodile River (West); and - Ensure that existing lawful use is respected and protected.”</p> <p>2.1.4 This is illogical and defeats the purpose of both the studies and the public participation process. The most critical information required by the public to assess the viability and impact of the Scheme is whether there is enough water in the Crocodile West River and catchment and secondly what the impact will be on lawful downstream water users. Certain information is available but in most cases this is old information (more than 10 years old and was compiled when the Scheme was investigated in 2008) and some of the assumptions on which the reports are based are no longer valid.</p> <p>2.1.5 The only satisfactory manner in which to answer these questions is to compile updated detailed scientific studies of the catchments and modelling of water use and to submit these for public participation. The modelling would have to include seasonal use as due to the very skewed rainfall in this area, water availability in the Crocodile River in the drier months (May-October) is considerably less than in the wetter</p>			<p>Feasibility Bridging Study (completed in 2015) to review and update the Feasibility Study findings for MCWAP-2A. The important development principles that have been formulated in the Feasibility Study reports remain relevant. These documents still inform the basic configuration, design, construction and operation of the MCWAP. The bridging study aimed to redefine the capacity required for MCWAP-2A. Various technical reports are available on the project website: www.dwa.gov.za/Projects/MCWAP/. The presentations provided during the EIA related public and focus group meetings (refer to presentation contained in Appendix Q of the Draft Scoping Report) also included information from the Crocodile River (West) System Reconciliation Strategy (access to technical reports via the DWS website). These same sources of information will be used to compile the IWULA.</p> <p>2.1.3 The Reserve and Existing Lawful Water Use are specifically catered for in Chapter 3 and Chapter 4 of the National Water Act (Act No. 36 of 1998). In addition, these matters (amongst others) must be taken into consideration for the issuing of a licence in terms of Section 27 of this Act.</p> <p>2.1.4 Refer to responses to No. 2.1.1, 2.1.2 and 2.1.3 above. Require clarity in terms of invalid assumptions.</p> <p>2.1.5 The water balance was considered as part of the technical studies and derived from sophisticated risk analysis simulation techniques. These methods simulate the complete Crocodile River System on a monthly time step, which accounts for the observed characteristics of rainfall and runoff. One of the objectives of the Reconciliation Strategy 2015 included maintaining a positive water balance in future and reconciling growing water requirements and availability.</p> <p>2.1.6 Refer to response to No. 2.1.5 above. In</p>

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	<p>summer months (November – April).</p> <p>2.1.6 Due to the fact that I&AP's have not been provided with the updated information referred to above as part of the Scoping Stage of the EIA, means that that they cannot meaningfully participate in the public participation process, rendering the public participation process defective at this stage.</p>			<p>acknowledging the critical nature of water related concerns, Focus Group Meetings were convened with the irrigation groups, namely Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board and Makoppa Agriculture, in January 2018. Refer to a copy of the presentations provided during these meetings contained in Appendix Q of the Draft Scoping Report. The following matters were discussed during these meetings:</p> <ul style="list-style-type: none"> • Background and Motivation; • Proposed Project Layout; • Verification of Existing Lawful Water Uses in the Crocodile River (West); • Availability of Water in the Crocodile River (West); • Management of Impacts regarding Existing Water Uses (Operating Rules); • River Management System; and • Environmental Impact Assessment.
296.	<p><u>2.2 A rushed public participation process and failure to adequately consider alternatives.</u></p> <p>2.2.1 Although the Scheme has lain dormant for many years it now seems to be undergoing a fast-track process which could render it non-compliant with procedural requirements of the EIA and WUL process.</p> <p>2.2.2 There does not appear to be an up to date and proper analysis of alternatives, either at a micro level (being the positioning of the proposed weir) or at a macro level, whether there may be other sources of water which may have lesser environmental impacts and more acceptable social and financial costs.</p> <p>2.2.3 It is very important, especially in light of the current serious allegations being levelled against the DWS and its consultants and which are the subject of Parliamentary inquiry that these issues are properly investigated and evaluated.</p> <p>2.2.4 At the moment the rationale for the project (and in the absence of any reasonable alternatives) is that the coal</p>	Gunn Attorneys	Letter (11/04/2018)	<p>2.2.1 The Public Participation process for seeking authorisation under the National Environmental Management Act (No. 107 of 1998) for the proposed project is being undertaken in accordance with GN No. R. 982 of 4 December 2014 (as amended). Section 12 of the Scoping Report provides an account of the Public Participation process that has been conducted to date, in accordance with the aforementioned regulatory requirements. In addition, the Plan of Study for the EIA (Section 14.5 of the Scoping Report) presents the approach to Public Participation during the EIA Phase. Figure 116 in the Scoping Report outlines the public participation process and the timeframes are aligned with the periods stipulated in GN No. R. 982 of 4 December 2014 (as amended).</p> <p>2.2.2 Refer to No. 2 for response to alternatives. Various options to supply the required water were considered during the Technical Pre-Feasibility and Feasibility Studies. The proposed water transfer scheme was identified to be the most preferable due to a variety of factors, and it is now being assessed as part of the EIA.</p>

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	<p>industry in Lephalale will be stranded if the Scheme is not implemented. This back-to-front rationale cannot be the main driver for the Scheme.</p>			<p>Only layout alternatives are under consideration. Section 9.3.1 of the Draft Scoping Report explains the various options considered for the proposed abstraction weir and the selection criteria used as part of the Conceptual and Pre-feasibility stages of the project. In addition, also refer to the following report: P RSA A000/00/9109 - Pre-feasibility Stage: Supporting Report 4: Dam, Weir and River Engineering (available on the project website).</p> <p>2.2.3 Clarity is requested with regards to the statement and its relevance to MCWAP-2A.</p> <p>2.2.4 Refer to No. 315 for response related to the IRP.</p> <p>Also refer to the following sections of the Draft Scoping Report:</p> <ul style="list-style-type: none"> • Section 3 – Project Background and Motivation. This includes the project’s status as a Strategic Integrated Project (SIP), where SIP1 aims to unlock SA’s northern mineral belt in one of the poorest provinces (Limpopo) through key infrastructure provision in the Waterberg and Steelpoort districts and initiating new energy and industrial development (amongst others); • Section 8 – Need and Desirability; and • Section 10.3.2 – implications of the No Go Option. <p>Considerations from DWS’ draft NW&SMP: Volume 2 (March 2018):</p> <ul style="list-style-type: none"> • “At present Eskom’s coal-based power plant fleet consists of 10 base load power plants (used during normal demand) and 3 return to service (RTS) power plants (used during peak demand). These power plants have diverse technical parameters and use a combination of cooling technologies which is bound to provide different water usage profiles. Within the context of the current Integrated Resources Plan, South Africa’s energy mix is bound to change in order to provide sufficient energy security. However, the

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				<p>abundance of local reserves of coal is likely to keep coal a dominant fuel source.</p> <ul style="list-style-type: none"> • DWS signed an MoU with Eskom in which Eskom committed it will be systematically moving from wet-cooled to dry-cooled power generation systems, to reduce their water foot-print. This undertaking was already implemented for the new coal power stations, Kusile and Medupi with a water allocation estimated at 15,4 million m³/a. • The supply area of the Vaal River System stretches far beyond the catchment boundaries of the Vaal River and includes most of Gauteng, Eskom's power-stations and Sasol's petro-chemical plants on the Mpumalanga Highveld, the North-West and Free State goldfields, iron and manganese mines in the Northern Cape, Kimberley, several small towns along the main course of the river, as well as the Vaalharts Irrigation Scheme. It will soon be extended to also supply water to the developments on the Waterberg coal-fields near the town of Lephalale in the Mokolo catchment. The size of the Vaal River System, the various inter-basin transfers coupled with the extensive bulk water distribution infrastructure and the geographical location of the water users in relation to the position of the water resource components provides for a complex mix of variables that influences both the demand and availability."
297.	<p><u>2.3 Structure of the Scheme- role and objectivity of DWS</u></p> <p>2.3.1 DWS will be acting as the authority that will review and potentially approve the WUL. At the same time, DWS is busy adjudicating the lawful entitlements of other water users in Limpopo North. For DWS to comply with its legal obligations in respect of the adjudication of these two competing water uses, it must do so objectively.</p> <p>2.3.2 We have not seen any evidence of such objectivity, meaning that DWS may be compromised in its role as the adjudicating authority.</p>	Gunn Attorneys	Letter (11/04/2018)	<p>2.3.1 DWS follows the prescripts of Part 3 of Chapter 4 of the NWA to determine the ELWU. Appeal procedures provided for in NWA.</p> <p>2.3.2 Comment to be substantiated.</p>

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298.	<p>2.4 <u>Structure of the Scheme - role of TCTA</u></p> <p>2.4.1 The TCTA has been nominated as the “implementing agent” for the Scheme. The TCTA’s role would therefore appear to be as a project manager, i.e. to ensure the viability and financial feasibility of the Scheme.</p> <p>2.4.2 We have not seen any evidence of TCTA fulfilling this function nor any recent reports of the viability or financial feasibility of the Scheme in the Draft Scoping Report.</p>	Gunn Attorneys	Letter (11/04/2018)	<p>2.4.1 See 2.5.1 below. Planning of MCWAP-2A is done by DWS.</p> <p>2.4.2 TCTA is still busy facilitating negotiation of Water Supply Agreements between DWS and major Users of this scheme which form the basis for the financial viability. Viability is a DWS function in consultation with the National Treasury. Fitch rating Agency also evaluate the project and provide a rating.</p>
299.	<p>2.5 <u>Structure of the Scheme- financing</u></p> <p>2.5.1 It is not clear whether the Scheme is financially viable, how the Scheme will be financed nor where the financing for the Scheme will come from.</p> <p>2.5.2 There is no reference anywhere in the Scoping Report to the detailed costs of the Scheme. This should be addressed in the Scoping Report.</p>	Gunn Attorneys	Letter (11/04/2018)	<p>2.5.1 The Government of South Africa made the decision on the Scheme based on the water needs to the Lephalale area. Financing of the Scheme will be partly from the Fiscus and commercial loans backed by water supply agreements between the DWS and the Users. Minister directed TCTA to co-finance and implement MCWAP subject to Environmental Authorisation. The water users repay such off-budget loans for the project after concluding off-take agreements.</p> <p>2.5.2 The estimated project budget based on the 75 million m³ capacity is approximately R12 billion (excluding VAT).</p>
300.	<p>2.6 <u>International Water Law Obligations</u></p> <p>2.6.1 The proposed site for the MCWAP II weir is on the Crocodile River, upstream from the confluence of the Limpopo River. The Scheme therefore falls within the Limpopo River Basin and South Africa shares the Limpopo River as an international boundary with Botswana and Zimbabwe and downstream neighbour Mozambique.</p> <p>2.6.2 There is no evidence that the Draft Scoping Report (and in turn the EIA) will deal with such obligations as outlined in inter alia the Convention on the Law of the Non-navigational Uses of International Watercourses Adopted by the General Assembly of the UN on 21 May 1997, the SADC Revised Protocol on Shared Water Courses, 7 August 2000 and the SADC Regional Water Policy 2005.</p>	Gunn Attorneys	Letter (11/04/2018)	<p>2.6.1 The Crocodile River (West) and Mokolo River catchments form part of the Limpopo River Basin, which is shared by Botswana, Mozambique, South Africa and Zimbabwe. All the basin states are signatories to the Revised Protocol on Shared Watercourses in the South African Development Community (SADC) Region (SADC Revised Protocol). In general, it is incumbent upon the RSA to pursue and establish close cooperation with the neighbouring states with regard to the study and execution of all projects likely to affect the regime of a shared watercourse such as the Limpopo. South Africa must therefore exchange information with the other Watercourse States and, if found necessary, negotiate the possible effects of planned measures on the condition of the Limpopo Watercourse. MCWAP-1 entail the yield of the existing Mokolo Dam and MCWAP-2A utilise return</p>

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	<p>2.6.3 In terms of this legislation, treaties and policy documents, the Scheme is obliged to investigate and evaluate the sustainable, equitable and reasonable utilisation of shared watercourse systems in order to avoid causing any negative impact to the neighbouring state and to consult with neighbouring states accordingly.</p>			<p>flows originating from the Vaal River. It is therefore considered that the scheme does not fall within the conditions contained in the SADC Revised Protocol of a planned measure with possible adverse effects for other states in a shared watercourse as indicated in Article 4(1)(b) of the SADC Revised Protocol. As such, it is not considered to be necessary to negotiate the use of the water with the neighbouring states.</p> <p>Notifications in terms Article 4(1)(a) of the SADC Revised Protocol of the RSA's intention to proceed with implementation of the MCWAP, were therefore given to the co-basin states. In the February 2010 letters to the co-basin states RSA stated that the RSA perspective is that there will be no significant adverse effect to any one of the LBPTC members as a result of the MCWAP, for the reasons given above. South Africa has therefore complied with the SADC Revised Protocol and international best practices.</p> <p>2.6.2 Refer to response to item 2.6.1 above.</p> <p>2.6.3 Refer to response to item 2.6.1 above.</p>
301.	<p><u>2.7 South African Water Law Obligations- the National Water Act and the Constitution</u></p> <p>2.7.1 In terms of the National Water Act (NWA), the State as custodian of South Africa's water resources is obliged to consider all the people of South Africa when taking a decision regarding the allocation of water resources and to develop the use of the country's water resources in a sustainable and equitable manner. Section 3 of the NWA states that:</p> <p><i>Public trusteeship of nation's water resources</i></p> <p><i>(1) As the public trustee of the nation's water resourced the National Government, acting through the Minister, must ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and</i></p>	Gunn Attorneys	Letter (11/04/2018)	<p>2.7.1 – 2.7.3 Legal references.</p> <p>The NWA requires the Minister to establish a National Water Resource Strategy (NWRS) by publishing a Notice in the Government Gazette becoming RSA law.</p> <p>The NWRS (2004 and 2013) provides information about the ways in which water resources will be managed and the institutions to be established. It also provides quantitative information about the present and future availability of and requirements for water in each of 19 water management areas and propose interventions by which these may be reconciled. The NWRS also quantify the proportion of available water in each water management area that falls under the direct control of the Minister in terms of her or his national</p>

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	<p><i>equitable manner, for the benefit of all persons and in accordance with its constitutional mandate.</i></p> <p><i>(2) Without limiting sub-section (1), the Minister is ultimately responsible to ensure that water is allocated equitably and used beneficially in the public interest, while promoting environmental values.</i></p> <p><i>(3) The National Government, acting through the Minister, has the power to regulate the use, flow and control of all water in the Republic.</i></p> <p>2.7.2 Section 25 of the Bill of Rights of The Constitution of the Republic of South Africa (The Constitution) states that</p> <p><i>“Environment</i></p> <p><i>Everyone has the right –</i></p> <p><i>(a) to an environment that is not harmful to their health or well-being; and</i></p> <p><i>(b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –</i></p> <p><i>(i) prevent pollution and ecological degradation;</i></p> <p><i>(ii) promote conservation; and</i></p> <p><i>(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”</i></p> <p>2.7.3 Section 27 of the Bill of Rights of the Constitution states that</p> <p><i>“Health care, food, water and social security</i></p> <p><i>Everyone has the right to have access to –</i></p>			<p>responsibilities.</p> <p>After its establishment the NWRS provide the framework within which water resources will be managed throughout the country, because section 5(3) of the Act states that South Africa’s water resources must be protected, used, developed, conserved, managed and controlled in accordance with the NWRS.</p> <p>The NWRS will be legally binding since section 7 specifies that the Minister, the Director-General, other organs of State and water management institutions must give effect to its provisions when exercising any power or performing any duty in terms of the Act.</p> <p>2.7.4 Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA. Section 3.4 of the Scoping Report states that operating rules for both the Mokolo and the Crocodile River (West) systems need to be developed by DWS in a separate process and must take cognisance of this and ensure that Existing Lawful Water Use is respected and protected.</p> <p>2.7.5 Refer to response to No. 6 and No. 259 with respect to water availability for the proposed water transfer scheme. Also refer to No. 4.</p> <p>2.7.6 Professor DA Hughes only reviewed the Feasibility Study reports (as indicated). Detail system wide risk analyses were carried out as part of the Reconciliation Strategy Study on several occasions to inform all water resource planning activities in the Crocodile River Catchment including the Feasibility Study. The results from these system analyses informed what is covered in No. 6 and No. 259.</p>

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	<p>(a); (b) sufficient food and water;"</p> <p>2.7.4 Thus the Scheme must give effect to general obligations of the DWS in its role as the public trustee of the nation's water resources and to the specific obligation in this instance not to adversely impact on our client's (and other lawful water users) water use.</p> <p>2.7.5 In this regard our client has employed the services of Professor DA Hughes, Institute of Water Research, Rhodes University to evaluate the technical aspects of the Scheme and advise our client whether the proposed Scheme is likely to negatively impact on its water supplies from the Crocodile River. Professor Hughes reviewed the technical documentation available (which is outdated) including the Mokolo and Crocodile West Water Augmentation Project (MCWAP) Feasibility Study: Technical Module, Supporting Report No 10, Requirements for the Sustainable Delivery of Water (Issued September 2010) and Report No 12 Technical Module Feasibility Stage Phase 2 (Issued September 2010). Professor Hughes states that there is insufficient information available to determine the likely impact of the proposed Scheme on water users downstream of the Vlieëpoort Weir and that assurances must be obtained that the water rights of downstream water users such as Thaba Tholo are adequately protected in the design and future operational management of the proposed Scheme.</p> <p>2.7.6 There is therefore no evidence in the Draft Scoping Report that the Scheme will comply with either the NWA or the Constitution in this regard or that our client's lawful water rights will be safeguarded.</p>			
302.	<p><u>2.8 NEMA Obligations and climate change</u></p> <p>2.8.1 In terms of the NEMA, a project developer is obliged to consider "all relevant factors" when undertaking environmental impact studies that are necessary to support an EIA.</p>	Gunn Attorneys	Letter (11/04/2018)	2.8.1 Refer to No. 40 for response to climate change. The climate change impacts associated with the power stations, coal mines and other intended water users need to be assessed as part of the respective environmental assessments conducted for each of these developments, as they are the sources of the impacts.

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	<p>2.8.2 The court considered this issue in <i>Earthlife Africa Johannesburg v The Minister of Environmental Affairs and Others</i> (65662/16) [2017] ZAGPPHC 58 [2017] 2 ALL SA 519 (GP) (8 March 2017) concerning the construction of the Thabametsi Coal Fired Power Station (“the Thabametsi case”). At issue in the Thabametsi case was the interpretation of Section 24O(1) of the NEMA and the Environmental Impact Assessment Regulations, (“the Regulations”) interpreted in light of South Africa’s domestic environmental policies, section 24 of the Constitution, and South Africa’s obligations under international climate change conventions which oblige competent authorities to take account of all relevant factors in deciding on an application for environmental authorisation, including any pollution, environmental impacts or environmental degradation likely to be caused if the application is approved or refused. Earthlife asserted that the climate change impacts of a proposed coal-fired power station were relevant factors and contended that at the time the Chief Director took his decision to authorise the project, the climate change impact of the power station had not been completely investigated or considered in any detail. The court agreed with Earthlife that a climate change impact assessment was a “relevant factor” and held that, “Where relevant information is missing the environmental impact assessment report must be rejected under regulation 34(2)(b) and environmental authorisation should be refused.”</p> <p>2.8.3 This is particularly relevant in the current instance as the studies which were previously conducted relating to the Scheme are outdated and do not adequately consider climate change and the impact of climate change on the Scheme (i.e. reduced water availability in the Crocodile and Mokolo catchments). This is therefore a relevant factor and needs to be adequately studied and modelled so that the information may be placed before the authorities and shared with I&AP’s.</p> <p>2.8.4 It could be argued in the current instance that another relevant factor (and based on the outcome of other technical reports regarding water availability for the Scheme) is how</p>			<p>2.8.2 Refer to response to No. 2.8.1 above.</p> <p>The climate change impact assessment that was instructed to be undertaken for the Thabametsi Coal Fired Power Station was for that particular development, based on its impacts to climate change.</p> <p>2.8.3 Refer to response to No. 2.8.1 above.</p> <p>The risk analyses are conducted for 1 000 plausible streamflow and rainfall stochastic sequences. These sequences cater for a range of extremes, where the wettest sequence is wetter than the wettest period experienced historically and the driest sequence drier than the worst drought experienced historically. The variability of the stochastic analysis is thus catered to a certain degree for potential changes within these extremes.</p> <p>Studies conducted where various global climate models were used to estimate the likely implication on water availability (yield) of system showed widely varying results and found that either increases or decreases will occur in water availability as a result of Climate Change. Due to these observations it has been acknowledged that Climate Change adds another layer of uncertainty to water resource assessment and planning.</p> <p>Considering the recent advances made in developing methods of assessing uncertainty in water resource analysis there are proposals under consideration by the DWS and other funding organisations to expand the uncertainty assessment methodology by also incorporating the effects of Climate Change. The key in achieving this is by integrating available research products of Climate Change and uncertainty. This will require developing procedures (including software systems) and establishing analytical techniques that can</p>

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	<p>much water should be allocated to coal fired stations versus sustainable agriculture. Without this information the authorities would not be in a position to adequately consider the impacts of the Scheme and its potential negative impacts on food security, employment and economic activity generally in the area.</p>			<p>be used in studies such as these.</p> <p>Considerations in terms of climate change from DWS' draft NW&SMP: Volume 2 (March 2018):</p> <ul style="list-style-type: none"> • “This NW&SMP gives effect to the mandate given to the water sector through the Constitution, the White Paper on a National Water Policy for South Africa (1997), the Strategic Framework for Water Services (2002), the National Sanitation Policy (2017), the National Water Act and the Water Services Act. In addition, it takes into account other relevant policy and legislation such as the Industrial Policy Action Plan (IPAP), the Irrigation Strategy, the National Climate Change Response White Paper, the National Environmental Management Act, the Public Finance Management Act, the Municipal Finance Management Act, and the Municipal Structures and Systems Acts. • A number of important strategies and operational policies have been compiled since the enactment of the national policy and water acts in order to flesh out and implement the legislation and policy. This includes a Water and Sanitation Sector Policy on Climate Change (2017). • The study on Future Climates in South Africa (DEA, SANBI, GIZ, 2013) concluded that climate change will have a limited impact on water supply at a national level but could be quite significant at regional level under particularly drier futures. The greatest concern regarding climate change, are the isolated water resource systems that are dependent on a single resource or small geographical area with limited hydrological variability, including small farm dams in headwater catchments and water supply schemes for rural towns. Systems with greater integration and diversification have greater resilience to climate change uncertainty, such as the Integrated Vaal River System. Also, more variability due to climate change, including more flush floods, may require more storage

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				<p>to provide the required yield of a system.</p> <ul style="list-style-type: none"> Although climate change brings an added uncertainty to water resources, the impacts can and should be mitigated. The relatively gradual nature of climate change allows time for well-considered adaptation and mitigation measures. However, there is growing concern that the decreasing monitoring through rainfall and flow gauging networks are no longer sufficient to accurately detect these trends to ensure mitigation measures are planned and put in place timeously. <i>[Note: this emphasises the need to for the proposed River Management System for the MCWAP-2A]</i> The impact of climate change on resource availability and water requirements should be taken into account in all future planning, including Reconciliation Strategy studies. Mitigation measures can then be introduced as their necessity becomes evident, but then adequate data is essential to support the decisions to be made. Therefore, it is vital that the monitoring of rainfall, evaporation and runoff be continued rigorously, and the hydrological monitoring network improved to ensure that the actual effects of climate change are measured accurately and brought as quickly as possible into the analysis of resources.” <p>2.8.4 Existing Lawful Water Use will continue. No impact on food security – note potential for virtual water as referenced during Focus Group meetings.</p>
303.	<p>2.9 <u>Need and Desirability argument</u></p> <p>2.9.1 This is contained in the Draft Scoping Report at pages 36 – 38. The need and desirability argument is based on the false premise that supplying water to dirty coal fired stations is in the national interest, thus is misleading.</p> <p>2.9.2 The potential negative impacts are not adequately presented and important issues such as food security are not dealt with.</p>	Gunn Attorneys	Letter (11/04/2018)	<p>2.9.1 Refer to response to No. 2.2.4 with regards to the status of the project in terms of SIP1. <i>In addition The World Bank loan is guaranteed by the National Treasury and any failure will have catastrophic consequences for the RSA.</i></p> <p>2.9.2 Reference is made in Table 7 (items no. 11 and 12) within this section to the potentially significant environmental issues associated with the proposed project contained in Section 13 of the Scoping Report.</p>

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	<p>2.9.3 This important part of the EIA cannot be done properly without adequate knowledge of the Scheme (and the impacts on other water users), which details have not been provided to the public nor are they included in the need and desirability argument.</p>			<p>2.9.3 Refer to the following:</p> <ul style="list-style-type: none"> • No. 4 and No. 259 for responses with respect to Existing Lawful Water Users as set out in the NWA; and • No. 6 and No. 259 for responses to water availability for the proposed water transfer scheme. <p>Section 3.4 of the Scoping Report, which precedes the Need and Desirability discussion, states that operating rules for both the Mokolo and the Crocodile River (West) systems need to be developed by DWS which need to ensure that Existing Lawful Water Use is respected and protected.</p>
304.	<p>2.10 <u>Impact of water transfer infrastructure on Thaba Tholo</u></p> <p>2.10.1 Certain of the options currently being considered for the routing of the pipeline would negatively impact on Thaba Tholo as they run adjacent to the South West corner of the Thaba Tholo property. Thaba Tholo security relies on a double fencing perimeter and on the thick natural bush on its perimeter. Should the double fencing be disturbed and/or should the natural bush be cleared, this would compromise Thaba Tholo's security which is a critical aspect of a commercial game farm, especially given the Rhino poaching crisis and general poor security situation in rural areas. Thaba Tholo's security would also be impacted during construction due to the presence of contractors on site.</p> <p>2.10.2 The proposed option then also runs through (or along) the North East corner of the Thaba Tholo property again, negatively impacting the property. The North East corner is a planned development for stud buffalo breeding. Should the pipeline be routed in this corridor then this valuable project would have to be shelved.</p> <p>2.10.3 Certain species on the property (especially Black rhino) are extremely territorial and any reduction of the property may impact negatively on these species.</p>	Gunn Attorneys	Letter (11/04/2018)	<p>2.10.1 To minimise impacts to the receiving environment and current land uses, the proposed pipeline route attempts to remain alongside existing linear-type infrastructure, such as roads (main roads and dirt roads), the railway line (i.e. section of approximately 56 km), transmission lines, industrial corridors and farm boundaries. As part of the EIA Process, a 100 m wide corridor was assessed to facilitate optimisation of the pipeline route. The exact routing of the pipeline in terms of which side of the road it will be aligned still needs to be confirmed.</p> <p>Specific measures will be included in the EMPr to manage security related matters.</p> <p><u>Additional Response</u> Refer to Section 12.4.1 Management of Security in the EMPr (Appendix K of the Draft EIA Report).</p> <p><i>The construction servitude will be fenced off. Provision is be made in the EMPr for Fencing Arrangements (Section 12.4.6), where the management objectives include:</i></p> <ul style="list-style-type: none"> • <i>Protect and maintain existing fences;</i> • <i>Fencing arrangements to adequately protect livestock and game animals from construction activities;</i>

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				<ul style="list-style-type: none"> • Adhere to agreements made with individual landowners and/or land users regarding fencing; and • Minimise disturbance to animals. <p>Refer to Section 12.4.26 Management of Reinstatement and Rehabilitation which contains the following objectives:</p> <ul style="list-style-type: none"> • Adequate reinstatement and rehabilitation of construction areas. • Conduct concurrent or progressive rehabilitation of areas affected by construction activities. <p>2.10.2 See response to No 2.10.1 above. Owner to continue with activities to maintain market value.</p> <p>Refer to No. 111 for the response to compensation.</p> <p>2.10.3 Refer to No. 82 for response in terms of the Wildlife Impact Assessment. Keeping of validated records is important.</p>
305.	<p>2.11 <u>Impact of Borrow Pits on Thaba Tholo</u></p> <p>2.11.1 To the extent that it is anticipated that borrow pits will be located on or adjacent to the Thaba Tholo property, then this may impact negatively on Thaba Tholo for similar reasons as specified in paragraph 2.10 above, i.e. impacting negatively on the security of Thaba Tholo by clearing of perimeter natural bush, disturbing the double fence, presence of contractors, reduction in the size of the property and negative impact on certain species such as Black rhino.</p>	Gunn Attorneys	Letter (11/04/2018)	2.11.1 See responses to No 2.10.1 – 2.10.3 above.
306.	<p>3. <u>Potential Impact on Thaba Tholo (Pty) Ltd of water shortages caused by the Scheme</u></p> <p>3.1 Thaba Tholo is a large game farm some 36 000 hectares, situated north of Thabazimbi in the Limpopo Province (“the Thabazimbi / Makoppa area”). It was established in 1990 through the consolidation of game and cattle farms into which the “big 5” and other rare species were introduced. A separate farming operation was also started along the banks of the Crocodile River, which involved the intensive breeding of rare</p>	Gunn Attorneys	Letter (11/04/2018)	<p>3.1 – 3.5 Overview of Thaba Tholo game farm, as well as context for concerns, noted.</p> <p>3.6 Refer to the following:</p> <ul style="list-style-type: none"> • No. 4 and No. 259 for responses with respect to Existing Lawful Water Users as set out in the NWA; • No. 6 and No. 259 for responses to water availability for the proposed water transfer scheme; and • No. 259 with regards to the IWULA process.

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	<p>species, as well as the production of animal feed. Thaba Tholo is committed to the conservation of all species, especially those that are endangered. Genetic diversity is safeguarded and enhanced by accommodating large, yet sustainable numbers of each species along with the selective breeding and genetic monitoring of its rare game.</p> <p>3.2 Game numbers are managed through live capture and limited hunting. Free-roaming predators, including lion, leopard, cheetah, brown hyena, caracal and other species, contribute to the natural selection process – thus ensuring the development of tough and vibrant animal populations, naturally adapted to withstand predation and disease.</p> <p>3.3 Natural methods are used to encourage grazing rotation and to keep bush encroachment under control. Different grasses are grown for different species on adjacent farmland, which are also used to supplement feed in winter.</p> <p>3.4 Thaba Tholo sells the majority of its excess game at an annual auction and prides itself on its long history of selling quality animals to satisfied customers. It is a world leader in rare species breeding, being the only viable breeding populations for the East African Black rhino (<i>Diceros bicornis michaeli</i>) outside of East Africa.</p> <p>3.5 Thaba Tholo is a significant employer in the area. Our client contributes significantly to employment in the Thabazimbi area, employing 160 people and supporting 350 dependants. Including contractors, our client is a significant contributor to the regional economy.</p> <p>3.6 The precise impact on Thaba Tholo of the Scheme is impossible to quantify at this stage because the details of the WUL and the Scheme's intended water expropriation (and consequent impact on the Crocodile River) have not yet been made public (refer to paragraph 2 above). However, should there not be sufficient water for Thaba Tholo to continue producing food for its operations the impact will be</p>			<p>3.7 Water is allocated in terms of the NWA. Refer to Master Plan on DWS website with regards to water for agriculture.</p> <p>3.8 Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA.</p> <p>3.9 Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA.</p>

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	<p>devastating.</p> <p>3.7 Thaba Tholo does not only produce food to support its own people and animals but is a nett producer and exporter of food to the surrounding area. In this regard, Thaba Tholo produces maize and soya beans which are a staple food for surrounding communities. The National Department of Agriculture has indicated that in order for South Africa to keep feeding its growing population and to be a nett exporter of food, farmers will have to triple the amount of food that they produce. Thus not only will Thaba Tholo have to safeguard its existing water rights but it will also have to expand. DWS is thus obliged to ensure that water supply to the Thabazimbi/Makoppa agricultural area is increased.</p> <p>3.8 Thaba Tholo relies to a large extent to support all of the above economic activity on the water that it draws from the Crocodile River. Should the Scheme be implemented in its current form and with no guarantee that there will be a reliable supply of water from the Crocodile River (especially in the drier months (July – November)) the effect on the Thabazimbi/Makoppa area could be devastating.</p> <p>3.9 There are many other agricultural operations on the Crocodile River in close proximity to Thaba Tholo which would be similarly impacted by the Scheme. The combined and compounded impact on the Thabazimbi/Makoppa area regional economy and on food security in the area would be devastating should the Scheme proceed with no protection of the water use rights of current lawful water users downstream of the proposed Vlieëpoort weir.</p>			
307.	<p>4. <u>In Conclusion</u></p> <p>4.1 There are obvious flaws and shortcomings in the MCWAP II project development and authorisation process (as per the draft Scoping Report), and the WUL process and important technical information regarding water availability should have been made available to the public before commencement of this EIA process. The public participation process is thus</p>	Gunn Attorneys	Letter (11/04/2018)	<p>4.1 Refer to responses to No. 2.1.1 – 2.1.6 above.</p> <p>4.2 Refer to responses to No. 2.2.1 – 2.2.2 above.</p> <p>4.3 NWA allow for dispute mechanism.</p> <p>4.4 DWS conducted the feasibility studies for the project and such reports are available on DWS website. DWS</p>

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	<p>currently fatally flawed and the studies necessary to defend the expropriation of water for the Scheme either do not exist (such as in the case of climate change, reserve determination and impact on current water users) or are required to be updated as most of the technical and feasibility studies are approximately a decade old.</p> <p>4.2 The current EIA process is being rushed without proper consideration of alternatives.</p> <p>4.3 The objectivity of DWS cannot be guaranteed as it acts as the referee and player in the Scheme. There are serious capacity constraints at DWS and challenges which are the subject of a Parliamentary inquiry.</p> <p>4.4 As implementing agent, TCTA needs to make available reports regarding the technical and financial viability of the Scheme.</p> <p>4.5 Information needs to be made available to the public about who is financing the Scheme and the mechanics thereof.</p> <p>4.6 There is no compliance with South Africa's international law obligations.</p> <p>4.7 There is no compliance with South Africa's domestic law obligations such as Section 3 of the NWA and the Constitution.</p> <p>4.8 NEMA has not been complied with as there has not been consideration given to "all relevant factors" including climate change.</p> <p>4.9 The need and desirability argument is not adequately developed.</p> <p>4.10 Water transfer infrastructure may impact negatively on Thaba Tholo if not carefully aligned.</p> <p>4.11 Borrow pits may impact negatively on Thaba Tholo if not</p>			<p>also conducted bridging study to augment the feasibility study and the Bridging Study Report is also available on DWS website. In terms of financial viability, TCTA considers the commitment by both the Government through its social funding contribution of the project and industrial users through their commitment to the process and signing of Water Supply Agreements to raise commercial loans for the project. See No. 292.</p> <p>4.5 Refer to response to No. 2.5.1 above.</p> <p>4.6 Refer to response to No. 2.6.1 above.</p> <p>4.7 Refer to responses to No. 2.7.4 – 2.7.6 above.</p> <p>4.8 Refer to response to No. 2.8.1 above.</p> <p>4.9 Refer to responses to No. 2.9.1 – 2.9.3 above.</p> <p>4.10 Refer to responses to No. 2.10.1 – 2.10.3 above.</p> <p>4.11 Refer to response to No. 2.11.1 above.</p> <p>4.12 Refer to responses to No. 3.6 – 3.9 above.</p>

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	<p>placed strategically.</p> <p>4.12 The impacts of the Scheme are at this stage not fully known (for the reasons outlined in paragraph 2 above) however if the impact is to curtail the water rights of economic activities such as our client's, the economic impact on the Thabazimbi Makoppa area could be disastrous.</p>			
308.	<p>5. <u>Way forward</u></p> <p>5.1 It is clear that the Scheme in its current form is fatally flawed and is being presented as a <i>fait accompli</i>, with disregard for South African law including the Constitution, the National Water Act, NEMA and international law.</p> <p>5.2 The public participation process does not comply with the law (as sufficient information does not exist to evaluate the Scheme).</p> <p>5.3 Technical reports must be updated and assurances regarding the management of the Scheme (including the protection of existing lawful water rights) need to be given to downstream water users such as our client.</p> <p>5.4 This EIA process needs to be delayed so that the technical reports referred to above may be concluded and should only recommence once the information is available, and only if the reports can prove that there is enough water in the Crocodile West River for the Scheme to proceed legally. Should this not be the case, and the Scheme proceeds with no assurance of the water rights of the people in the Thabazimbi /Makoppa area, and water supply to the area is terminated by the Scheme, this would effectively terminate the lifeblood of the area (reliable all year round water supply from the Crocodile River) and could present as an economic disaster for the area. This potential disaster (based on insufficient information) is what is currently is being proposed by the draft Scoping Report.</p>	Gunn Attorneys	Letter (11/04/2018)	<p>5.1 Based on an understanding of the content of the letter, the premise of the statement that the proposed project is fatally flawed stems from "whether there is enough water in the Crocodile River (West) and catchment and secondly what the impact will be on lawful downstream water users" (extracted from No. 2.1.4 of the letter). Responses pertaining to the availability of water for the proposed water transfer scheme are provided in No. 6 and No. 259. Responses pertaining to Existing Lawful Water Users as set out in the NWA are provided in No. 4 and No. 259.</p> <p>5.2 Refer to response to No. 2.1.2 above with regards to the sources of information for the EIA. A response to public participation is provided under 2.2.1 above.</p> <p>5.3 Refer to responses to No. 3.6 – 3.9 above.</p> <p>5.4 Refer to responses to No. 5.1 – 5.2 above.</p>
309.	1 We act for Earthlife Africa NPC ("Earthlife") and groundWork ("our clients"). The Centre for Environmental Rights (CER),	Nicole Löser (Centre for	Letter (11/04/2018)	1 – 3 Introductory section. No response necessary.

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	<p>Earthlife and groundWork, form part of the Life After Coal Campaign, a campaign which aims to discourage investment in new coal-fired power stations and mines; accelerate the retirement of South Africa's coal infrastructure; and enable a just transition to renewable energy systems for the people.</p> <p>2 We confirm that our clients have been duly registered as interested and affected parties (I&APs) in relation to this project.</p> <p>3 We submit these comments in response to the notification of 1 March 2018 titled "notice of review of draft scoping reports and public meetings in respect of the proposed Mokolo and Crocodile River (West) Water Augmentation Project (Phase 2)" ("MCWAP-2", or the "project").</p>	Environmental Rights NPC)		
310.	<p>4 We note that the notification refers to three separate components of MCWAP-2, namely: "Water Transfer Infrastructure - transfer of water from Crocodile River (West) to the Steenbokpan and Lephalale areas; Borrow Pits - sourcing of construction material for the water transfer infrastructure; and River Management System - manage abstractions from, and the river flow in, the Crocodile River (West) between Hartbeespoort Dam and Vlieëpoort Weir, the Moretele River from Klipvoor Dam to the confluence with the Crocodile River (West), the stretch of Elands River from Vaalkop Dam to Crocodile confluence, and also the required flow past Vlieëpoort", but that the Scoping Report only deals with the first component – the water transfer infrastructure. Since these components are all intricately linked – especially the assessment of impacts on the giving and receiving water systems – we submit that they should not be separated in this manner and we reserve our clients' rights to comment and make submissions on all the components of MCWAP-2.</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>Refer to No. 194 for a response to the process for seeking authorisation from DMR for the proposed borrow pits, due to the legislative changes regarding mining activities.</p> <p>Refer to No. 194 for a response to the River Management System.</p>
311.	<p>5 On 24 June 2016, we submitted comments, on behalf of Earthlife, on the background information document (BID) for MCWAP-2, published on 16 May 2016 ("the BID comments"). In the BID comments we stated that Earthlife had significant reservations about the feasibility and sustainability of the proposed MCWAP-2 project based on, inter alia:</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>5.1 The water balance was considered as part of the technical studies. One of the objectives of the Reconciliation Strategy 2015 includes maintaining a positive water balance in future and reconciling growing water requirements and availability. Refer to No. 6 regarding the increasing surplus return flow in</p>

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	<p>5.1 the current water shortages throughout South Africa, and the scientific predictions that the water shortage will worsen;</p> <p>5.2 the impending and increasing impacts of climate change; and</p> <p>5.3 the communities and the agricultural industry which are dependent on water sources such as the Crocodile River, which will be negatively impacted and affected by MCWAP-2.</p>			<p>the Crocodile River (West) catchment. Also refer to NWRS-1 and NWRS-2.</p> <p>5.2 Refer to No. 40 and No. 302 for responses to climate change.</p> <p>5.3 Refer to the following:</p> <ul style="list-style-type: none"> • No. 4 and No. 259 for responses with respect to Existing Lawful Water Users as set out in the NWA; and • No. 6 and No. 259 for responses to water availability for the proposed water transfer scheme.
312.	<p>6. We pointed out that Earthlife is concerned about the impacts that the proposed MCWAP-2 poses for human health and the environment, and stated that all potential health and environmental impacts of MCWAP-2 must be fully assessed as part of the requisite assessments.</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>6. In accordance with the purpose of the Scoping exercise as part of the overall environmental assessment, the Scoping Report identifies potentially significant environmental issues for further consideration and prioritisation during the EIA phase.</p> <p>Pertinent environmental issues, which will receive specific attention during the EIA phase through a detailed quantitative assessment and relevant specialist and technical studies (where deemed necessary), are discussed in the Scoping Report.</p> <p><i><u>Additional Response</u></i> <i>All potential impacts on the receiving environment, were assessed in Section 13 Impact Assessment of the Draft EIA Report. All potential impacts are listed in Section 13.1.6.</i></p> <p><i>For more information of Specialist Studies conducted as part of the EIA phase, refer to Section 12.3 – 12.10 of the Draft EIA Report.</i></p>
313.	<p>7 We stand by the BID comments, and make the following additional submissions on behalf of our clients and in relation to the Scoping Report, below.</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>7 Statement noted. No response necessary.</p>
314.	<p>I Summary of main points:</p>	Nicole Löser (Centre for	Letter (11/04/2018)	<p>Main points of letter summarised under items No. 8 – 14 below.</p>

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		Environmental Rights NPC)		
315.	8 Under MCWAP-2, the Department of Water and Sanitation (DWS) proposes to spend R 13 billion to transfer 75 million m ³ per annum of water from the Crocodile West catchment to the Mokolo catchment - beginning in 2023 - in order to meet purported shortfalls in the Lephalale area. However, DWS plans to implement this costly and risky inter-basin transfer to supply water primarily to proposed coal mines and coal-fired power plants in the Waterberg that are no longer necessary to meet South Africa's energy or development requirements, would significantly increase South Africa's greenhouse gas (GHG) emissions, and would further deteriorate the poor limited water resources and air quality in the region. We have identified numerous deficiencies in the Scoping Report which must be addressed in the Environmental Impact Assessment (EIA) for the project.	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>8 Government identified and approved 18 SIPs across the RSA to support economic development and address service delivery in the poorest provinces. SIP 1 entails the unlocking of the Northern Mineral Belt with Waterberg as the catalyst. Investment in rail, water and transmission infrastructure and energy generation will catalyse unlocking rich mineral resources in Limpopo resulting in thousands of direct jobs across the areas covered. The MCWAP includes the water infrastructure needed for SIP 1.</p> <p>The DWS planning processes are informed by the IRP process combined with consultations with the Department of Energy, Eskom and interest groups from industry. The IRP process is being monitored from the first IRP report of 2010, the update in 2013 as well as the latest draft distributed in 2016.</p> <p>Please note that the IRP process is not specific with respect to future location of power plant development. The DWS planning process for MCWAP -2 was thus also based on consultation with Eskom and potential IPP developers in this area <i>and other developments</i>.</p> <p>The DWS planning for the MCWAP 2 initially included for potentially 4 large coal fire power stations and some small IPP's in the Waterberg area. The 4th coal fire power station was only envisaged beyond 2035.</p> <p>Based on the available planning horizon of the IRP as well as the perceived reduced need for a 4th power station in future, the more recent planning in DWS was based on a potential of maximum 3 large coal fire power stations and a limited number of IPP's in the Waterberg area. It should be noted that the third facility may also potentially be made up by a combination of IPP's.</p>

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				<p>The draft IRP 2016 Base Case assumes some further coal fire power station development up to 2030. However, the portion of the electricity production from coal in the total technology mix is being reduced consistently.</p> <p>This appears to be aligned with the development of at least the equivalent of further 5 250 MW coal fire power generation capacity by 2030. The decommissioning of Kriel (3 000MW), Komati (1 000MW), Grootvlei (1 200MW), Camden (1 561MW), Arnot (2 000MW) and Hendrina (2 000MW) Power Stations is scheduled before 2030. It is assumed that Medupi and Kusile will effectively replace this capacity.</p> <p>It is of interest that further 10 000MW new coal fire power generation is planned beyond 2030 up to 2050 (Draft IRP 2016-Base case). However the CSIR and other interest groups strongly oppose this. The latest DWS planning allows for potential future phased development should this current unlikely development scenario be required.</p> <p>The DWS approach of planning for the development of more coal fire power capacity in the Waterberg area is deemed realistic and aligned with the latest trends in energy planning.</p> <p>The need for Phase 2A is thus is not primarily to supply water to new coal fire power plants. The immediate short term driver entails supplementing the FGD demand from Medupi, which cannot be supplied from the Mokolo source.</p> <p>The need for Phase 2A is driven by Medupi's and Matimba Power Stations' total water requirements which exceeds the water available (yield) from Phase 1 (Mokolo Dam). Following studies the DWS identified the Crocodile River (West) as the most suitable water resource for industrial purposes in the area.</p>

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				<p>The existing developments in Lephalale are currently dependent on a single source of water (Phase 1). Lephalale water requirements are already at its limits in terms of its licence. Without additional water the water availability in the town will be constrained.</p> <p>Phase 2A will also free up water supplied from Phase 1 to the town only when Phase 2A is implemented and existing Phase 1 users such as Eskom and Exxaro are able to access water from Phase 2A.</p> <p>Furthermore, a drought in the Mokolo catchment will place a significant portion (approximately 20%) of Eskom's generation capacity at risk and the town's water supply will be severely constrained. Water is required from the Crocodile River (West) to mitigate this risk.</p> <p>The total water allocation is made from an integrated river system management approach. The systems yield determination was optimised by using differentiated assurance of supply to the different types of users.</p> <p>Refer to No. 40 and No. 302 for responses to climate change.</p>
316.	9 The need and desirability of the project is based on incorrect assumptions around the need for additional coal-based electricity capacity.	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	9 Refer to No. 315 for response related to the IRP.
317.	10 The Scoping Report relies on outdated and faulty assumptions to estimate future water requirements in the MCWAP-2 receiving-system. For example, the Scoping Report estimates that a large proportion of the future water requirements in the Waterberg would be for new coal-fired power generation. However, as discussed further in paragraphs 18 to 26, circumstances around electricity demand and prices have changed significantly and new coal-fired power is not only not necessary, but it is expensive. Clean alternative energy options are available, which are cheaper	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>10 Refer to No. 315 for response related to the IRP.</p> <p>DWS initiated a Post Feasibility Bridging Study (completed in 2015) (Post Feasibility Bridging Study MCWAP 2A: Review Report P RSA 000/A00/18413) to review and update the Feasibility Study findings for MCWAP-2A. The bridging study aimed to redefine the capacity required for MCWAP-2A.</p>

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	and can meet South Africa's energy needs. There is no need for additional coal-powered energy and the EIA should not assume that these energy projects are needed or that they all (or even any) will be built.			
318.	11 The Scoping Report's projected water requirements also do not include any allocations for the Reserve, a legal requirement that takes precedence over all water uses. It is also vital that the climate change impacts on the water resources to supply MCWAP-2 be fully assessed in the EIA. The climate change impact assessment must study the effects of climate change on river flows throughout all the rivers in the MCWAP-2 system (see discussion in paragraphs 64 to 74). The EIA must address these deficiencies.	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	11 Refer to No. 41 and 79 for responses to the Reserve. Refer to No. 40 and No. 302 for responses to climate change.
319.	12 As discussed further below, in line with the recent judgment in Earthlife Africa Johannesburg v the Minister of Environmental Affairs & Others, the EIA process must also ensure that a thorough climate change impact assessment is conducted, which analyses the indirect and cumulative climate change impacts from the growth in coal mines, coal-fired power stations, and other industry that would be enabled by MCWAP-2. Such an assessment is critical because these developments would exacerbate South Africa's extreme vulnerability to the impacts of climate change, and because South Africa, and most of the world, has committed to capping and reducing GHG emissions under the Paris Agreement. However, MCWAP-2 would move South Africa in the wrong direction.	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	12 Refer to No. 40 and No. 302 for responses to climate change.
320.	13 The EIA must also thoroughly assess other indirect and cumulative impacts from the growth in coal mining, power plants, and industry enabled by MCWAP-2; including water, air quality, and socio-economic threats, as these developments would likely harm the environment and human health (see discussion in paragraphs 83 to 94) and also further impact on the area's resilience to climate change. By way of an example, the projected industrial growth that would occur in the Waterberg-Bojanala Priority Area (WBPA) should be assessed: this air pollution priority area was designated by the Minister of Environmental Affairs in 2012 because of concerns regarding non-compliance with National Ambient Air Quality	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	13 The impacts associated with the power stations, coal mines and other intended water users need to be assessed in sufficient detail as part of the respective environmental assessments conducted for each of these developments, as they are the sources of the impacts. However, cumulative impacts will also be assessed as part of the EIA for MCWAP-2A. <i>Additional Response</i> Refer to Section 13.22 (Cumulative Impacts) of the Draft EIA Report for a discussion of all possible cumulative impacts related to MCWAP-2A.

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	Standards (NAAQS). The EIA must assess the effect of this growth on the WBPA and its prospects of meeting its aim of ensuring compliance with NAAQS – where NAAQS, in certain areas, are already not being complied with. It is worth pointing out that, more than 11 and 10 years since the declarations of the Vaal Triangle and Highveld Priority Areas, respectively, there is regular non-compliance with the NAAQS - with attendant health impacts and violations of constitutional rights - largely as a result of industrial emissions. There is no reason to assume that the WBPA will not face the same fate if the extensive planned developments proceed.			
321.	14 In summary, without addressing these and other concerns identified below in the EIA, the Department of Environmental Affairs (DEA) cannot make an informed and rational decision about the potential need for, risks and benefits from MCWAP-2. A failure to do so will make the process susceptible to legal challenge.	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	14 Refer to response to No. 13 above.
322.	II The Scoping Report fails to adequately and accurately motivate the need and desirability of the project	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	Supporting points of Section II captured under items No. 15 – 31 below.
323.	15 The EIA Regulations 2014 state that the objective of the scoping process is to, inter alia, motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location.	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	15 Refer to the following sections of the Draft Scoping Report: <ul style="list-style-type: none"> Section 3 – Project Background and Motivation. This includes the project’s status as a Strategic Integrated Project (SIP), where SIP1 aims to unlock SA’s northern mineral belt in one of the poorest provinces (Limpopo) through key infrastructure provision in the Waterberg and Steelpoort districts and initiating new energy and industrial development (amongst others); Section 8 – Need and Desirability. <i>Also refer to No. 303 with respect to RSA’s economy;</i> and Section 10.3.2 – implications of the “No-Go-Option”.
324.	16 Under the heading of need and desirability in the Scoping Report, it is stated that “[t]he IDP for the Lephalale LM (2016) acknowledges the need for MCWAP and specifically states the following: “It is imperative to note that the outcome of the MCWAP project need (sic) to be implemented to address expected water shortages before any development in node	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	16 No additional information pertaining to new development in node area 1 is provided in the IDP for Lephalale LM. In acknowledging the critical nature of water related concerns, Focus Group Meetings were convened with the

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	<p>area 1 will be viable, as currently the area does not have sufficient water resources to sustain any new development””(emphasis added). However, it is not made clear to what extent such new development is needed.</p> <p>In response to the following question in the Scoping Report: “Does the community/area need the activity and the associated land use concerned (is it a societal priority)? This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate)” the Scoping Report stated “MCWAP-2A features prominently on SIP 1, which aims to unlock SA’s northern mineral belt in one of the poorest provinces (Limpopo). The assurance of water supply to the current power stations near Lephalale is not acceptable and places the country’s power supply at risk. The concerns raised by IAPs with regards to the proposed project primarily fall into the following categories: concerns related to the footprint of the physical infrastructure and associated impacts to land use as well as existing structures and infrastructure; concerns related to water availability in the Crocodile River (West); and concerns related to the cumulative impacts associated with the various developments that are linked to the Waterberg Coalfields.” The alleged needs of the communities therefore only relate to an apparent need to “unlock the northern mineral belt”, but no mention is made of the communities requiring the additional water to come from MCWAP2. In fact, as shown above, water availability in the Crocodile River (which will be used by MCWAP-2) is highlighted as a concern from I&APs.</p>			<p>irrigation groups, namely Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board and Makoppa Agriculture, in January 2018. Refer to a copy of the presentations provided during these meetings contained in Appendix Q of the Draft Scoping Report. The following matters were discussed during these meetings:</p> <ul style="list-style-type: none"> • Background and Motivation; • Proposed Project Layout; • Verification of Existing Lawful Water Uses in the Crocodile River (West); • Availability of Water in the Crocodile River (West); • Management of Impacts regarding Existing Lawful Water Uses (Operating Rules); • River Management System; • Environmental Impact Assessment; and • MCWAP-2A is needed to “free-up” water from the Mokolo Dam to supply water to Lephalale’s increasing urban requirements.
325.	<p>17 The Scoping Report’s inaccurate assessment that coal-fired power, and demands for electricity and more coal mining, will increase is based on, among other things, the outdated Integrated Resource Plan for Electricity 2010 – 2030 (promulgated in 2011) (“IRP 2010”). However, it is unreasonable to rely on the IRP 2010 to justify any projects because it is based on outdated and inaccurate assumptions about electricity demand, energy pricing, and feasibility of alternative electricity sources.</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>17 – 23 Refer to responses to no. 8 and no. 10 above.</p> <p>Please note that the IRP 2010 is still the officially approved version of energy planning. However, the DWS planning process for this specific project are not only informed by this document. The assumption that the DWS planning process only relies on the IRP 2010 is thus incorrect.</p> <p>It is agreed that the IRP planning process is dynamic and</p>

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	<p>18 The IRP is supposed to be a “living plan”, which is updated every 2 years, but it has yet to be revised since it was published in early 2011. Draft IRP updates were published for comment in 2013 and then again in 2016 – but a revised IRP has not yet been published. The latest in the media is that the IRP update has been sent back to Cabinet for reprocessing, and that it will be finalised “very soon” and that it is a “high priority” for the Department of Energy.</p> <p>19 The IRP 2010 assumptions on projected energy demand are too high. For example, the IRP 2010 estimated electricity demand in 2016 to be approximately 310 terawatt-hour (TWh) per year, whereas actual demand was significantly lower, at just above 250 TWh per year. The IRP 2010 estimated demand in 2020 to be about 350 TWh per year, whereas the Council for Scientific and Industrial Research (CSIR) has forecast it to be 288 TWh per year.</p> <p>20 Moreover, although Eskom was facing an energy crisis at the time of the IRP 2010, it now has excess supply of electricity capacity. In January 2017, Eskom confirmed that it had a surplus of 5 600 MW at peak and could meet any increase in demand until 2021. In a statement of August 2017, Eskom Chief Executive Officer said: “[w]hereas security of power supply was the key concern two years ago, the focus has now shifted to managing surplus capacity”. Eskom's Medium Term System Adequacy Outlook for October 2017, concludes that “the system is adequate in the short- to medium-term to meet demand from 2017 to 2022 in all the scenarios studied”.</p> <p>21 In addition, renewable energy sources from solar photovoltaic (“PV”) and wind are now much cheaper than they were when the IRP 2010 was promulgated. The IRP 2010 estimates that the cost of solar PV and wind energy would be between approximately 1-2 Rand per kWh in 2015 and 1 Rand per kWh respectively, while the actual cost – in the latest rounds of the renewable energy independent power producer (IPP) procurement programme - was 0.62 Rand per kWh for</p>			<p>the subsequent versions of the planning process were taken into account.</p> <p>The DWS planning process is required to pro-actively interpret the dynamic energy planning process in order to provide the required water supply to the Medupi FGD in time to meet loan and license conditions. It includes an obligation on the RSA Government to guarantee water supply to Medupi Power Station. During this process economy of scale principles and phasing of implementation options are applied to address realistic potential future water demand in this area. This is based on the best information available from the various inter departmental planning processes.</p> <p>The IRP process is only indicative of the national trend and not detailed planning of implementation technology in a specific region. The latter is informed by the SIP process.</p> <p>The draft 2018 IRP included Medupi Power Station and an EA was already issued for the FGD.</p>

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	<p>both. The price for new renewable capacity is also much cheaper than new coal. For example, the price of Thabametsi's electricity, should the power plant be built, will be R1.03 per kilowatt hour (KWh).</p> <p>22 Recent studies have concluded that there is no need for additional coal-fired power to meet South Africa's energy needs, and that Eskom can also retire many of its old plants. For example, a November 2017 report by Meridian Economics ("the Meridian report"), relying on modelling by the CSIR, found that in a 34 year, least-cost optimised, power system operation and expansion plan, no new coal-fired power capacity is built after Eskom's Kusile power station. It stated, "new coal and nuclear plants are simply no longer competitive. When new capacity is required, demand is met at lowest cost primarily from new solar PV and wind" (emphasis added).</p> <p>23 The Meridian report also concluded that Eskom should accelerate the decommissioning of three of its older coal-fired power stations (Hendrina, Grootvlei, and Komati) and curtail the completion of Kusile units 5 and 6 in order to save costs. The report found that these interventions can be achieved without affecting security of supply and could save Eskom up to R17 billion. Notably, CSIR's system analysis for the study found that all of South Africa's projected energy demands in both moderate and high demand scenarios can be met by new solar PV and wind, and without any new coal or nuclear energy, including, Thabametsi power station. The Meridian Report concluded: "[i]n both demand scenarios, coal-fired power stations provide most electrical energy until about 2025, after which coal's contribution starts to decline (as older coal-fired plants are decommissioned). No new coal-fired power is built after Kusile (which is taken as committed in the reference scenarios), as new coal is simply no longer competitive. Demand is met primarily from new solar PV and wind generation. Renewable energy is supplemented by flexible technologies; storage (pumped storage and batteries) and open-cycle gas turbines for peaking. In the high demand scenario, combined cycle gas</p>			

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	turbines are deployed after 2040. No new nuclear plants are built in any scenario either. Coal and nuclear are no longer a part of South Africa's least cost electricity mix" (emphasis added)".			
326.	<p>24 The Energy Systems, Economics, and Policy Group based at the Energy Research Centre (ERC), University of Cape Town, conducted a similar study that focused on the proposed Thabametsi and Khanyisa IPP power stations. ERC presented the findings of its study at the 27 March 2018 generation licence hearing for the proposed Thabametsi and Khanyisa coal IPP power stations. The presentation is attached as Annexure A. The study found that Thabametsi and Khanyisa would:</p> <p>24.1 increase South Africa's GHG emissions by approximately 155-177 million tonnes of CO₂ equivalent up to 2050;</p> <p>24.2 result in additional costs in the electricity sector every year of up to R4bn to 2025-2027 - to be borne by consumers; and</p> <p>24.3 increase the overall system costs by between R19,3 billion (reference case) and R24,5 billion (low demand scenario) in present value terms.</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	24 Refer to No. 40 and No. 302 for responses to climate change.
327.	<p>25 The ERC study concluded that, because South Africa has a major surplus of baseload generation, further new capacity (from Medupi, Kusile, and renewables) is coming online, and electricity costs have risen and are putting the economy and citizens under increasing pressure, Thabametsi and Khanyisa should not be built as they would not provide least-cost, or even necessary, electricity to South Africa, and would prevent cheaper investments later. Importantly, the power stations would exacerbate the situation of oversupply in the short- and medium-term. This would lower the load factors at Eskom plants and put those plants and jobs at risk, exacerbating the "utility death spiral". The study further noted that future energy demand could be met mostly by renewable energy options.</p> <p>26 The findings in these studies should, our clients submit,</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>25 – 26 Refer to responses to No. 8 and No. 10 above.</p> <p><i>The Draft IRP issued on 27 August 2018 includes Medupi, Kusile and Thabametsi in the Waterberg. The project team noted the diverging views on the Draft IRP expressed during the October 2018 hearing by the DoE Portfolio Committee of Parliament.</i></p> <p><i>Another recent opinion is by Prof Hartmund Winkler (Professor in Physics, University of Johannesburg): "South Africa has a lot going for it when it comes to renewable energy – good sunshine and coastlines that lend themselves to wind power generation. But a number of factors stand in the way of its ability to move entirely away from coal. The biggest is that wind and solar power</i></p>

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	make DWS reconsider its plans for a costly water infrastructure project which assumes that coal-fired power and coal mining in the Waterberg will increase significantly up to 2030. DWS must comprehensively assess whether the remaining unbuilt units for Medupi and any new coal-fired power plants in the receiving area, such as the Thabametsi power station, are necessary and likely to be completed.			<i>are intermittent, and new technologies haven't yet been developed that allow for cheap and effective storage."</i>
328.	<p>27 DEA's 2017 Guideline on Need and Desirability sets out a list of questions which should be addressed when considering need and desirability of a proposed development. These questions include:</p> <p>27.1 How will this development (and its separate elements/aspects) impact on the ecological integrity of the area, including how will this development impact on non-renewable resources? What measures were explored to firstly avoid these impacts?</p> <p>27.2 How were the Global and international responsibilities relating to the environment (e.g. RAMSAR sites, Climate Change, etc.) taken into account?</p> <p>27.3 What is the socio-economic context of the area, and considering the socio-economic context, what will the socio-economic impacts be of the development (and its separate elements/aspects), and specifically also on the socio-economic objectives of the area?</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>27.1 Section 11.8.5 (aquatic ecology), Section 11.9 (flora) and Section 11.10 (fauna) of the Scoping Report discuss the manner in which the ecological integrity may be affected by the proposed project during the project life-cycle. This will be investigated further as part of the identified specialist studies.</p> <p>The Scoping Report considers the project's need and desirability in terms of the nature, scale and location of the proposed development, as well as the wise use of land. This will be elaborated on in the EIA Report.</p> <p><u><i>Additional Response</i></u> <i>Refer to Section 8 of the Draft EIA Report which discusses the need and desirability of MCWAP-2A.</i></p> <p>The strategic context for the project's need and desirability was also discussed in the Scoping Report by considering the IDP, SDF and EMF for the area, as noted in DEA's Guideline on Need and Desirability of 2017.</p> <p>Refer to No. 40 and No. 302 for responses to climate change.</p> <p>Refer to response to No. 13 above with regards to the impacts associated with the power stations, coal mines and other intended water users, which includes impact to non-renewable resources, such as fossils fuels.</p> <p>27.2 Refer to response to No. 27.1 above. The project also complied with the SADC Revised Protocol.</p>

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				<p>27.3 Section 11.11 of the Scoping Report discusses the manner in which the socio-economic environment may be affected by the proposed project during the project life-cycle. This will be investigated further as part of the identified specialist studies.</p> <p><i>Additional Response</i> Refer to Section 12.8 of the Draft EIA Report for a summary of the Socio-Economic Impact Assessment (SEIA) (contained in Appendix 16 of the Draft EIA Report), which provides a summary of the key findings of the abovementioned study. Refer to Section 13.12 for a summary of the SEIA impact assessment. All aspects evaluated is listed in Section 13.12.1</p>
329.	<p>28 The Guideline states that “[d]uring screening and “scoping” the abovementioned questions must be used to identify the key issues to be addressed as well as to identify alternatives that will better respond to the considerations (i.e. that will firstly avoid the negative impact or better mitigate the negative impact, or that will better enhance the positive impact). The “scoping” process might find that many of the questions have clear answers and that no further information has to be gathered related to the specific question. In this regard would be required is for the relevant report (first part of the Basic Assessment Report or the Scoping Report) to clearly answer all the questions including a clear indication which questions do not require further information to be generated during the assessment.”</p> <p>29 We submit that the Scoping Report has not given adequate and full regard to these considerations, and has failed to adequately identify key issues and questions to be addressed in the EIA.</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>28 Reference to DEA guidelines. No response needed.</p> <p>29 Section 13 of the Scoping Report identifies potentially significant environmental issues for further consideration and prioritisation during the EIA stage. Clarity is required with regards to the key issues that have allegedly not been identified. In the case of climate change issues pertaining to the power stations, coal mines and other intended water users, refer to response to 27.1 above.</p> <p>Various options to supply the required water were considered during the Technical Pre-Feasibility and Feasibility Studies. The proposed water transfer scheme was identified to be the most preferable due to a variety of factors, and it is now being assessed as part of the EIA. Only layout alternatives are under consideration. Section 10 of the Scoping Report discusses the screened alternatives as well as the options for the proposed components of the project.</p>
330.	30 For the reasons set out above, we submit that the questions around need and desirability for MCWAP-2 must be seriously reconsidered in light of: the fact that there is no need for additional coal electricity capacity or coal mines in the country; the high climate, health and environmental impacts of MCWAP-2; and the high costs of implementing MCWAP-2.	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	30 Refer to No. 315 for response related to the IRP. <i>In addition, refer to No. 303.</i>

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331.	31 As mentioned above, to the extent that the envisaged development entails new coal plants and coal mines, this cannot serve as an adequate justification for the project being necessary nor desirable given the current circumstances of excess supply and the ability of alternative electricity sources to provide electricity which is cheaper than coal, with less environmental impacts.	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	31 Refer to responses to No. 15 and No. 27.1 above. Note divergent views during NERSA tariff talks. The Project Team noted the very diverging views (<i>solar, wind, coal, nuclear, etc.</i>) expressed during the October 2018 hearing by the DoE Portfolio Committee of Parliament. The same diverging opinions presumably found their way to DoE's request for comment on the draft IRP. MCWAP-2A cannot be delayed awaiting the revised IRP and judging from the divergent views legal action will once again follow.
332.	III The EIA must reassess future water demand for MCWAP-2 because the Scoping Report's projections are based on outdated and flawed assumptions concerning the growth of coal-fired power plants and mines and do not allocate water for meeting the Reserve or propose an adequate assessment of climate change impacts on water availability	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	Refer to responses to No. 8 and No. 10 above. Refer to No. 41 and No. 79 for responses to the Reserve.
333.	32 As discussed above and below, the Scoping Report predicts a major expansion of coal-fired power stations and mining in the Waterberg, which would require a significant increase in water supply. However, these projections are not accurate because they are not reflective of current realities around: South Africa's electricity demand (which is much lower than initially projected); Eskom's excess capacity; and alternative and technically feasible energy sources which are much cheaper than coal-fired electricity and also less water-intensive. As such, coal-fired power is no longer necessary to meet South Africa's energy demands. As a result, the Scoping Report substantially overestimates future water requirements for coal-fired power stations and coal mines (which primarily supply power plants) in the Waterberg.	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	32 Refer to responses to No. 8 and No. 10 above.
334.	33 In addition, the Scoping Report does not allocate water for the Reserve, a significant and unlawful omission, and it is unlikely to adequately assess the impacts of climate change on the water systems to supply MCWAP-2 – both of these factors will significantly impact on the availability of water for MCWAP-2.	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	33 Refer to No. 41 and 79 for responses to the Reserve. Refer to No. 40 and No. 302 for responses to climate change.

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335.	<p>The Scoping Report's stated motivation for MCWAP-2 and projected water requirements</p> <p>34 The Scoping Report claims that MCWAP-2 is needed to meet primarily the growing water demands of coal mines and coal-fired power plants in the Lephalale area. According to the Scoping Report: “[D]emand will increase in the Lephalale area due to the following planned and anticipated consequential developments due to the Waterberg coalfields: Construction of Eskom’s Medupi Power Station; Possible development of further Eskom power stations; Possible development of power stations by Independent Power Producers (IPPs); Extension of the Grootegeluk mining operations and further mines; Possible exploitation of gas; and accelerated growth in the population in the area.”</p> <p>35 Based on meeting the above and other “needs”, Table 3 of the Scoping Report sets out the combined water requirement projections for the MCWAP-2 project until 2050. For example, the Scoping Report projects that water requirements for Eskom coal-fired power plants and Exxaro coal mines will increase from approximately 24 m³ per annum in 2019 to 43 million m³ per annum in 2030. The Scoping Report projects that “Department of Energy future users”, which include “CF3 Mines”, “IPP Other”, and “CF3 Power Generation” (it is not clear what these projects are), will increase their water requirements from approximately 6 million m³ per annum to 40 million m³ per annum during this same time period. It predicts that Lephalale Municipality’s water use, which the Scoping Report refers to as “Social Users”, will increase from approximately 12 million m³ per annum to 14.4 million m³ per annum over the same time period. There is no mention of supplying water for agriculture.</p> <p>36 The Scoping Report also indicates (in discussing the implications of the “no go” alternative) that, if the project is not built, it would have the following implications:</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>34 – 45 Refer to responses to No. 8 and No. 10 above.</p> <p>Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA, in terms of agricultural water use. The Crocodile River (West) Management System will also deal with such irrigation demand from the river being also used as a conveyance system, <i>i.e. a government waterwork.</i></p> <p>The Table only reflect the users accountable to redeem the cost of the project. No additional water is allowed for irrigation as the projected water tariff is too high <i>to enable sustainable irrigation.</i></p> <p>It should be noted that an EIA has been undertaken on the Medupi FGD project, which included public participation.</p> <p>38 <i>Response from Eskom</i> - Eskom has considered both the water saving technology as well as technologies that use less water than that of a wet FGD. Eskom, through our analysis, have come to the conclusion that the Wet FGD remains the most efficient, sustainable and broadly (i.e. technical, social, cost) responsible solution for Medupi. This is justified by the attached report (<i>report to be provided on request</i>).</p> <p>Specifically, the technology to reduce water consumption by 30% refers to flue gas cooling. This can be implemented either in-front or behind the particulate control plant, but before the FGD. Western (i.e. Europe and the Americas) experience is mostly on installations after the particulate control plant, whereby the experience in Asia is for the type before the particulate control plant (references only exists for installations before Electrostatic Precipitators, not Fabric Filter Plants. The principle of operation is to reduce the inlet temperature to the FGD as the biggest water usage in an FGD goes into evaporative cooling. Hence if you can lower the</p>

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	<p>36.1 under-utilisation of the Waterberg coal reserves;</p> <p>36.2 the development of new power stations is of high strategic importance with tight timeframes. Without a suitable source of water, the new power stations will not be possible, with potential future energy shortages;</p> <p>36.3 the absence of water will suppress development, with associated socio-economic implications on a national scale; and</p> <p>36.4 without MCWAP-2A, Eskom will not be able to implement the Flue-Gas Desulphurisation (FGD) technology at the Medupi Power Station to reduce sulphur emissions, which will violate the related condition in Eskom's World Bank loan.</p> <p>37 As mentioned above, the Scoping Report's assessment that coal-fired power will increase is based on, among other things, the outdated IRP 2010. The result is that the Scoping Report overestimates both the need for coal-fired power and the need for coal mines.</p> <p>38 It is our clients' assertion that FGD for the Medupi power station (for those units that are completed) can be the only justifiable proposed use of water listed above as this will have a positive public health benefit (in addition to domestic water use, insofar as MCWAP-2 is intended for this) and given Eskom's legal obligations to meet the minimum emission standards prescribed under the National Environmental Management: Air Quality Act, 2004. It must be assessed, however, whether MCWAP-2 is needed for Medupi's FGD alone, given that the need for new coal-fired power and for the expansion of coal mining in the Waterberg has been significantly overestimated in the Scoping Report (as explained further below). Furthermore, it is worth pointing out that although the FGD proposed by Eskom does require additional water, the amount of additional water depends on the technology used. The amount of FGD water can be reduced by about 30% with technology widely used in Europe,</p>			<p>temperature, the water usage is lower. However, both type of installations have significant risk associated with them, and elements which Eskom does not believe can be adequately mitigated or managed at this point in time. The technology is not deemed technically feasible for installation, and coupled with this, the cost associated with this is high, the maintenance extensive and the unknowns in the South African context prohibitive.</p> <p>Commercially available technology (referring to lower water consumption) does exist when Wet FGD is not selected. It must be noted however that there does not exist a technology which has no water requirement. Specifically, looking at Medupi, the only other alternative which could be considered an alternative is a semi-dry system, which utilised hydrated lime instead of limestone (used in a Wet FGD). Hydrated lime is an expensive sorbent and the characteristics of lime to reduce SO₂ emissions in the South African context is not fully understood – calcination troublesome. Further to this, the Medupi site was not developed to be able to easily retrofit a semi-dry system. The costs associated with doing this will far exceed that of a wet FGD in the context of Medupi.</p>

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	<p>and potentially up to 100% with emerging new technology.</p> <p><i>The Scoping Report overestimates the need for new coal-fired power</i></p> <p>39 As explained in detail above, and based on: the research of, inter alia, the CSIR, Meridian Economics and ERC; Eskom's statements around excess capacity and the current prices of coal-based electricity versus other sources of electricity, there is simply no need for new coal-fired power stations to be built in the Waterberg.</p> <p>40 The Scoping Report and EIA must reconsider the likelihood of these proposed power stations being built on this basis.</p> <p>41 As discussed in paragraph 81 below, the Scoping Report and EIA must also thoroughly consider whether South Africa's international and domestic obligations to curtail its GHG emissions could force the country to abandon or move away from coal-fired power in the near future. It is submitted that this is clearly the case. This would also reduce the future demand for costly MCWAP-2 water.</p> <p><i>The Scoping Report overestimates the expansion of coal mining in the Waterberg</i></p> <p>42 The recoverable coalfield reserves in the Waterberg are estimated to be 15,847 million tonnes, with 13,111 million tonnes of that amount being low-grade bituminous coal that cannot be exported.</p> <p>43 A study in the Journal of the South African Institute of Mining and Metallurgy concluded that: "the low-grade Waterberg coals with their high ash content and low yields are a significant stumbling block to further development of the coalfield. Any new exploitation will only be financially feasible if a market can be found for the vast quantities of low-grade coal that will be produced."</p>			

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	<p>44 According to the study, the market for this low-grade coal is domestic coal-fired power plants, as well as gas, steel, and chemical production. The study concluded that: “Sufficient water is the primary key to enabling exploitation, together with an adequate market for the large volumes of low grade coal. As the most likely consumer of this coal will be either a power station or a petrochemical complex, the need for additional energy will be a driving force in the development of this coalfield” (emphasis added).</p> <p>45 As discussed above, the Scoping Report assumes an increase in the water requirements for mines from 2019 to 2050. As there is no need for new coal power generation, the development of Waterberg coalfields would also be significantly curtailed. Thus, the Scoping Report’s projected water requirements also potentially significantly overestimate the need for expanded and new coal mining in the area.</p>			
336.	<p><u>The Scoping Report’s projected water requirements do not include the Reserve</u></p> <p>46 The National Water Act, 1998 (NWA), section 16 states that “[a]s soon as reasonably practicable after the class of all or part of a water resource has been determined, the Minister must, by notice in the Gazette, determine the Reserve for all or part of that water resource ... A determination of the Reserve must – ... ensure that adequate allowance is made for each component of the Reserve.” Furthermore section 18 states that “[t]he Minister, the Director-General, an organ of state and a water management institution, must give effect to the Reserve as determined in terms of this Part when exercising any power or performing any duty in terms of this Act.”</p> <p>47 The Minister of Water and Sanitation has – as of yet – only determined the reserve for one water resource in South Africa - the Olifants-Doorn46 catchment.</p> <p>48 Although the Scoping Report recognises that the “Reserve is central to water resource management and enjoys priority of use according to the National Water Act (No. 36 of 1998)”, the</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	46 – 53 The MCWAP-2A will be implemented complying with the requirements of the NWA.

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	<p>Report's projected water requirements fail to allocate any water to the Reserve or anticipate any determination of the reserve in the future, even though this is legally required by the NWA. Nor is any indication given on what the reserve for the relevant catchments actually is and/or how it will be accounted for in the MCWAP-2 EIA.</p> <p>49 Moreover, the Scoping Report indicates that the EIA will not discuss meeting Reserve requirements, but vaguely asserts that this discussion will be part of the licensing process of DWS. It notes: "The Reserve will assist DWS to make informed decisions regarding the authorisation of future water use as well as the operation and management of the water resource. The Reserve requirements (EWR) will ultimately feed into the licensing process of DWS and the operation of the system."</p> <p>50 This is an unacceptable omission, as the determination of the Reserve is a legal requirement and will undoubtedly impact on the water available for MCWAP-2 – it must be given priority.</p> <p>51 The DWS has noted that: "[c]urrently, water availability and water use are in balance [in the Mokolo catchment]. However, within the provisions of the National Water Act as stipulated in the National Water Resources Strategy, there is a need to meet the water requirements of the Reserve (Basic Human Needs and Ecological) in terms of water quantity and quality. Taking these requirements into account there is insufficient water to maintain the current balance. Added to this, it is anticipated that water demand will increase with new developments in the Mokolo Catchment, such as new or expanded mining activities and new power stations" (emphasis added).</p> <p>52 Similarly, the Draft Limpopo Water Management Area North Reconciliation Strategy noted that meeting the ecological reserve in the Mokolo River catchment would reduce yield in the Mokolo Dam by 57%.50 The Draft</p>			

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	<p>Reconciliation Strategy provides: “[I]t is evident that the impact of implementing [the ecological reserve] has an adverse effect on the available yield. Almost all of the major dams within the study area will not be able to meet their current allocations if the desktop [ecological reserves] are implemented. More detailed studies have to be conducted to better quantify the [ecological reserve] and subsequent impact on the yield of large dams for the following phases of the Draft Reconciliation Strategy. It might be that a compromise can be made between the [ecological reserve] and the impact on the available yield” (emphasis added).</p> <p>53 MCWAP-2 is unlikely to be able to meet requirements for both the Reserve and other water users listed in Table 3 of the Scoping Report. It is thus critical that the EIA must include the Reserve in its projected water requirements.</p>			
337.	<p>54 In summary, there are major flaws in the Scoping Report’s projected water requirements that the EIA must address. The EIA must also re-assess the Scoping Report’s no-go alternative to include scenarios where water requirements for coal-fired power plants and coal mines are significantly reduced (on the presumption that these projects cannot and do not proceed), as this is a likely outcome regardless of MCWAP-2 proceeding.</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	54 Refer to responses to No. 8 and No. 10 above.
338.	<p>55 Failing to adequately assess the full impacts of climate change on water resources will also affect the water available for MCWAP-2. This is, however, addressed in further detail below.</p> <p>IV The EIA process must require that a comprehensive climate change impact assessment is conducted</p> <p>56 The 8 March 2017 judgment in the case of Earthlife Africa Johannesburg v the Minister of Environmental Affairs & Others (“the Thabametsi judgment”) confirmed that project proponents must conduct a comprehensive climate change impact assessment (CCIA) as part of the EIA process in accordance with EIA Regulations and the requirements of the National Environmental Management Act, 1998 (NEMA). In that case,</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	55 – 60 Refer to No. 40 and No. 302 for responses to climate change.

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	<p>Earthlife had challenged the Minister's decision to grant the Thabametsi coal-fired power plant its environmental authorisation without first considering the climate impacts of the project. The Court held that climate impacts were not adequately considered by the DEA or the Minister prior to granting the environmental authorisation.</p> <p>57 Importantly, the Court held that a CCIA requires more than just a quantification of projected GHG emissions. Project proponents must consider broader impacts such as, in the case of Thabametsi that the power station would be based in a water-stressed region, thereby "aggravat[ing] the impact of climate change in the region by contributing to water scarcity, raising in turn questions about the viability of the power station over its lifetime." It also stated that such an assessment would be best done by means of a professionally-researched report.</p> <p>58 The Scoping Report's discussion of climate change does not meet the requirements of NEMA and the EIA Regulations as confirmed and set out by the Court in the Thabametsi judgment. Its discussion of climate change impacts is limited only to general comments on the potential threat from climate change to the water yield in the system. Section 11.3.2 notes: "As is common accepted practice, the potential impact of climate change to river flows has been considered in the hydrological modelling, where a margin for error in the future predictions has been considered. This is based on historical data of wet and dry periods for the area, as well as all known water use that affects river runoff."</p> <p>59 It further states: "Studies conducted where various global climate models were used to estimate the likely implication on water availability (yield) of system showed widely varying results and found that either increases or decreases will occur in water availability as a result of Climate Change. Due to these observations it has been acknowledged that Climate Change adds another layer of uncertainty to water resource assessment and planning. Considering the recent advances made in developing methods</p>			

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	<p>of assessing uncertainty in water resource analysis there are proposals under consideration by DWS and other funding organisations to expand the uncertainty assessment methodology by also incorporating the effects of Climate Change. The key in achieving this is by integrating available research products of Climate Change and uncertainty. This will require developing procedures (including software systems) and establishing analytical techniques that can be used in studies such as this. The water resource analysis that was carried out for this study should be reviewed once the proposed analytical techniques and procedures have been developed to account for Climate Change as an uncertainty.”</p> <p>60 This discussion is insufficient and flawed because, among other things:</p> <p>60.1 the hydrological model referred to above was not provided to the public, making it impossible to evaluate how the model assessed the potential impacts of climate change to river flows. The vague methodological description provided in the Scoping Report provides no further clarity (i.e., “where a margin for error in the future predictions has been considered ... based on historical data of wet and dry periods for the area, as well as all known water use that affects river runoff”);</p> <p>60.2 although the Scoping Report recognises that climate change “adds another layer of uncertainty to water resource assessment and planning”, it suggests that no “procedures” or “analytical techniques” are available to “account for Climate Change as an uncertainty.” The Scoping Report notes that the water resource analysis should only be reviewed for climate change impacts once “analytical techniques and procedures have been developed to account for Climate Change as an uncertainty.” This is incorrect, and suggests that the EIA may not complete a comprehensive CCIA. As the report of Bradley Udall, attached to these comments as Annexure B, and the Thabametsi Power Plant climate resilience report, attached to these comments as Annexure C, demonstrate, it is possible to predict, with a high level of certainty, the potential threats from</p>			

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	<p>climate change to water yield of the Crocodile West River and Mokolo River catchments; and</p> <p>60.3 in addition, the Scoping Report avoids any discussion of the manner in which MCWAP-2 might aggravate the Waterberg's resilience to climate change, or of indirect or downstream GHG emissions that would be enabled by MCWAP-2.</p>			
339.	<p>61 Moreover, the list of specialist studies in the Scoping Report to be conducted as part of the environmental review does not include a CCIA.</p> <p>62 The EIA must complete a comprehensive CCIA that is consistent with the Thabametsi decision and which includes the following elements:</p> <p>62.1 an assessment of the potential threats to the system water yield from climate change;</p> <p>62.2 a discussion of how the project might aggravate potential climate change impacts in the area; and</p> <p>62.3 an assessment of GHGs that would result from the project, including indirect and full life-cycle emissions, cumulative emissions, climate health impacts and the environmental and social cost of the GHG emissions.</p> <p>63 These elements are discussed in turn.</p> <p><u>The EIA must assess the potential threats to the MCWAP-2 system's water yield from climate change</u></p> <p>64 Recent reports have found that climate change would reduce the water yield throughout the MCWAP-2 system.</p> <p>65 According to the 2016 Limpopo Department of Economic Development, Environment and Tourism (LDEDET) Provincial Climate Change Response Strategy (2016-2020): "...the region is likely to experience greater variability in</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	61 – 72 Refer to response to No. 296 with regards to climate change considerations.

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	<p>rainfall, and will almost certainly witness an increase in evaporation rates, implying a drier future even in the presence of greater rainfall and heavy rainfall events. Limpopo Province would therefore experience regular droughts and heat intensity, water shortages, spread of diseases with adverse effects on the economy, natural resources, infrastructure, human health and community livelihoods. Water shortages are already a key feature in the drier Limpopo Province and the situation is going to become even more severe as a result of climate change. Important water use sectors such as agriculture and electricity generation (i.e. the energy sector) will face severe effects from climate change”(emphasis added).</p> <p>66 Furthermore, the LDEDET report found: “ [a] detailed climate change vulnerability assessment for Limpopo revealed that sectors such as human health, agriculture, plant and animal biodiversity, water resources, and water and road infrastructure, livelihoods as areas showing the highest vulnerability to climate change mainly because the Province comprises predominantly rural areas that are dependent on rain-fed agriculture with a low economic development, low levels of human and physical capital, poor infrastructure standing, and therefore very low adaptive capacity.”</p> <p>67 The report concluded: “in most climate change scenarios projected for the Limpopo river basin in South Africa, future water supply availability will ‘worsen considerably’ by 2050.”</p> <p>68 A May 2017 report by the Academy of Science of South Africa entitled ‘First Biennial Report to Cabinet on the State of Climate Change Science and Technology in South Africa’ highlights the key climate change challenges and impacts in South Africa over the next 30 years. The report states that “[t]he strongest impacts of climate change in South Africa in the first half of the 21st century will be on the security of freshwater supplies to industry, towns and agriculture; on crop and livestock agriculture, due to less favourable growing</p>			

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	<p>conditions; on human health, due to heat stress and disease spread, particularly in urban areas; and on biodiversity, due to shifting habitat suitability.”</p> <p>69 Thabametsi’s Climate Resilience Assessment Report (CRAR) found that climate change is a high risk to the availability of water resources in the Mokolo Catchment. It noted that climate change projections for the region indicate a likely increase in drought conditions and higher temperatures, which would reduce water availability. The CRAR explained “that climate-related variables will have an impact on water resources; notably, higher temperatures are likely to bring about increased evaporation losses from dams and rivers, and increased irrigation water requirements.”</p> <p>70 Importantly, the CRAR noted that climate change “risks and impacts do not appear to be considered in the context of basin-level programs, including the Crocodile West River Reconciliation Strategy 2012 and the draft Limpopo WMA North Reconciliations Strategy 2016, both relevant to this project, adding uncertainty in the extent to which proposed allocations will be met in the context of a changing climate” (emphasis added).</p> <p>71 The report of Bradley Udall, Senior Water and Climate Research Scientist/Scholar at the Colorado Water Institute in Colorado State University, attached as annexure B, is consistent with the findings of the CRAR. It concludes that the strong preponderance of scientific evidence indicates that flows in the Mokolo and Crocodile (West) Rivers will likely significantly decline as the 21st century warms due to higher evaporation and evapo-transpiration and increased incidents of flash droughts. Udall cautioned: “South African water and infrastructure planners and government should prepare for significant Mokolo and Crocodile (West) River flow reductions and refrain from actions that will increase the risks of undesired outcomes. Maladaptive actions would include increasing the demands on these already over-allocated water systems, and contributing to additional warming by increasing</p>			

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	<p>emissions of greenhouse gasses through the construction of long-lasting, new coal-fired power plants” (emphasis added).</p> <p>72 In summary, there is resounding agreement that climate change threatens water flow throughout the MCWAP-2 system. The EIA must assess the potential threats to the MCWAP-2 system’s water yield from climate change, including on the Vaal, Crocodile (West), and Mokolo catchment areas. The potential for climate change to reduce flow in these catchments is a major risk to the long-term viability of the project and the EIA must assess the feasibility of MCWAP-2 to deliver the committed amounts of water in light of predicted climate change reduced flows.</p>			
340.	<p><u>The EIA must assess how MCWAP-2 might aggravate climate change harms in the area</u></p> <p>73 As mentioned, MCWAP-2 would enable the significant growth of new polluting coal mines, power stations, and other industry. Not only will these industries contribute significantly to climate change (nationally and globally) through their GHG emissions, they will exacerbate the impacts of climate change in the Waterberg area by utilising, and potentially polluting, scarce and limited water resources, which are needed by communities and the environment for climate adaptation and resilience, and which will be (and are being) significantly reduced as a result of climate change.</p> <p>74 The EIA must, therefore, assess how MCWAP-2 will impact the surrounding area’s resilience to climate change.</p> <p><u>The EIA must assess the indirect or downstream GHG emissions that would result from the project</u></p> <p>75 The Scoping Report concedes: “MCWAP-2A will enable developments associated with the Waterberg coalfields to proceed”. This will include the development and/or expansion of coal-fired plants, coal mines, and other industry.</p> <p>76 These developments will significantly increase South</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	73 – 82. Refer to No. 40 and No. 302 for responses to climate change.

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	<p>Africa's GHG emissions.</p> <p>77 For example, Thabametsi power station, which would rely on MCWAP-2 water for its water requirements, would have very high GHG emissions. Thabametsi's final CCIA found: "the Project's GHG emissions are estimated to be 5 186 749 t [Carbon dioxide equivalent] CO₂e annually during operations on completion of Phase 1, and 9 879 522 t CO₂e annually on completion of Phase 2. Using benchmarks of international lender standards with respect to the magnitude of annual emissions from a development ... the magnitude of this Project's GHG emissions is considered to be 'Very Large'—the highest possible rating, which translated to an overall significance rating of "High (Negative)."</p> <p>78 A fully operational Medupi Power Station would emit 26.7 Mt per year before FGD and 26.0 Mt per year, after FGD.⁷¹</p> <p>79 In addition, there are several other power stations and coal mines proposed in the Waterberg that would rely on MCWAP-2 water and would individually and cumulatively emit significant GHG emissions, given the nature of their processes as coal plants and coal mines. All coal-fired power stations emit high volumes of GHGs by virtue of burning coal for electricity. The only means to substantially reduce these emissions would be through carbon capture and storage technology, which is neither technically nor financially feasible for South Africa.</p> <p>80 The EIA must assess these indirect and cumulative GHG emissions.</p> <p>81 This is particularly important considering that South Africa has committed to reduce its GHG emissions through its ratification of the Paris Agreement. There is a real risk that new coal-fired power plants will be unable to operate for their intended operational lifespan as South Africa's commitments would require it to reduce its emissions significantly by 2035, and South Africa's Nationally Determined Contribution (NDC)</p>			

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	<p>under the Paris Agreement recognises that “near zero” GHG emissions are required by the second half of the century to avoid even greater impacts that are beyond adaptation capability. All NDCs are required to become progressively stricter, with South Africa’s next intended NDC due in 2020.</p> <p>82 In summary, the Scoping Report’s discussion of climate change – and intended assessment of climate change in the EIA - is wholly inadequate and legally flawed. The EIA must conduct a comprehensive CCIA which includes: the potential threats to the system water yield from climate change; how the project might aggravate potential climate change impacts in the area; and an assessment of GHGs that would result from the project, including indirect and cumulative emissions.</p>			
341.	<p>V The Scoping Report’s discussion of potentially significant environmental issues does not address indirect threats</p> <p>83 In addition to climate change, the Scoping Report does not adequately discuss indirect threats from the project to air quality, land/soil, water resources, and associated human health, and the socio-economic environment.</p> <p>84 Section 13 of the Scoping Report addresses potentially significant environmental issues that will be assessed during the EIA. The Scoping Report describes several “general [terms of reference] that will apply to all the EIA specialist studies to be undertaken for the proposed project”, including that the EIA will: “6. Assess the impacts (direct, indirect and cumulative) in terms of their significance (using suitable evaluation criteria) and suggest suitable mitigation measures. In accordance with the mitigation hierarchy, negative impacts should be avoided, minimised, rehabilitated (or reinstated) or compensated for (i.e. offsets), whereas positive impacts should be enhanced. A risk-averse and cautious approach should be adopted under conditions of uncertainty.”</p> <p>85 The Scoping Report, however, does not follow its own</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	83. Refer to response to No. 13 above with regards to the impacts associated with the power stations, coal mines and other intended water users.

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	<p>terms of reference because it does not discuss any indirect impacts from the project, including to air quality, water resources, human health, and the socio-economic environment.</p> <p>86 As mentioned, MCWAP-2 would allow for the development of many power plants, coal mines, and other industry in the Lephalale area (although it is not clear what the additional industrial developments might be, nor when they would be constructed and when they would operate). These developments have the potential to significantly pollute air and water, as well as harm human health and the socio-economic environment.</p> <p>87 The air quality impacts from power plants and coal mines are notoriously bad. For example, in the Highveld Priority Area, DEA found that Mine Haul Roads account for 49 percent of the particulate matter (PM¹⁰) emissions, while power plants accounted for 12% of PM¹⁰, 73% of nitrogen oxide (NO_x), and 82% of sulphur dioxide (SO₂) emissions. Moreover, elevated levels of these pollutants seriously threaten human health. For example, a 2017 study commissioned by groundWork links the air pollution from PM2.5 particulate matter of Eskom's coal-fired power stations to 2 239 equivalent attributable deaths annually. It also states that these pollution impacts cost South Africa more than USD 2,3 billion annually, through premature deaths, hospital admissions, and lost working days. Despite these potential threats, there is no indication in the Scoping Report that the EIA will assess the air quality and health impacts which will indirectly result from the project.</p> <p>88 Coal-fired power plants and mines also threaten water quality. Mining pollutes water in many ways. One of the most damaging sources of water pollution is acid mine drainage (AMD) from both active and abandoned mines. AMD is water flowing from mine sites that has become acidified by contact with sulphides in the mining waste rock that have been exposed to air. The resulting water is very acidic and high in salts and heavy metals. AMD often leaches into aquifers or</p>			

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	<p>flows into rivers and streams, causing widespread devastation by sterilising soils, contaminating food crops, and harming the health of humans, animals and plants.</p> <p>89 Abandoned and closed mines are the biggest source of AMD in South Africa. As of 2014, South Africa had approximately 6000 abandoned mines from which acid water and heavy metals leak into the environment. Active mining operations also contribute to the problem. For example, in 2012, a storm event caused run-off ponds at coal-handling facilities to overflow with AMD into the Boesmanspruit Dam near Carolina in Mpumalanga, contaminating the water in the reservoir and leaving the people of Carolina and the Silobela Township without a safe water supply for seven months. The community members had to purchase water from alternative sources at their own expense.</p> <p>90 The storage of post-combustion waste from coal-fired power plants and its dispersion into the water and air also threatens human health and ecosystems. In South Africa, Eskom alone produces 25 million tons of solid waste residue (referred to as coal ash) annually. Coal ash residue is made of very fine particles that are corrosive and contain toxic metals and soluble salts which can leach into the environment, polluting surface and ground water.</p> <p>91 Coal ash leachate will commonly escape the ash and enter and contaminate natural groundwater and surface water systems. Numerous researchers have observed worldwide the adverse environmental impacts caused by the leaching of coal ash to groundwater and surface waters from both old and new ash deposits. Leaching takes place from both old and new sites, and peak leaching of hazardous chemicals occurs many decades after disposal and can persist for hundreds of years. Thus, ash disposal sites are potential sources of groundwater and surface water contamination for many decades after ash deposition has ceased. Many researchers have also documented the potential harm from coal ash contamination in drinking water to human health. Some of these health impacts</p>			

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	<p>include cancer and damage to the nervous systems and other organs, especially in children.</p> <p>92 However, the terms of reference included in the Scoping Report for the Aquatic Impact Assessment neglect to address any of these indirect threats from the project.</p> <p>93 We submit that a health impact assessment (HIA) must be conducted, which analyses the indirect and cumulative impacts from the growth in coal mines, coal-fired power stations, and other industry that would be enabled by MCWAP-2. An HIA should include a cost benefit analysis of the infrastructure proposals, and an economic assessment of health impacts from the proposed projects.</p> <p>94 Although the Scoping Report concedes that “MCWAP-2A will enable developments associated with the Waterberg coalfields to proceed”, it does not discuss the potential socio-economic threats and harms from those developments. These would include: harm to human health from water and air pollution; the financial burden of the health costs as well as reduced productivity as a result of the health impacts; harm from water pollution on the environment and natural resources including wildlife, which will threaten sectors such as agriculture and tourism; and reduced water available for communities, farmers, and the environment as a result of the water being utilised and contaminated by coal mines, power plants, and other industries. The EIA must fully consider these issues. This is a legislative requirement and a failure to do so will make the EIA open to legal challenge.</p>			
342.	<p>VI Conclusion</p> <p>95 In light of the above, it is our recommendation that the Scoping Report be significantly amended before it is submitted to DEA, and made available again for public comment, to address the deficiencies highlighted above.</p> <p>96 The proposed schedule for finalising the EIA allows the DWS and its consultants approximately one week to address</p>	Nicole Löser (Centre for Environmental Rights NPC)	Letter (11/04/2018)	<p>95 Based on the nature of the comments received and the responses provided it is not deemed necessary to make significant changes to the Scoping Report.</p> <p>96 In accordance with Regulation 21(1) of GN No. R 982 of December 2014 (as amended), the Scoping Report (which was subjected to a public participation process of at least 30 days) must be submitted to DEA within 44 days of receipt of the application by the Department.</p>

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	<p>public comments before submitting the final Scoping report to the DEA. This is an unreasonably short amount of time to meaningfully take into account all public comments, especially considering the cost, complexity and scale of the project, the potential significant environmental impacts, and the sensitive and complex nature of water distribution in a water-stressed area.</p> <p>97 Moreover, the one-month time period allowed for the public to comment on the Scoping Report is inadequate and does not allow the public to meaningfully evaluate the Scoping Report – nor is this amount of time adequate for comment on an EIA and the many technical reports that would be submitted as part of the draft EIA. The CER has on, numerous occasions, made submissions on unreasonable timeframes provided for in the NEMA EIA Regulations for the EIA process. The requirement for an applicant to, within 44 days of receipt of the application, submit to the competent authority a scoping report, which has been subjected to a public participation process of at least 30 days – is too short to allow for adequate and meaningful assessment and participation, as required by the Constitution and the Promotion of Administrative Justice Act, 2000 (PAJA). We submit that arrangements should have been made for more time for both comment, and consideration of the comments, before submission of the final Scoping Report. Our clients' rights in this regard are reserved.</p> <p>98 Please ensure that adequate consideration is given to these comments, and keep us updated on the progress of this matter.</p>			<p>DEA. The Application Form was submitted to DEA on 5 March 2018. The timeframes in the Scoping Report are thus aligned with the EIA Regulations of 2014 (as amended).</p> <p>97 The timeframes of the EIA process for MCWAP-2A aim to satisfy the EIA Regulations of 2014 (as amended).</p> <p>In order to provide additional opportunities for IAPs to become involved in the project and to provide comments, a project announcement phase was undertaken prior to the EIA which included the distribution of a Background Information Document and Reply Form (which was also acknowledged and commented on by the Centre for Environmental Rights NPC) to IAPs, notification via onsite notices and newspaper advertisements and convening public meetings (refer to Section 12.5 of the Scoping Report). Focus Group Meetings were also held to discuss key issues (refer to Section 12.5.7 and Section 12.6.6 of the Scoping Report).</p> <p>98 Centre for Environmental Rights NPC and their partners to be kept informed during the course of the EIA process.</p>
343.	<p>Following the various meetings that have been attended regarding the information of the pipeline from Vlieëpoort to Medupi, a call has been made for input regarding the project.</p> <p>Besides Kumba Iron Ore who own the property where the weir is proposed to be constructed, my property is the first of the portions of Mooivallei farm which is envisaged to be affected by a significant servitude and engineering works of the first section of the pipeline.</p>	G. Bauer	Letter (12/04/2018)	<p>1) Section 9.3.1 of the Draft Scoping Report explains the various options considered for the proposed abstraction weir and the selection criteria used as part of the Conceptual and Pre-feasibility stages of the project. To minimise impacts to the receiving environment and current land uses, the proposed pipeline route then attempts to remain alongside existing linear-type infrastructure, which in the instance of the Mooivallei area includes the road. In addition, it also follows property</p>

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	<p>Following the last meeting, and our conversation immediately afterwards, the owners of the Mooivallei properties have had a meeting to discuss possible alternatives to the envisaged route of the pipeline as per the kml file received from you for mapping on Google Earth.</p> <p>I would like to point out the following regarding the suggested route:</p> <ol style="list-style-type: none"> 1) It would affect practically all Mooivallei properties. 2) Water supply from boreholes and / or the river, as well as some power cables and ESKOM lines will be affected. 3) As the pipeline is to be fenced during the construction phase, game and animals will be cut off from the water they have access to, i.e. the Crocodile River during this period. 4) The proposed routing lies over the Mooivallei Caves which have been mapped and studied by cartographers and are occupied by a large colony of bats. 5) The portions of Mooivallei are relatively small properties, and thus, a permanent 25m wide servitude over arable and irrigable land carries great significance to marketability and profitability of the portions where agriculture is the only / main income source. 6) The purchase of portion 10 of Mooivallei was done as a lifestyle farm purchase, and this will be changed and no longer be such once construction has started, and indeed, even after completion of the project in this area. 7) This therefore has a significant impact on the owners of Portion 10, their lifestyle, and the value of the property which is slowly being returned to a pristine bushveld state, rather than arable land so as to afford the game in the area a natural haven from ever decreasing environment. 8) There is at least 1, but possibly 4 structures that will need to be relocated and reconstructed / replaced. These include a farm store (possibly 2), an occupied house and a butchery. 9) Access to the various portions of Mooivallei may be 			<p>boundaries to limit disturbances on the farms. The original Farm Mooivallei 342 KQ was subdivided into various narrow farms that are located along the road, which is followed by the proposed pipeline route.</p> <p>2) Refer to No. 146 for response to impacts to existing infrastructure.</p> <p>3) Allowance will be made in the EMP for access to watering points.</p> <p>4) Section 11.10.1 acknowledges that previous studies found a bat cave that is situated in the Mooivallei area. The bats recorded from the cave are reported to be <i>Rhinolophus darlingi</i> and <i>Miniopterus schreibersii</i>, and are both ranked as 'Least Concern'. This will need to be investigated further as part of the Terrestrial Ecological Impact Assessment (noted in scope of this study – see Section 14.4.3.2 of the Scoping Report) in the EIA phase.</p> <p><u>Additional Response</u> <i>Mammals in the study area were assessed as part of the Terrestrial Ecological Impact Assessment (Appendix I2 of the Draft EIA Report).</i></p> <p><i>Refer to Section 13.10.2 of the Draft EIA Report for an impact assessment and mitigation measures related to the bats.</i></p> <p>5) To be assessed as part of the Agricultural Impact Assessment in the EIA phase.</p> <p><u>Additional Response</u> <i>Extract from Table 62, Section 13.13.2 (agricultural impact assessment) of the Draft EIA Report, states the following: "Permanent loss of irrigated crops on Mooivallei. Approximately 80 ha of irrigated crops will be lost for the construction period. Approximately 200 LSU fill be lost for the duration of construction. Can be partially</i></p>

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	<p>problematic during the construction phase.</p> <p>10) A significant number of Leadwood trees will need to be felled to accommodate the required temporary servitude.</p> <p>At a meeting of Mooivallei owners held to discuss this matter, two alternatives were recorded and are now presented for consideration, namely alternative A and alternative B as detailed below.</p> <p>A) ALTERNATIVE A: To move the weir site from Vlieëpoort to a position on the river immediately adjacent to the storage dam – see diagram A. This will have the following advantages:</p> <ol style="list-style-type: none"> The cost of construction so as to deliver water to the storage dams will be significantly reduced. None of the Mooivallei owners will be affected and will not need to be compensated for land that is expensive and will need to be expropriated. The costs involved in ensuring the stability and suitability of the weir, as opposed to that at Vlieëpoort will most likely be far less than that of ultimately delivering the water from Vlieëpoort to the storage dams. At least 9 landowners will be cut out of the consultation / expropriation phase of the project. <p>B) ALTERNATIVE B: The pipeline to follow the road on the south western side of the Crocodile River and to cross the river adjacent to the storage dam – See Diagram B. This will have the following advantages:</p> <ol style="list-style-type: none"> The cost of expropriation will be significantly decreased as the land traversed will mostly not be irrigated arable land or lifestyle farming area The line will be much straighter with significantly reduced difficulty of construction. There are no mountains which need to be traversed There are no sensitive geological structures / caves 			<p><i>mitigated by changing the crop selection, unless the land is planted with permanent crops like lucerne or citrus. Compensate the farmer for loss on income”.</i></p> <p>6) To be assessed as part of the Socio-economic Impact Assessment in the EIA phase.</p> <p>7) Section 14.4 of the Scoping Report lists the various specialist studies identified, which will need to assess the potential significant impacts during the EIA phase.</p> <p><u>Additional Response</u> <i>All impacts on landowners/directly affected properties were assessed in Section 13.12.2.2 Quality of the Living Environment and 13.12.2.4 Economic and Material well-being (negative), in the Draft EIA Report.</i></p> <p>8) Refer to No. 146 for response to impacts to existing infrastructure.</p> <p>9) Allowance will be made in the EMPr for safe access to properties during construction, as well as for the safety of road users.</p> <p><u>Additional Response</u> <i>Refer to Section 12.4.5 (Management of Access and Traffic) of the EMPr (Appendix K of the Draft EIA Report) which contains the following objectives:</i></p> <ul style="list-style-type: none"> • <i>Ensure that all construction vehicles use only dedicated access routes to construction sites.</i> • <i>Ensure proper access control.</i> • <i>Prevent unlawful access to the construction domain.</i> • <i>Adhere to agreements made with individual landowners and community members regarding access.</i> • <i>Ensure the safety of all road users by implementing proper signage and traffic control measures.</i> • <i>Limit construction-related nuisance to service nodes.</i>

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	<p>that will be affected.</p> <p>e. The ground structure possibly lends itself to easier and simpler engineering works to construct the delivery pipeline.</p> <p>f. Very little, if any arable land will need to be included in the permanent servitude.</p> <p>g. No permanent structures will be affected.</p> <p>I trust that the suggestions made will be carefully considered as viable and practical alternatives to that proposed.</p>			<p>10) Terrestrial Ecological Assessment to be undertaken during the EIA phase. Areas to be affected by project activities and infrastructure will be surveyed to identify sensitive and significant floral species.</p> <p>Mitigation measures will be established during the EIA phase to manage the potential impacts to vegetation, removal of protected trees and medicinal plants, encroachment by exotic species and to address the overall reinstatement and rehabilitation of the area affected within the construction domain.</p> <p>Permit(s) will be obtained under the National Forests Act (No. 84 of 1998) if protected trees are to be cut, disturbed, damaged, destroyed or removed. The final pipeline route will attempt to avoid protected trees, where possible.</p> <p>If possible, sensitive environmental features within the 100 m wide corridor along the proposed pipeline route being assessed as part of the EIA, will be avoided.</p> <p><u>Additional Response</u> <i>Extract from Section 12.5.4 from the Draft EIA Report: "Protected trees in the study area include Vachellia (Acacia) erioloba (Camel Thorn), Adansonia digitata (Baobab), Boscia albitrunca (Shepherd's tree), Combretum imberbe (Leadwood) and Sclerocarya birrea subsp. africana (Marula). According to Section 51(1) of the National Forests Act (Act No. 84 of 1998) (NFA), no person may cut, disturb, damage or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree, except under a license granted by DAFF".</i></p> <p>A) From a river hydraulic perspective the location of the abstraction weir is mostly determined by the topography, the geology and the river morphology which impacts on</p>

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				<p>the sediment management. The Vlieëpoort site is the preferred site from this perspective.</p> <p>Alternative A as a weir site is not a technically feasible option and contrary to the assumption presented, the cost of the weir structure at position A will likely increase. Various technical and geotechnical studies were performed in the selection and optimisation of the weir site for the project.</p> <p>The weir was positioned in the narrowest part of the valley at Vlieëpoort. Moving it downstream will significantly increase not only the length of the weir, but also the associated jet grout cut-off which will have massive cost implications, certainly dwarfing any land expropriation costs as well as the cost saving of a shorter pipeline.</p> <p>B) The suggested pipeline route for Alternative B is not technically viable. The same goes for the alternative pipeline route on the left bank of the Crocodile River. The abstraction works need to be located on the right bank (<i>on the outside of the bend</i>) of the river to minimize sediment abstraction. One could cross the river with a pipeline encased in the weir. But the second crossing will be a costly and risky exercise, especially given the founding conditions on very deep sands, not to mention another river diversion being required during construction. A significant length of stainless steel pipeline may also be required in the river crossings further raising the costs.</p> <p>The design philosophy for the pipeline between the abstraction works and the high lift pump station may include a dual pipeline to manage silt deposits and comply with the required system availability.</p> <p>Refer to response to No. 261.</p>
344.	Your email of 4 April 2018 referred to below. As you know, the development and establishment of the weir is a concern for	W. Potgieter	Email (16/04/2018)	Please find attached the updated Comments and Responses Report, which is appended to the Final

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	<p>our members, and I can also inform you that Makoppa Agriculture is in the process of obtaining legal advice on the Department's handling of the process and establishment of the weir. It is therefore of the utmost importance that our inquiries are responded to as soon as possible so that we can make the right decision on the continuation of the erection of this weir. As you know, Makoppa Agriculture has recently been notified of the construction of the dam and it is therefore essential that we receive the answers to our questions as soon as possible. The request is consequently to be held at the date of completion of the inquiries.</p> <p>Makoppa Agriculture has also compiled an AD HOC committee to monitor and handle the issue of the construction of the weir. This AD HOC committee consists of myself, and three other members. Any further handling, continuation and proposed development of the dam will be handled by the AD HOC Committee to Makoppa Agricultural Reports. Consequently, the request is that any further steps taken by any party regarding the erection of the weir should inform it to myself and / or Makoppa Agriculture. Makoppa Agriculture's email address is makoppaboere@gmail.com. The AD HOC committee will welcome a detailed session with the project team.</p> <p>Thank you for your cooperation.</p>			<p>Scoping Report. The comments from Makoppa Agriculture as well as the responses from the project team appear on pages no. 69 - 82.</p> <p>A meeting will still be arranged with the Makoppa Agriculture Ad Hoc Committee during the EIA phase to discuss water related issues. This will also serve as a Focus Group Meeting that deals specifically with the concerns of Makoppa Agriculture.</p> <p><u>Additional Response</u> A focus group meeting is scheduled with the Makoppa Agriculture Ad Hoc Committee for 03 October 2018, in Thabazimbi, where the objective of the meeting is to deal specifically with their concerns. Minutes of the meeting will be provided in the Final EIA Report to be submitted to DEA.</p> <p>Refer to No. 401.</p>
345.	<p>The discussions held during the information meeting held on 24 January 2018 refer.</p> <ol style="list-style-type: none"> 1. During a board meeting held on 6 March 2018, the board members expressed their gratitude to the organizers. As expected, there are many questions that still need to be answered. An opinion was also expressed that the time allocated for the meeting was insufficient. This can be the reason for the many unanswered questions. 2. The board did not review the statistics and forecasts on which the water balance was based and could not comment on it. Nonetheless, there was certainly a water 	Crocodile River-West Irrigation Board	Letter (18/04/2018)	<ol style="list-style-type: none"> 1. Dedicated Focus Group Meetings were arranged with the irrigation groups (Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board and Makoppa Agriculture). A 3-hour meeting was convened with the Crocodile River (West) Irrigation Board. A follow-up meeting will be scheduled and additional time will be allocated. <p><u>Additional Response</u> A combined focus group meeting is scheduled with the Crocodile River (West) Irrigation Board and the Hartbeespoort Irrigation Board in Koedoeskop, on 02 October 2018. Minutes of the meeting will be provided</p>

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	<p>balance study undertaken for the Cape area. It could be reassuring if such a study predicted the water shortage over a particular period, which is currently being experienced.</p> <p>3. Experience has shown that the current Crocodile River Irrigation District could not cultivate a reasonable winter harvest before building Vaalkop, Klipvoor and Roodekopjes Dams due to a river with no or little water during the winter. The three dams have created an extra 200 million m³ of storage space, which allowed for winter harvests in the area to be more secure.</p> <p>4. The board is aware of the large volume of water which is transferred across the watershed into the catchment area at a high cost, and which is available in the catchment area after it has been used. Re-use was one of the first attempts made to address the water problem in the Cape.</p> <p>5. Water re-use is already planned and undertaken by the Pretoria City Council. After the January 2018 meeting, notification was received of a new purification works (presumably near Rooiwal Power Station), where water will be purified for use in Hammanskraal. There is no reason why Johannesburg City Council and Pretoria City Council will not be forced to re-use water due to unmanageable urbanization and insufficient infrastructure. If so, the additional available water can reduce or decrease drastically.</p> <p>6. The time schedule for the entire project also creates uncertainty. It currently seems that the project has not yet been approved and that the budget required is not yet available. This first needs to be confirmed before a start date for MCWAP2 can be determined. Regardless, planning and development is continuing in Lephalale. According to the January 2018 presentation, a shortage could already occur in 2030. If the commencement of MCWAP2 is delayed, it appears that MCWAP3 will have to</p>			<p><i>in the Final EIA Report to be submitted to DEA.</i></p> <p>2. Refer to the 2015 Reconciliation Strategy as highlighted by Mr. Pieter van Rooyen during the Focus Group Meetings held in January 2018. With respect to the Cape area: Refer to report No. P WMA 19/000/0507 available on the DWS website and the recent report by Prof Mike Muller (former DWS DG) at https://www.nature.com/articles/d41586-018-05649-1. Prof Mike Muller in essence stated: "Since the 1980s, South Africa's major development centres have used systems models to guide their water management. These models, run (as and when required, e.g. before the start of the rainy season) by the national government, are considered world-class. They map links between river basins, reservoirs and transmission channels and use historical hydrological data to predict probable stream flows. Those are then matched to projections of demand to assess how much storage is needed. The models support real-time operations of the water network as well as planning for development. Crucially, they allow planners to assess risks of supply failures to different categories of users and evaluate the effectiveness of responses such as restrictions.</p> <p>For two decades, policymakers heeded these models. They guided managers, for example, on when and where to tap sources and build reservoirs to enable the Western Cape Water Supply System (WCWSS) to meet rising demand from urban and industrial growth".</p> <p>Also note response to No. 49.</p> <p>3. Statement is correct. Roodekopjes Dam (W.P.G –'81) was built to be operated with Klipvoor and Vaalkop in a system's context to stabilise the water supply to the Crocodile River (West) Irrigation Board. Water was</p>

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	<p>run in parallel with MCWAP2 to prevent water shortages in 2030. If this does not happen, there may be a severe shortage of irrigation water in the Crocodile River area for a few years, which could lead to major financial losses.</p> <p>7. Operating costs of a scheme is one of the few input costs that an irrigation farmer has control over. The board would like to view a breakdown of the estimated operating cost per hectare, as proposed. A list of the advantages and disadvantages of the proposed and current systems, as well as the associated costs, will have to be developed to allow for the two systems to be compared and to implement the most effective, affordable system</p> <p>8. The operation of the scheme. The area's water year starts on the first of October and ends on 30 September. Due to the poor commodity prices and the high input costs, an increasing number of irrigators are moving towards an early summer and summer harvest instead of a winter harvest. The planting date of the aforementioned crops is from August to January. Currently the scheme operates on a full quota during this period, regardless of the status of the dams because it is the start of the rainy season and planting date. It will not help if the quota is adjusted after the planting date. Up to what dam percentage will the principle still be valid?</p> <p>9. An increasing number of permanent crops, especially pecan nuts, are also being planted in the area. It will also be necessary to consider how the water needs of these crops will be dealt with during dry periods.</p> <p>10. During the meeting a concern was raised about the maintenance of all waterworks in the drainage area. An example of the aforementioned is the maintenance of the Roodekopjes / Vaalkop Dam canal. In the summer months there is usually surplus water in the system that is released into the river because the canal is not maintained. (On average, 1,718 cumec passes through</p>			<p>allocated on a 70% assurance basis, meaning that an irrigator was assured of the determined volume seven out of ten seasons and for the other three years he/she would be subject to restrictions.</p> <p>4. Statement noted.</p> <p>5. The City of Tshwane's proposed Re-use Project was considered in the Reconciliation Study performed in 2015. Mr. van Rooyen indicated it in his presentations during the Focus Group Meetings held in January 2018 (refer to Appendix Q of the Final Scoping Report).</p> <p>6. As stated during the Focus Group Meetings and Public Meetings, the MCWAP-2A will only proceed if environmental authorisation is obtained following the EIA process. In terms of the funding strategy approved by the National Treasury, the majority of the funding will be sourced off-budget by the TCTA if environmental authorisation is obtained, with guarantees by the National Treasury. The Reconciliation Studies by DWS will continue and the water use will be monitored. All interested and affected parties with water concerns are best advised to participate freely in such studies.</p> <p>The immediate short term driver for MCWAP-2A is to supplement the feed-water required for flue-gas desulfurisation at the Medupi Power Station to reduce pollution. Refer to response to No. 357. Refer to the indicative implementation programme in Section 9.9 of the Draft Scoping Report.</p> <p>7. Adjustments to the decision dates due to the shifting in cropping patterns are not dependant on the MCWAP-2A <i>per se</i>. The decision making date to suit cropping patterns can be investigated in consultation with the Irrigation Board during the setting of annual</p>

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	<p>the canal in the summer months, totalling 26,718 million m³. The canal should allow 3,499 cumec to pass through, which equates to 54,427 million m³ for the same period. In the winter months when Vaalkop's level begins to drop, attempts are made to increase the canal's throughput to 3,499 cumec). From the above it is clear 27,708 million m³ of water needs to be transferred from the dam's capacity in the winter, which would not be necessary if the canal was maintained during the summer.</p> <p>11. There are also smaller schemes in the area where maintenance is not undertaken and millions m³ of water is lost to provide water to the irrigators.</p> <p>12. All that is said here is that through poor maintenance, a large volume of water is lost that could actually have been available.</p> <p>13. The board is still convinced that there is enough water in the catchment to justify a dam or two small dams. At the beginning of MCWAP it was requested that negotiations be undertaken with the relevant neighbouring states for the construction of the dams. Please advise on the progress in this regard.</p> <p>14. It is requested that another meeting be arranged with the Board at an appropriate date to try to get answers.</p>			<p>operating rules.</p> <p>8. It is currently possible to operate the scheme consistently at the full quota as a result of the increasing return flows generated in the catchment. A decision on annual allocation will after completion of the MCWAP-2A be performed annually as indicated in the presentation by Mr van Rooyen earlier this year (Operating rules). An informed decision will annually be made before the start of the rainy season. The operating costs will be determined during the EIA for the River Management System and the cost sharing amongst users, in accordance with the prevailing Pricing Strategy.</p> <p>9. The crop mix between permanent and cash crops will have to be managed by each irrigator within the allocation during droughts. The Assurance of Supply provides for a minimum annual lawful allocation during droughts, which will be determined before the start of the irrigation season.</p> <p>10 – 12. <u><i>Additional Response</i></u> <i>Maintenance of the Roodekopjes / Vaalkop Dam canal: Challenges, mainly relating to blockages caused by aquatic weeds growing in the canal, are indeed periodically experienced. Financial constraints and contractual challenges are also aggravating the situation. It is unfortunately reducing the ability to operate the canal optimally. Chemical dosing is an option (refer to Hartbeespoort Irrigation Board's experiences) to mitigate the widespread impact. This inability is however currently offset by the surplus water being available in the system. This situation will however need to change following MCWAP-2A's implementation. The system will need to be operated at the optimum level through the River</i></p>

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				<p><i>Management System and the Operation and Maintenance costs recovered using the Water Pricing Strategy.</i></p> <p>13. Refer to response to No. 52.</p> <p>14. A follow-up Focus Group Meeting will be arranged during the 30-day public review period of the Draft EIA Report, during the EIA Phase. See response above to No. 1 above.</p>
346.	<p>A. Discussion: Sustainability of a dam can be analysed in terms of Social justice, Environmental protection and Economic development. The dam and its surroundings feel threatened by a lack of participation in long term planning due to the fact that our benefits and fairness have been severely jeopardised by the DWS who terminated the Harties-Metsi-a-me programme.</p> <ol style="list-style-type: none"> 1. Although man made, the dam is an indispensable feature in supporting economic development as well as promoting the conservation of ecological environment of the surrounding communities as well as the downstream area. 2. Natural causes and anthropogenic activities have collectively compromised the functionality of the Hartbeespoort Dam. The result of these effects is a hypertrophic dam. 3. This will again be highlighted by the implementation of the augmentation scheme whereby recycle water will further impact on sustainability model of the dam in an established community. 4. The dam is supporting economic development one for an irrigation area that is key to a large food production area as well as promoting the conservation of ecological environment of downstream area. <p>B. This leads to several concerns crucial to the future of the Hartbeespoort Dam, that need to be considered:</p> <ol style="list-style-type: none"> 1. Is the existing dam able to supply water sustainably to the 	F Botha	Letter (24/04/2018)	<p>A.1 - 4. Statement made.</p> <p>B.1. Yes, the system is capable to provide water sustainably. Please refer to the presentation by Mr. van Rooyen contained in Appendix Q of the Final Scoping Report.</p> <p>B.2. <u>Additional Response</u> <i>A Specialist Opinion was sought with regards to the potential impacts of MCWAP-2A on Hartbeespoort Dam (see Appendix 18 of the Draft EIA Report). Refer also to the Draft Water and Sanitation Master Plan available on DWS' website. The water from the Crocodile River and Mokolo River will be utilised separately.</i></p> <p>B.3. <u>Additional Response</u> <i>Refer to the Hartbeespoort Dam Specialist Opinion contained in Appendix 18 of the Draft EIA Report. The MCWAP-2A is not responsible to mitigate the impact in Hartbeespoort Dam's catchment, and it needs to be dealt with in terms of the National Water Pricing Strategy and by Local Government. The regulatory functions will be performed by DWS, which includes setting standards.</i></p> <p>C.1 - 6. The efforts as stated by stakeholders are acknowledged. The Hartbeespoort Dam will be operated as a dam to maximise water supply sustainably to its users fulfilling its prime purpose for which it was</p>

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	<p>current users as well as the new demand created by socio economic development in Limpopo?</p> <ol style="list-style-type: none"> 2. How is the growing amount of recycle water going to affect the existing design due to worsening water quality and no investment in remediating the water quality in an already hypertrophic system? 3. While acknowledging the importance of these issues, there is much to be done, through quantitative evaluation, to determine if the HBPD can support the goal of sustainability, and what is required for nutrient reduction in the catchments, as well as algae bloom and water hyacinth problems in the dam. <p>C. A proper evaluation must include the indicators of the current situation and how these indicators will be affected due to the augmentation scheme that will cause increased recycle flow through the dam as well as fluctuating levels which can have serious implications for the community who have invested in water front developments.</p> <ol style="list-style-type: none"> 1. We envision a sustainable reservoir as “in its design and management, operate on a basin-to-basin basis, to fulfil the present and future social needs while maintaining the ideal condition of it surrounding ecology, environment and hydrology.” 2. It is necessary to take environmental protection, economic development and social justice into account when evaluating the sustainability of reservoirs. 3. The analysis should be a continuation of the Mets-a-me programme, which focused on biological remediation in-dam as well as nutrient reduction in the catchments. 4. The augmentation study should be updated to take into account regional sediment management, systemic flood control, river ecology conservation, regional distribution of water resources, maintaining optimal water quality, effectiveness and fairness. 5. The consequences of “doing nothing” as was excepted by DWS since 2015 left a strategic reservoir in a mode of “endurance” with the support of the community who took over “surgery” to rescue what they have invested in. 			<p>constructed. The dam is a government waterwork, which is defined by the NWA a waterwork owned or controlled by the Minister and includes the land on which it is situated. Fluctuating water levels are a common occurrence on any dams that are optimally utilised. It is recommended that the Hartbeespoort Dam RMP be updated as a <i>parallel process</i> to make provision for fluctuating water levels and that Business Plans be developed to deal with specific issues (e.g. sustainable harvesting of water hyacinth).</p>

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	<p>6. Today we can look back at an achievement of cleaning the dam as well as improving water quality, without any financial support by the DWS! We have demonstrated that we are able and willing to care for items such as hyacinth harvesting. The long term role and function of the dam should be managed within the policy of</p> <ol style="list-style-type: none"> categories of flood control, sediment management, water resource allocation, river ecology, water quality, benefit and fairness. 			
347.	<p>Introduction The potential impact of the additional 'water draw down' to meet the Medupi power and coal mine needs on Hartbeespoort Dam, are difficult to quantify accurately. Here I review the possible impact of one aspect only, i.e. the management and control of water Hyacinth on the dam.</p> <p>Impact of water draw down levels on water surface area. Figure 1 below shows the location of exposed surfaces, given certain dam levels. According to the Department of Water Affairs, they expect the dam levels to drop to some 60% of its volume by June in every year once the programme starts.</p> <p>There is a virtual linear relationship between volume and remaining surface area of the dam. (See figure 2 below.) As can be seen from the diagram above, finding a permanent site from which to harvest water Hyacinth on a continuous basis from the shore will not be feasible.</p> <p>According to the Department of Water affairs projections, dam levels will drop to 60% of its capacity for a few months every year. The projection is therefore that at least some 33% of the dam surface will be dry ground (See equation in Figure 2).</p> <p>Water Hyacinth legal issues Water Hyacinth (<i>Eichhornia crassipes</i>) is a perennial problem on the Hartbeespoort dam. According to existing legislation</p>	J Breytenbach	Letter (24/04/2018)	<p>Refer to response to no. 346.</p> <p><i>Additional Response</i> <i>Refer to the following specialist studies contained in the Draft EIA Report:</i></p> <ul style="list-style-type: none"> • <i>Appendix 16 - Socio-Economic Impact Assessment; and</i> • <i>Appendix 18 - Hartbeespoort Dam Specialist Opinion.</i> <p><i>See No. 291 for responses to impacts on water quality and water levels in the Hartbeespoort Dam.</i></p> <p><i>Refer to Section 8 (Hartbeespoort Dam Socio-Economic Impacts) of the Socio-Economic Impact Assessment (Appendix 16 of the Draft EIA Report). The following potential impacts were assessed as part of this study:</i></p> <ul style="list-style-type: none"> • <i>Existing boat mooring facilities to the water will be high and dry;</i> • <i>Reduced surface area of the dam for recreational use;</i> • <i>Increased beach area;</i> • <i>Impact of water hyacinth production;</i> • <i>Changes in the sense of place for residents of properties surrounding the dam;</i> • <i>Property value impacts; and</i> • <i>Tourism revenue declines</i>

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	<p>water Hyacinth has been declared a Category 1 invasive plant. All category 1 plants are prohibited on any land or water surface area and must be controlled by the land owner. The Department of Water Affairs and Sanitation (DWAS) in this instance is therefore responsible for the control of water Hyacinth on the dam. It is of course public knowledge that the DWAS has abdicated on this responsibility. During a recent visit, it was indicated to the public by the then Minister responsible, that in her opinion, there were enough rich people around the dam to clean it for themselves.</p> <p>Water Hyacinth has a major impact on all surface water activities as well as fishing and access to the dam. The Hartbeespoort dam steering committee was therefore established in 2017 and mandated by the community to attempt to manage the problem.</p> <p>Water Hyacinth biology Water Hyacinth is considered to be the worst invasive plant on the planet. Over the last 40 years, its notoriety has increased exponentially, of course in direct proportion to the exponential growth of eutrophication, on the freshwater systems of the planet. The figure below shows areas where the plant has invaded and now constitutes a major management problem for the countries concerned. Because of climate change and increasing global temperatures it has now also invaded the temperate zones of southern Europe and has infested dams, lakes and rivers in Spain, Portugal, Italy and Greece extensively (See Figure 3). More significantly, is the fact that it is now also a problem in its area of origin, South America. By implication then, bio control has also failed in its area of origin. It is our tenet that eutrophication has led to increased growth rates and biocontrol agents can no longer cope with the biomass and plants involved.</p> <p>Growth rates The plant grows well between maximum temperatures of 23° and 34°C. In tropical areas it can double its biomass within 7 days. During the 2017 season at Hartbeespoort dam it</p>			<p><i>Refer to Section 8.5 (Impact and Mitigation Assessment) of the Socio-Economic Impact Assessment (Appendix 16 of the Draft EIA Report).</i></p>

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	<p>doubled its biomass, once a month during the summer period. During the 2018 season the growth rate was well below this. It is surmised that the plants had absorbed most of the nutrients in the surface layer, and that a perturbation, such as an upwelling or flood would be required to move nutrients from the deeper layers to where plant roots could access nutrients again.</p> <p>It is critical to note that the doubling of biomass in summer on Hartbeespoort dam occurred with virtually no new seedlings being added to the population. During the 2017 season the flowering of water Hyacinth was low and it is estimated that less than 1% of the population had flowered.</p> <p>Flowering, seed production and seed germination I will not review the flowering and seed production processes in water Hyacinth here. Suffice it to say that extensive studies have been done in South Africa and the phenomenon has been well described. It is however critical to understand seed bank dynamics of water Hyacinth. (See table 1 below).</p> <p>Table 1 Results of studies done at South African dams were utilised to compile this table which shows the size of seed banks and germination potential of seed banks at the dams sampled.</p> <p>Extensive studies done in South Africa by Martin Hall and associates at the University of Rhodes, found that the average seed density in several South African dams was 1,500 seeds per square metre. They also showed that virtually no seed will germinate until such time as the seeds are exposed to sun and receive a heat stimulus. Germination rates of some 47% of the seeds germinate once water levels return and seeds are submerged again. In the table above, we show by implication then, that some 7 million seedlings would emerge per hectare of dam exposed during the winter season.</p> <p>Economic implications of proposed MCWAP scheme on Hartbeespoort dam water Hyacinth management programme</p>			

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	<p>HRSC has collected donations from the public and also conducted several fundraising programmes. Contractors were appointed at R30.00 per tonne to remove the water Hyacinth. (See table 2 below.)</p> <p>HRSC has spent R881,336 thus far, amongst others, paying contractors for removing water Hyacinth from the dam. Several contractors, at their own risk, have continued with harvesting and have submitted invoices for payment to the HRSC. The total amount outstanding to the contractors is R1,000,596.</p> <p>Information was also sourced from estates around the dam and they in turn have spent R1,302,000 on their part also on removing water Hyacinth. We could not get data from all the Estates, and this only represents data from 5 of them. In total, therefore, the public has incurred more than R 3 million worth of known expenses in an effort to control the water Hyacinth. These efforts have met with great success. (See Figure 4 below).</p> <p>History HRSC member, Frikkie Botha, and the technical team have estimated that we succeeded in removing some 100,000 tonnes of water hyacinth from the dam. Which then also adds up to the R 3,000,000 spent on cleaning operations by all concerned at R30.00 per ha. If we assume that the 100,000 tonnes is distributed over the dam so that the biomass is equal to 250 tonnes per ha, (which was the mean for January 2018,) it means that a total of 400 ha of water hyacinth were removed.</p> <p>The water quality of the dam has been assessed to be the best in years. Frikkie Botha compared the Cyanobacteria and chlorophyll α in December 2011 (See Figure 5 above) when the Cyanobacteria and pollution levels were considered to be "Very high"!</p> <p>After removing more than a 100,000 tonnes of water hyacinth,</p>			

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	<p>which has a high phytoremediation capacity, between March 2017 and March 2018, the dam is now in a much healthier state. (See Figure 6 above). Cyanobacteria and chlorophyll α are right down and the dam is rated as safe.</p> <p>Although studies have not been done in South Africa the fact that water hyacinth is also a good remedial agent for both coliform and non-coliform bacteria has been shown elsewhere in Africa. Studies in water with different levels of pollution both physical, bacterial and organic, have shown remarkable recovery through growing and harvesting water hyacinth on water bodies.</p> <p>The work done at Hartbeespoort Dam by the HRSC has confirmed this although detailed studies still need to be carried out.</p> <p>We want to make it clear, that to our mind the State has never explored the beneficial effects of growing, controlling and harvesting water hyacinth on a large scale. Moreover, it has now reached a state where sustainable businesses are being developed around the harvesting of water hyacinth and by producing value added products from the harvesting material. Without any assistance from the State, the people of Hartbeespoort Dam has helped to resolve a major problem and the process should be self-sustainable in the near future. The suggested programme to regularly drain Hartbeespoort Dam to 60% volume will create severe problems for the now successful process.</p> <p>The conundrum The models described here are based on verified data where appropriate. The following assumptions were made:</p> <ol style="list-style-type: none"> 1. The water surface will be reduced during winter and only be replenished once the catchments get adequate rain to fill the dam. Given current climate change projections as regards rainfall and temperature, it is likely that the supply of water to the dam will decrease substantially over time. 2. At the same time the demands from irrigation and the mine 			

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	<p>and energy sector will continue to increase. It is therefore difficult to predict to what level dam levels will drop, given the projected offtake. In the table.</p> <p>3. Once seedlings germinate and float it will take them some 3 months to reach the same size as that of plants currently on the dam. There are currently mature plants on the dam that have petiole and leaf lengths at 100 cm. There are also plants that have just formed stolons and leaves on the stolons are less than 15 cm high. We therefore randomly sampled 10, 1 m² blocks in water Hyacinth stands. The average number of plants per square metre was 47.3 (with standard deviation at 9.7) or 473,000 plants per hectare.</p> <p>4. During 2017 and 2018, the standing biomass of water Hyacinth on Hartbeespoort dam was measured and found to vary between 250 and 400 t per hectare. For the purpose of the model, it was assumed that the standing biomass would be 250 t per hectare. This of course would be a gross under estimate.</p> <p>5. We assume that the harvesting cost would be stable at 30 Rand per tonne harvested.</p> <p>6. The area exposed is calculated from Total surface – (Area remaining=0.8549x+15.903) (From Figure 2).</p> <p>The following impacts should be considered.</p> <p>1. Impacts on land-use surrounding Hartbeespoort dam due to fluctuating water levels.</p> <ul style="list-style-type: none"> a. Shore line and banks. <ul style="list-style-type: none"> i. Wetland vegetation ii. Increased trampling iii. Water hyacinth harvesting iv. Water Hyacinth harvesting sites b. Exposed area (some 200 - 1000 ha) <ul style="list-style-type: none"> i. Dust (heavy metals with August winds) <p>2. Climate</p> <ul style="list-style-type: none"> a. Later season rains and inflow regimes <p>3. Soil/Silt</p> <ul style="list-style-type: none"> a. Mobilisation of heavy metal deposits in silt b. Water hyacinth seedlings heavy metal mobilisation into water column when they float free from 			

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	<p>germination sites</p> <p>c. Implications for downstream users</p> <p>4. Hydrology</p> <p>a. Impacts of fluctuating water levels</p> <p>b. Impact on groundwater replenishment from the dam</p> <p>c. Impact on layering and planning process in the impoundments</p> <p>5. Water quality</p> <p>a. Quality of possible Vaal catchment transfer water</p> <p>b. Water quality invasive alien plant management. Impacts of water quality</p> <p>6. Riparian habitat</p> <p>a. Wetland vegetation drying out</p> <p>b. Influx of alien vegetation, e.g. poplars.</p> <p>7. Water use</p> <p>a. Impact on recreational use of Hartbeespoort dam due to fluctuating water levels.</p> <p>8. Aquatic ecology</p> <p>a. impairment of fish breeding sites</p> <p>b. exponential increase in floating aquatic alien vegetation</p> <p>c. impacts on breeding of:-</p> <p>i. shoreline breeders, e.g. insects such as dragonflies damselflies</p> <p>ii. Reed warblers, coot and duck</p> <p>d. impacts on purging fish hunters such as pigmy and malachite kingfishers</p> <p>9. Sediment regime</p> <p>a. it is highly likely that the estates would remove heavy metal laden silt from areas where they want to access to water surface and deposit them in unquarantined areas</p> <p>b. perturbation of salt during the filling period will increase exponentially impact of silt mobilisation must be studied</p> <p>10. Terrestrial ecology-flora</p> <p>a. extension of the Phragmites beds into the dam will have to be controlled</p>			

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	<p>b. Poplar stands will extend into the dam</p> <p>11. Terrestrial ecology-fauna.</p> <p>a. Several estates have game such as Impala, koedoe, zebra and blesbok on the estates. These animals will now be able to escape across the dry areas of the dam. Estates will have to extend their fences into the dam, which will then cause havoc once the water levels rise again. The additional cost of maintaining these populations will become prohibitive.</p> <p>12. Socio economic environment.</p> <p>a. Cumulative impact on properties that are already impacted by the negative perceptions linked to water Hyacinth on the dam.</p> <p>i. Many house owners own houses that are only used for recreational purposes over weekends or holidays will immediately place houses on the market resulting in a rapid slide in house prices</p> <p>ii. This will seriously impact on the real estate business in Hartbeespoort region</p> <p>iii. The decline will of course also have an impact on property tax and negatively influence the municipalities in the area.</p> <p>b. The weekend home tourism will decline exponentially and have a serious impact on:-</p> <p>i. Hawkers, especially those that sell wood and fresh produce will be seriously impacted. Weekend home owners tend to purchase wood and fresh produce from the roadside merchants</p> <p>ii. The formal retail outlets such as Pic and Pay and Spar will also experience a decline in purchases.</p> <p>c. The day trippers, such as the bikers on the other hand, support the formal industry to a large extent, since they come on breakfast or lunch runs and do not buy fresh produce, or wood.</p> <p>d. The curio markets in the Dam Dorein area will also</p>			

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	<p>be heavily impacted by any decline in tourism numbers.</p> <p>e. What will impact be on curio producers?</p> <p>f. What will impact be on house and garden employees?</p> <p>13. The long-term cumulative impacts to Hartbeespoort dam in social, economic terms will need careful evaluation.</p>			
348.	<p>Dear Donovan.</p> <p>1. I refer to the conversation we had earlier on relating to the proposed water project you are currently busy with.</p> <p>2. I represent Tubatse Community Mining Solutions (Pty) Ltd (Tubatse).</p> <p>3. Tubatse has a mining permit to mine sand and aggregate within the closer vicinity of the proposed project. We are able to supply your project with sand and aggregate for the project directly from our source.</p> <p>4. We would appreciate if you can put us in touch with the project manager and consultant responsible for procurement in the project.</p> <p>5. You may contact me or my partner.</p>	S Makubung	Email (24/04/2018)	Refer to No. 167.
349.	<p>Did they pay compensation to individuals like me???</p> <p>What is the chance for the alternative routes being selected on my property – has this been done in the past?</p> <p>When, in my case, will they start breaking rocks and digging trenches?</p>	T. Roux	Email (24/04/2018)	<p>Please find attached an enlarged map showing the proposed route options for the pipeline, as well as TCTA's Policy and land acquisition process.</p> <p>The land acquisition process must adhere to all legal requirements, which according to current legislation includes compensation.</p> <p>The preferred option for the pipeline route will be identified taking into consideration the findings of the specialist studies that still need to be conducted. We are unable at this stage to indicate which routes are preferred.</p> <p><i>Additional Response</i> Refer to Section 14.6 (BPEOs Selection) of the Draft EIA Report for a description and map of the preferred pipeline</p>

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				<p><i>route.</i></p> <p>Based on the current implementation programme, DWS and TCTA intend to commence with construction in the last quarter of 2019, if Environmental Authorisation is obtained. TCTA is not able to indicate at this stage when construction will take place on your property.</p>
350.	<p>Morning Donavan</p> <p>I had a few concerned land owners who contacted me last week w.r.t. properties that is next to the intended construction.</p> <p>Many of these properties are hunting and eco-tourism farms that will surely be impacted on during construction. Will the impact on these properties be seen as directly affected or not? The impacts during construction will be more or less the same on properties bordering the servitude area.</p> <p>Can you please revert back to us on this issue please?</p>	B. Enslin	Email (07/05/2018)	<p>Refer to No. 293, i.e. the impact assessment will be done in accordance with prevailing legislation <i>at the time</i>. Also refer to Annexure 1 hereto.</p> <p>TCTA will make a baseline assessment of farms that are impacted directly and indirectly. The nature of the impact will be assessed and TCTA will have risk mitigation measures to respond in line, and where applicable the relevant legislative prescripts will be applied.</p> <p><u>Additional Response</u> <i>Refer to the Wildlife Impact Assessment contained in Appendix 17 of the Draft EIA Report.</i></p>
351.	<p>ACCEPTANCE OF SCOPING REPORT FOR THE PROPOSED MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJCT (PHASE 2A) (MCWAP-2A), WITHIN THE THABAZIMBI AND LEPHALALE LOCAL MUNICIPALITIES, IN THE WATERBERG DISTRICT MUNICIPALITY, LIMPOPO PROVINCE</p> <p>The Final Scoping Report (FSR) and Plan of Study for Environmental Impact Assessment (PoSEIA) dated April 2018 and received by the Department on 05 March 2018 refer.</p> <p>The Department has evaluated the submitted FSR and PoSEIA dated April 2018 and is satisfied that the documents comply with the minimum requirements of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended. The FSR is hereby accepted by the Department in terms of regulations 22(1) (a) of the EIA Regulations, 2014, as amended.</p>	DEA	Letter (14/05/2018)	<p>1 & 2. The approach to Public Participation during the EIA phase is explained in Section 15 of the Draft EIA Report. The comments received from IAPs and the manner in which they were / are to be addressed (as relevant), are captured in this Comments and Responses Report.</p> <p>3a. The project footprint is explained in Section 9 of the Draft EIA Report. Detailed maps are contained in Appendices A and C of the Draft EIA Report.</p> <p>3b. Refer to Section 9.10 of the Draft EIA Report.</p> <p>3c. Potential spoil sites (old borrow sites from construction of the railway line and roads) were identified. A description of each proposed spoil site is provided in Table 20 of the Draft EIA Report.</p> <p>Refer to mitigation measures contained in the EMPr</p>

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	<p>You may proceed with the environmental impact assessment process in accordance with the tasks contemplated in the PoSEIA as required in terms of the EIA Regulations, 2014, as amended.</p> <ol style="list-style-type: none"> 1. All comments and recommendations made by all stakeholders and Interested and Affected Parties (I&APs) in the draft SR and submitted as part of the final SR must be taken into consideration when preparing an Environmental Impact Assessment report (EIAR) in respect of the proposed development. 2. Please ensure that all relevant stakeholders are provided with an opportunity to comment on the EIAR. This includes but is not limited to the Limpopo Department of Economic Development, Environment and Tourism; the Department of Roads and Transport; the Department of Water and Sanitation; the Department of Agriculture, Forestry and Fisheries; the Department of Co-operative Governance; Human Settlements and Traditional Affairs; the Department of Mineral Resources; the Department of Public Works, Roads and Infrastructure; the Limpopo Provincial Heritage Resources Authority; the South Africa Heritage Resources Agency; the South African National Roads Agency SOC Ltd; Roads Agency Limpopo; Transnet; the Department of Environmental Affairs: Branch: Biodiversity and Conservation; the Thabazimbi Local Municipality; the Lephalale Local Municipality; and the Waterberg District Municipality. 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. 3. In addition, the following additional information is required of the EIAR: <ol style="list-style-type: none"> a) The total footprint of the proposed development must be indicated. The location of the pipeline with the proposed corridor and the associated infrastructure must be mapped 			<p>for managing impacts to watercourses (e.g. a buffer zone of 30 m from the edge of the delineated riparian zone is recommended for construction activities such as mixing areas, stockpiles and laydown yards).</p> <p><i>Additional Response</i> Refer to Section 13.8.6.3 of the Draft EIA Report for the mitigation measures recommended as part of the Baseline Aquatic and Impact Study (Appendix 11 of the Draft EIA Report).</p> <p>3d. An IWULA will be compiled (refer to Section 5.1.5 of the Draft EIA Report).</p> <p>The Water Use Licence Application and Appeals Regulations (GN No. R. 267 of 24 March 2017) prescribe the procedure and requirements for IWULA, as contemplated in section 41 of the NWA, as well as an appeal in terms of the NWA. The intention was to undertake the IWULA in parallel with the EIA, however, during a meeting with the DWS Limpopo North Proto CMA in December 2017 the DWS officials indicated that an IWULA needed to be compiled and submitted separately due to the timeframes indicated in the aforementioned regulations.</p> <p>3e. The listed activities are explained in the context of the project in Table 4 and Table 5 of the Draft EIA Report.</p> <p>3f. Enquiry made with LDEDET. Refer to Table 5 of the Draft EIA Report for details of activities triggered under Listing Notice 3.</p> <p>3g. Refer to Section 12 of the Draft EIA Report.</p> <p>3h. An updated list of authorities with jurisdiction was provided to the DEA Case Officer.</p>

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	<p>at an appropriate scale.</p> <p>b) A clear description of all associated infrastructure must be provided. This description must include, but not limited to the following:</p> <ul style="list-style-type: none"> o Access roads infrastructure (old and new); and o All supporting onsite infrastructure. <p>c) With regards to infilling and excavation of watercourses for the construction of the pipeline and associated infrastructure, the applicant is required to provide an indication of the preferred alternate locations from which the material used for infilling will be sourced and where excavated material will be stored and/or disposed of. In addition, the impacts associated with this activity must be adequately assessed in the EIAR.</p> <p>d) Should a Water Use Licence be required, proof of application for a licence needs to be submitted.</p> <p>e) The listed activities represented in the EIAR and the application form must be the same and correct. Only activities that are applicable and relevant to the development must be included in both the application form and the EIAR. Should there be activities that are no longer applicable to the development, the application form must be amended and submitted together with the EIAR.</p> <p>f) The EAP must engage with the relevant provincial authority with regards to development in geographic areas triggering GN R. 985: Activities 2, 4, 10, 12, 14, 18, 23 and 26. Please ensure that all applicable province and only the relevant sensitive geographic areas are applied for under these listed activities.</p> <p>g) The EIAR must provide an assessment of the impacts and mitigation measures for each listed activities applied for.</p> <p>h) Please make sure that correct contact details of all authorities (provincial, local and district municipalities) including email addresses are provided in the application form.</p> <p>i) The EIAR must provide the corner/bend-point coordinates for the proposed pipeline (as well as start, middle and end points) and these must be attached as a separate appendix to the EIAR, as well as the start, middle and end</p>			<p>3i. Refer to Table 12 of the Draft EIA Report.</p> <p>3j. Refer to Section 4.1 of the Draft EIA Report.</p> <p>3k. Refer to Section 3 and Section 8 of the Draft EIA Report.</p> <p>3l. <u>Additional Response</u> Refer to <i>Affected Landowners</i> (Appendix G) of the Draft EIA Report.</p> <p>3m. <u>Additional Response</u> <i>Refer to Section 9.10 of the Draft EIA Report.</i></p> <p>3n. <u>Additional Response</u> <i>Refer to Section 9.9 of the Draft EIA Report.</i></p> <p>3o. <u>Additional Response</u> <i>The EMP is contained in Appendix K of the Draft EIA Report.</i></p> <p>3p. <u>Additional Response</u> <i>Refer to Locality Maps contained in Appendix A of the Draft EIA Report.</i></p> <p><i>The latest land cover is shown in Figure 71 and vegetation types are shown in Figure 89 of the Draft EIA Report.</i></p> <p>4. The Heritage Impact Assessment undertaken as part of the EIA will be submitted to LIHRA and SAHRA, and will be uploaded to the South African Heritage Resources Information System (SAHRIS).</p> <p>5. <u>Additional Response</u> <i>Refer to Section 15 of the Draft EIA Report for details of the review period.</i></p>

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	<p>points of all roads proposed for construction or widening.</p> <p>j) Please ensure that the EIAR correctly indicated only the affected provinces, district and local municipalities for this specific application, as far as the location of the activity is concerned.</p> <p>k) The EIAR must provide a detailed need and desirability motivation as to why there is a need for the development and why the specific location is desirable.</p> <p>l) The EIAR must include all items as specified in Appendix 3 of GN R 982; including:</p> <ul style="list-style-type: none"> o The 21 digit Surveyor General code of each cadastral land parcel; and o Where available, the physical address and farm name of the property or properties; <p>m) Information on services required on the site, e.g. sewage, refuse removal and water. Who will supply these services and has an agreement and confirmation of capacity been obtained?</p> <p>n) Please provide in the EIAR an indication of the time period that will be required to complete construction of the applied for pipeline and associated infrastructure (i.e. number of years or months to be required complete the development, once construction commences).</p> <p>o) A construction and operational phase EMPr to include mitigation and monitoring measures. The Environmental Management Programme (EMPr) to be submitted as part of the EIAR must include the recommendations and mitigation measures recorded in the EIAR and the specialist studies conducted.</p> <p>p) Please ensure that the Final EIAR includes at least one A3 regional map of the area and that the locality maps included in the Final EIR illustrate the different proposed alignments. The maps must be of acceptable quality and as a minimum, have the following attributes:</p> <ul style="list-style-type: none"> o Maps are relatable to one another; o Cardinal points; o Co-ordinates; o Legible legends; o Indicate alternatives; 			<p>6. To be complied with as part of final submission to DEA.</p> <p>7. Legal requirement noted.</p>

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	<ul style="list-style-type: none"> ○ Latest land cover; ○ Vegetation types of the study area; and ○ A3 size locality map. <p>4. Further it must be reiterated that, should an application for Environmental Authorisation be subject to the provisions of Chapter 11, Section 38 of the National Heritage Resources Act, Act 25 of 1999, then this Department will not be able to make not issue a decision in terms of your application for Environmental Authorisation pending letter from the pertinent heritage authority categorically stating that the application fulfils the requirements of the relevant heritage resources authority as described in Chapter 11, Section 38 (8) of the National Heritage Resources Act, Act 25 of 1999.</p> <p>5. The applicant is hereby reminded to comply with the requirement of Regulation 45 with regard to the time period allowed for complying with the requirements of the Regulations, and Regulations 43 and 44 with regard to 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 43(1).</p> <p>6. You are requested to submit two (2) copies of the Environmental Impact Report (EIAR) to the Department and at least one electronic copy (CD/DVD) of the complete final report with the hard copy documents.</p> <p>7. 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.</p>			
352.	<p>My property description: 361 LQ Portion 4 - Farm Rhenosterpan.</p> <p>I refer to our telephonic discussion about the construction of a</p>	J Grundlingh	Email (17/05/2018)	An informed solution will be found during the tender design stage, if Environmental Authorisation is obtained, in consultation with the TCTA, the Engineer, the land evaluator and the land owner. Refer to Annexure 1

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	<p>new water pipeline along the railway line, through my ground.</p> <p>Here are a few aspects that I would like to bring to your attention and which should be taken into account when negotiating the establishment of the said pipeline.</p> <p>There is an existing waterhole that is supplied by rain showers. The water flows down with the dirt road for about 2km as well as from the railway line. The waterhole must be re-created once the pipeline has been completed with due consideration that the inflow would not be obstructed. My wildlife drinks water out of it.</p> <p>There are two small ridges/koppies that are valuable to me. The one lies about 20+ m from the railway lines fence and should be left unhindered. I believe there is enough space to install the pipeline. The other one lies against the railway line but can be opened where the pipeline has to go through, but leave the rest of it with the vegetation on it.</p> <p>One of my boreholes is about 3m from the rail reserve fence on my property. The borehole is a spare and used when my other hole dries up in the dry times. Water is scarce and deep should you drill. On this side of the railway line, 5 holes were drilled but only two had water, depth 120m to 160m. The water is used for cattle and wildlife. My request is that other boreholes should be drilled in the area of my choice until there is water or, alternatively, I seek a lifelong free water offtake from this new pipeline.</p> <p>My land has already been cut into pieces by the gravel road and railroad which makes farming difficult. As I heard from your community meetings, a 60m fence will be erected for the time when the pipeline is in process and after completion the fence will be broken down and a final 25m servitude fence erected. My request is that no fence should be erected but only cement pillar beacons for the 25m servitude, approximately 50m apart. Reason for this is so that my livestock and game can graze freely over the pipeline</p>			<p>detailing the process. Before start of construction, a basic assessment of the areas to be impacted is undertaken. This is done in consultation with the land owners, and a common understanding is then sought with the land owners.</p> <p>With regard to the Koppies, the Engineer will optimise the pipeline route within the confines of economical, constructability and maintainability.</p> <p>Prior to construction activities commencement, TCTA will conduct baseline studies along all the affected properties. One of the baseline studies to be conducted will be an Asset and Infrastructure Study that will assess the existence and condition of any assets or infrastructure within and adjacent to the construction servitude prior and after construction. During construction if any of the boreholes are affected, temporary water supply will be provided. Once construction is completed, the boreholes will be assessed if they have been permanently affected and alternative solution provided. With regard to free water off-take for life, that is not possible. The Department will provide off-take to the interested farmers on application for such an off-take and water use authorisation. Third party tariffs will be applicable for such off-takes in accordance with the prevailing Pricing Strategy.</p> <p>Refer to No. 111 for the response to the servitude.</p> <p><u>Additional response:</u> TCTA shall endeavour to compensate fair and equitable market value as per recommendation of an independent professional valuer determined in terms of prevailing legislation at the time.</p>

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	servitude. Lastly, an extraordinary good financial offer for the water pipeline servitude over my land, which I will not be able to refuse, will be a plus.			
353.	Proposed alternative for the borrow pit. Will it be possible? It's an old piece of land. Your proposal includes natural bush. I would like to know what the compensation will be.	H Hills	Email (17/05/2018)	Further investigation (test holes and laboratory tests) will have to be performed to confirm the suitability and quantity of the underlying material of the alternative site.
354.	<p>RE: MOKOLO AND CROCODILE (WEST) WATER TRANSFER SCHEME PHASE 2A (MCWAP-2A) WATER TRANSFER INFRASTRUCTURE AND BORROW PIT ENVIRONMENTAL IMPACT ASSESSMENT – COMMENTS ON THE FINAL SCOPING REPORT</p> <p>1. Introduction</p> <p>1.1. We refer to the above matter and the Final Scoping Report dated April 2018 of which notification was sent to us on 24 April 2018.</p> <p>1.2 Thank you for including our comments on the draft Scoping Report and your responses in Annexure Z to the Final Scoping Report.</p> <p>1.3 However, it would seem to us that the project developers are intent on pushing ahead with an illegal “White Elephant” Project based on insufficient information (for example outdated information and failure to do requisite studies such as Climate Change Impact Assessment), a defective public participation process (the scope should have been much broader as this is a project of national significance), no assurance of future water supplies for lawful water users downstream of the Vlieëpoort Weir (and the precise impacts and available quantities seem to be unknown) and defective legal arguments underpinning the Scheme (allegedly no impacts on international downstream users and fictitious concept of “return water flows” and distinction from other water in the Crocodile West system). The false premise of the Scheme is that</p>	Gunn Attorneys	Letter (01/06/2018)	<p>1.1 No response necessary.</p> <p>1.2 No response necessary.</p> <p>1.3.1 Insufficient and outdated information: refer to responses to No. 295 and No. 317.</p> <p>1.3.2 Climate Change: refer to No. 40 and No. 228 for response to climate change.</p> <p>1.3.3 Public participation: refer to response No. 296.</p> <p>1.3.4 Assurance of future water supplies for lawful water users downstream of the Vlieëpoort Weir: The MCWAP-2A is developed in accordance with the provisions to the National Water Act. Refer to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA. Refer to No. 60 for response to assurance of supply for agriculture. The MCWAP-2A is developed in accordance with the provisions to the National Water Act. Many Government Waterworks in the RSA utilises rivers (e.g. Mooi, Berg, Sondags, etc.) as conduits for water supply. Please refer to the minutes of the Public meetings held in March 2018 where the linkages of RSA catchment via water transfer schemes were demonstrated. Such transfer schemes were implemented to supply water to the RSA’s growing population and growing the economy. This will need to continue in the future.</p> <p><i><u>Additional response:</u></i> <i>It is noted that the volume of return flows exceed the volume that will be transferred by MCWAP-2A.</i></p>

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	<p>the NWA empowers the DWS to dump (largely untreated) water and gather run-off from cities and all other areas into the Crocodile River and then abstract it at a point convenient for it at the expense of other lawful water users. It is submitted that if DWS wants to offtake output water from water treatment or sewage works then the legal way to do so is at point of discharge by the water treatment works. The legal fiction that the Scheme is currently based on is not acceptable or sustainable.</p> <p>1.4 As a reliable source of water in the Crocodile River below the Vlieëpoort Weir is critical to our client's business and the lifeblood of the area in general, this remains unacceptable to our client.</p> <p>1.5 This submission will deal with the updates and amendments made to the Final Scoping Report and comments on the responses provided by NEMAI to our client's comments on the Draft Scoping Report (Annexure Z to the Final Scoping Report, pages 134 – 151).</p>			<p>1.4 The lawful entitlement to water is not impacted by the MCWAP-2A. Refer to No. 4 for response to Existing Lawful Water Users.</p>
355.	<p>2. Comments on the Final Scoping Report</p> <p><u>2.1 Crocodile West Water Management System process and operating rules</u></p> <p>2.1.1 Paragraph 9.11 Page 98 and 99 – final paragraph – River Management and operating rules. The Scoping Report States that:</p> <p><i>“A River Management System is required to monitor, control and manage the releases into the river, the flows in the river and abstractions from the river. This will apply to the Crocodile River (West) between Hartbeespoort Dam and Vlieëpoort Abstraction Works, including the releases and spills from such Works, as well as the Moretele River from Klipvoor Dam to the confluence with the Crocodile River (West) and the Elands River from Vaalkop Dam to the confluence with the Crocodile River (West). It includes a servitude-of-</i></p>	Gunn Attorneys	Letter (01/06/2018)	<p>2.2.1 Report P RSA A000/00/8609 - Feasibility Stage: Supporting Report 10: Requirements for the Sustainable Delivery of Water provide detail on the proposed River Management System (See No. 3). The relevant section was copied to Section 12 of the Reconciliation Strategy of 2015 (Report No. P WMA 03/A31/00/6615/2 Dated September 2015.</p> <p>2.2.2 The NWS&SMP by DWS recognises that deteriorating water quality is a major constraint to economic and social development, reduces the sustainability of available resource, and impacts significantly on cost. Urgent measures will be taken to protect and restore water quality in our water resources.</p> <p>DWS also has a National Programme of monitoring of water quantity and quality at dams and gauging stations. It will be considered to be part of the</p>

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	<p><i>aqueduct to be acquired as described in Section 9.12 below over such stretches of the said rivers. The system should also include the management of all abstractions within the so-called "red-line" zone, which is considered to be abstractions from the river.</i></p> <p><i>The water requirements between the four upstream dams (i.e. Hartbeespoort, Roodekopjes, Klipvoor and Vaalkop) and Vlieëpoort, the flows required past Vlieëpoort and the other factors that will affect the flow in the river at Vlieëpoort such as rainfall, evaporation from the river water surface, evapo-transpiration from the riverine vegetation, tributary and diffuse inflows and diffuse seepage outflows from the river, will need to be considered as part of the overall River Management System.</i></p> <p><i>Operating rules of the Lower Crocodile (West) system with MCWAP 2 releases will be complex due to:</i></p> <ul style="list-style-type: none"> <i>• Multiple users along the river stretch (irrigation, transfer and ecological reserve), with varying entitlements and assurance of supply criteria;</i> <i>• Multiple dams from which releases for users need to be made;</i> <i>• Cascading releases of water for transfer from Vlieëpoort;</i> <i>• Dynamic water requirements and availability (e.g. return flows);</i> <i>• Limited current gauging locations on Lower Crocodile (West) River;</i> <i>• Some uncertainty around conveyance losses (including surface water groundwater interactions - sand aquifers);</i> <i>• Limited storage potential to regulate water releases at Vlieëpoort; and</i> <i>• Water quality concerns.</i> <p><i>The components of the River Management System include the following:</i></p>			<p>gauging station in relation to the River Management System.</p>

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	<ul style="list-style-type: none"> • 4 Existing dams; • Possible new river outlet at Hartbeespoort Dam or revised operating procedures; • Possible new river outlet at Roodekopjes Dam or revised operating procedures; • 13 Existing river gauging stations; • 4 new river gauging stations; • Smart metering of direct abstraction; • Smart metering of indirect abstraction (boreholes); • Conveyance capacity in Crocodile River (West); • Data communication network; and • Integrated operational centre.” <p>2.2 <u>Thaba Tholo response</u></p> <p>2.2.1 While we appreciate the need for a comprehensive and functional River Management System if the Scheme is implemented, there is insufficient detail provided in the Scoping Report (including the annexures) to enable us to comment on whether the Scheme as envisaged (and the attendant River Management System) will be effective or not. We request that this information be provided in the EIA phase.</p> <p>2.2.2 Further, please confirm that at the river gauging stations, the quality of the water will also be tested, not only the quantity. Water quality is a critical issue to our client (and other water users in the area) but it is not adequately dealt with in the Final Scoping Report.</p>			
356.	<p><u>3. Response to Final Scoping Report comments contained in Annexure Z</u></p> <p><u>3.1 Thaba Tholo concern: The Scheme is based on outdated information.</u></p> <p>3.1.1 Final Scoping Report response reference 292 “Require an indication of what information is outdated, as stated in the letter.”</p>	Gunn Attorneys	Letter (01/06/2018)	3.1.2 The MCWAP-2A <i>inter alia</i> needs to be implemented for the feed-water required for FGD systems to be retrofitted at both Medupi and Matimba Power Stations to reduce pollution. The MCWAP-2A is of strategic national importance to meet Medupi’s water need date to commission the fourth unit’s FGD plant in August 2024. Additional water supply is also required for the growing urban needs of Lephalale. It is not prudent to only depend on the water supply from the Mokolo Dam to keep Medupi

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	<p>3.1.2 Thaba Tholo Response: The entire premise for the Scheme is outdated and archaic as the Scheme is driven by the alleged requirement for water to feed coal projects which refers back to Strategic Infrastructure Projects (SIP's) and the national Integrated Resource Plan for Electricity 2010 – 2030 ("IRP 2010"). Certain projects will no longer take place (such as the coal to liquids SASOL plant that was planned many years ago for the Limpopo Valley, incorrectly referenced as the Waterberg). Furthermore, the Scheme relies on the outdated IRP 2010 and the false premise that the exploitation of coal and more coal fired power stations are an integral part of South Africa's energy requirements and in the "national interest" and a least cost option when this is no longer the case due to the reduction in the costs of renewable energy and increase in the cost of coal fired power. A proper and up-to-date assessment must be carried out in the EIA phase of the true cost of coal exploitation in the Limpopo Valley (incorrectly referenced as the Waterberg) from a water use perspective and which study should include competing land uses (agriculture, conservation and food security), water uses, environmental impacts and impacts on international downstream users.</p>			<p>and Matimba operational, almost supplying 20% of the RSA's electricity needs including baseload demands. Any further delay would result in Eskom being in default with respect to its loan with the World Bank and the African Development Bank impacting negatively on each and every South African should such loan be withdrawn and Rating agencies further downgrade the RSA.</p> <p>Implementing MCWAP-2A also provide the opportunity to use the "economy of scale" to unlock the rich mineral wealth in the project area.</p> <p>The Government is on record that the updated IRP is due for publication during August 2018 (<i>was since issued on 27 August 2018</i>). It will according to media reports include for an energy mix including various modes of power generation including coal and possibly nuclear. No. 290 nevertheless highlights how it is envisaged that the future contribution of coal in the energy mix will reduce. Until issued and approved IRP 2010 remains valid. <i>Government's guarantee to provide water to Medupi remains in terms of World Bank loan.</i></p> <p>The decision on such IRP is outside the ambit of the Minister of Water and Sanitation. The Minister is however accountable for the supply of water for the aforementioned power stations.</p> <p>Refer to Section 3.4 of the EIA report with respect to the recent draft IRP issued by DoE on 27 August 2018.</p> <p><u><i>Additional response:</i></u> <i>It is noted that the volume of return flows exceed the volume that will be transferred by MCWAP-2A.</i></p>

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				<i>The implementation of the MCWAP-2A also acts as an enabler for other industrial developments and mining, i.e. unlocking the mineral wealth as envisaged by SIP 1.</i>
357.	<p>3.2 Thaba Tholo Concern: Incorrect sequencing of authorisations required for the Scheme and defective public participation process.</p> <p>3.2.1 Final Scoping Report response references 4, 6, 258 and 293.</p> <p>3.2.1.1 <u>Final Scoping Report Response Number 4</u></p> <p><i>“The water requirements of the Existing Lawful Water Users are secured through Existing Lawful Water Use in terms of the National Water Act, No. 36 of 1998). Existing Lawful Water Uses were accounted for in assessing the availability of water for the transfer scheme.</i></p> <p><i>Note: Any reference to “Existing Lawful Water Use” in the responses provided herein shall be interpreted in terms of the provisions set out in the National Water Act, No. 36 of 1998. DWS however does not guarantee the assurance of supply in accordance with the National Water Act.</i></p> <p><i>The Vlieëpoort Abstraction Weir will make provision for a gauging facility to monitor flows downstream of the abstraction works.</i></p> <p><i>The Draft Scoping Report addresses the impacts and how it will be addressed.</i></p> <p><i>Refer to a copy of the presentations provided during the Focus Group Meeting with Makoppa Agriculture on 25 January 2018 (contained in Appendix Q of the Draft Scoping Report). The following matters were discussed during this meeting:</i></p> <ul style="list-style-type: none"> • <i>Background and Motivation;</i> • <i>Proposed Project Layout;</i> 	Gunn Attorneys	Letter (01/06/2018)	<p>3.2.1.1.1 The Outcome of the 2015 Reconciliation Study was shared with the public during the Focus Group and Public Meetings held in January and March 2018 as part of the Scoping Phase public review period. The minutes, including the presentations, were annexed to the Final Scoping Report (refer to Appendix Q). DWS is committed to continue with the Reconciliation Studies forming an important cornerstone for water resource management in the RSA. Your client is welcome to partake in such future studies.</p> <p>Your attention is drawn to the prescripts of Section 31 of the National Water Act applying to all water users in the RSA with respect to your client’s request relating to a reasonable assurance of supply.</p> <p>3.2.1.2.2 “Return water flows” (or “return flows”) simply means the treated effluent discharged from wastewater treatment plants. Return flows already contribute to 11% of the RSA’s current water mix and is expected to grow to 13% in future as presented during the March 2018 public meetings.</p> <p>It is noteworthy to mention that the indirect re-use of water at present is estimated to already account for about 14% of all available water. Water is re-used indirectly on a large scale in in-land areas, such as in Gauteng in the Vaal and Crocodile-West catchments, as the return flows from the wastewater plants forms part of a down-stream raw water abstraction from the</p>

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	<ul style="list-style-type: none"> • <i>Verification of Existing Lawful Water Uses in the Crocodile River (West);</i> • <i>Availability of Water in the Crocodile River (West);</i> • <i>Management of Impacts regarding Existing Lawful Water Uses (Operating Rules);</i> • <i>River Management System; and</i> • <i>Environmental Impact Assessment.”</i> <p>3.2.1.1.1 Thaba Tholo Response to Final Scoping Report Response 4: Our client seeks an undertaking that if the Scheme does go ahead, there is a reasonable assurance of supply of its existing lawful water use which assurance must be based on proper technical studies carried out in this EIA together with the Water Use Licencing process where there is a legal obligation to provide such information. Currently, the Scoping Report is “hoping” that there is sufficient water but there is no evidence to substantiate this. Vague references to the NWA and legal obligations that allegedly will be complied with by the Scheme do not provide our client with the requisite level of comfort.</p> <p>3.2.1.2 <u>Final Scoping Report Response No 6</u></p> <p>Refer to Final Scoping Report Response Number 4 for response with respect to Existing Lawful Water Users as set out in the NWA.</p> <p><u>Final Scoping Report Response Number 6</u> <i>“The increasing surplus return flow in the Crocodile River (West) catchment that can be transferred is set out in the on-going review of the Crocodile River (West) Water Supply System Reconciliation Strategy. Given that the growth in water requirements for the main urban centres (Johannesburg, Midrand, Pretoria, Rustenburg) will continue to be supplied from the Vaal River System via Rand Water’s network, and the commensurate growth in urban return flows towards the</i></p>			<p>same river. The water re-use schemes in Beaufort-West (direct re-use) and George (indirect re-use), which were also built as a result of the 2009-2011 drought, are operating full time and supply good quality water to the inhabitants. Re-use of water will increase in the future as shared during the March 2018 public meetings. The Minister acts as the Public Trustee of the nation’s water resources in terms of Section 3 of the National Water Act.</p> <p>3.2.1.2.3 The Reconciliation Strategy for the Crocodile River (West) Water Supply system was first developed in 2008, revised in 2012, and continues to be reviewed and updated by DWS in cooperation with institutions and stakeholders in the water sector. The latest revision (Report No. P WMA 03/A31/00/6615/2) was finalised in 2015 entitled: “Continuation of the Reconciliation Strategy of the Crocodile West Water Supply System: Phase 2”. The outcome was shared during the Focus Group and Public meetings in January and March 2018.</p> <p>3.2.1.2.4 The minutes of the pre-application meeting held with the DWS Limpopo Regional Office, which were drafted by this Department, will be appended to the IWULA. Note that the timeframes associated with the IWULA process, as stipulated in the Water Use Licence Application and Appeals Regulations (GN No. R. 267 of 24 March 2017), complicate the running of the EIA and IWULA processes in parallel. The application process for the IWULA will be undertaken via the DWS’ electronic Water Use Licence Application and Authorisation System.</p>

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	<p><i>Crocodile River (West) and its tributaries, sufficient water is expected to be available to meet all the entitlements for water in its catchment.</i></p> <p><i>Return flows to the Crocodile River (West) are discharged into various tributaries. These mainly converge upstream and at the confluence of the Pienaars River with the Crocodile River (West), which offers the opportunity for large scale abstraction (such as for the Lephale area) and possible regulation downstream of that point.</i></p> <p><i>The transfer of water from the Vaal River System for use in the Crocodile River (West) catchment (potable water via Rand Water network) continues to grow for all the identified planning scenarios.</i></p> <p><i>Should the need for water transfer from the Crocodile River (West) catchment to the Lephale area be taken into account, together with the effluent flows from the Rand Water transfers to the Crocodile River (West) catchment, the low water use scenarios in the Crocodile River (West) catchment also result in the lowest total transfers from the Vaal River System, despite the need for additional augmentation (raw water) in the Lephale area to meet the growing requirements.</i></p> <p><i>The planning phase therefore concluded that the requirement for additional water to the project area should be augmented from the Crocodile River (West) and that adequate volumes of water should be available for such transfer. “</i></p> <p>3.2.1.2.1 Thaba Tholo Response to Final Scoping Report Response 6:</p> <p>3.2.1.2.2 Please clarify what is meant by this statement. In particular, please refer to the relevant section of the NWA that defines “return water flows” and refer us to the section of the NWA that distinguishes between different types of water. In our opinion there is no such concept recognised in the NWA and all water in a catchment must be dealt with accordingly. The</p>			<p>3.2.1.2.5 The Minister acts as the Public Trustee of the nation’s water resources in terms of Section 3 of the National Water Act.</p> <p>3.2.1.3.1 Refer to the correspondence received from the Crocodile River (West) Irrigation Board (No. 345) stating the following: “Experience has shown that the current Crocodile River Irrigation District could not cultivate a fair winter harvest before building Vaalkop, Klipvoor and Roodekopjes dams due to a river with no or little water in the winter. The three dams have created an extra 200 million m³ of storage space, which made winter harvest in the area more secure.” The White Papers for such dams highlighted the lack of “natural flow”.</p> <p>3.1.2.3.1.2 Refer to response 3.2.1.2.2 above.</p> <p>3.1.2.3.1.3 Refer to response contained in 3.2.1.2.3 above.</p> <p>3.1.2.3.1.4 DWS intends to acquire a servitude of aqueduct to use the river as a conveyance (<i>government waterworks</i>), done at several water transfer schemes in operation throughout the RSA. Refer to presentations during Public meetings (Appendix U of the Final Scoping Report).</p> <p>3.2.1.4.1.1 Reference: Post Feasibility Bridging Study; MCWAP-2A: Review Report, P RSA 000/A00/18413. To be posted on DWS website in due course.</p> <p>3.2.1.4.1.2 The assurance and supply criteria applied in the water resource analysis that is applicable to the various water users were presented at</p>

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	<p>attempt by DWS to expropriate this water (“<i>return water flows</i>”) for the Scheme therefore is disingenuous. It could also be said that due to the fact that the water will be supplied to IPP’s (mainly private companies) this water is being expropriated not for a national purpose but to assist private entities to make profits.</p> <p>3.2.1.2.3 Please provide us with a reference to a specific study that leads to the conclusion that “<i>sufficient water is expected to be available to meet all the requirements for water in this catchment</i>”.</p> <p>3.2.1.2.4 Please provide us with correspondence from DWS Limpopo where they request the delayed submission of the IWULA as alleged in your response and the reasons therefore.</p> <p>3.2.1.2.5 References to the DWS’ draft NW&SMP: Volume 2 (March 2018) continues to make the argument that there are different classes of water in the Crocodile River and that the DWS somehow has greater rights than other water users to the water due to the fact that some of the water is recycled and initially originates from other catchments. Please refer us to the relevant sections of the NWA on which this argument is based since this seems to be a legal fiction created to suit this Project.</p> <p>3.2.1.3 <u>Final Scoping Report Response No 258</u></p> <p><i>“The Verification and Validation of Existing Lawful Water Uses in the Crocodile River (West) is underway in accordance with the National Water Act (see No. 4). The findings to date were presented by DWS during the Focus Group Meetings with the irrigation groups in January 2018 (refer to Appendix Q of the Draft Scoping Report for a copy of the presentation and minutes of these meetings).</i></p> <p><i>The availability of water for the proposed transfer of water as part of MCWAP-2A was modelled during the Reconciliation Study, which took into consideration the Existing Lawful Water</i></p>			<p>the Focus Group meetings.</p> <p><u><i>Additional Response</i></u> <i>Focus Group meetings were held in January 2018. See slides 56 ‘Risk Criteria Crocodile West System’ and 57 ‘Irrigation Assurance of Supply’ (Appendix Q of the Final Scoping Report).</i></p>

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	<p><i>Uses (including the Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board and the Makoppa Irrigation Area). The return flows from growing urban areas that feed into the Hartbeespoort Dam provide surplus water that is available and targeted for the proposed water transfer, which is more than the natural yield of the Crocodile River (West).</i></p> <p><i>Standard principles applied by DWS for water transfer schemes, including provisions for Existing Lawful Water Use as set out in the NWA, will be adhered to.</i></p> <p><i>The Water Use Licence Application and Appeals Regulations (GN No. R. 267 of 24 March 2017) prescribe the procedure and requirements for IWULA, as contemplated in section 41 of the NWA, as well as an appeal in terms of the NWA. The intention was to undertake the IWULA in parallel with the EIA, however, during a meeting with the DWS Limpopo North Proto CMA in December 2017 the DWS officials indicated that an IWULA needed to be compiled and submitted separately due to the timeframes indicated in the aforementioned regulations.</i></p> <p><i>Considerations from DWS' draft NW&SMP: Volume 2 (March 2018):</i></p> <ul style="list-style-type: none"> • <i>"The supply interventions to meet future needs in the Limpopo Water Management Area North have been identified in the Reconciliation Strategy, as listed below –</i> <ul style="list-style-type: none"> ○ <i>Monitor observed flows and storage levels at strategic points as well as water quality and monitor water use to confirm water requirement projections before implementing options.</i> ○ <i>Plan and implement WC/WDM in all water use sectors.</i> ○ <i>Continue with the implementation of planned bulk water distribution systems, such as the MCWAP-ORWRDP phases and water supply systems from Nandoni Dam.</i> • <i>The Crocodile West River System (Crocodile West River Reconciliation Strategy, DWS, 2015) –</i> <ul style="list-style-type: none"> ○ <i>The catchment area of the Crocodile West River is</i> 			

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	<p><i>one of the most developed in the country. It is characterized by the sprawling urban and industrial areas of northern Johannesburg and Pretoria, extensive irrigation downstream of Hartbeespoort Dam and large mining developments north of the Magaliesberg. As a result, the Crocodile River is one of the rivers in the country that has been most influenced by human activities, and where more specific management strategies are of paramount importance.</i></p> <ul style="list-style-type: none"> <i>○ The water resources that naturally occur in the catchment have already been fully developed and most of the tributaries as well as the main stem of the Crocodile River are highly regulated. Much of the water supplied to the metropolitan areas and some mining developments is transferred from the Vaal River system via Rand Water. This in turn results in large quantities of effluent from the urban and industrial users, most of which is discharged to the river system after treatment, for re-use downstream. In many of the streams and impoundments, water quality is severely compromised by the proportionate large return flows. The effluent return flows constitute a large portion of the water availability in the catchment and are an important resource.</i> <i>○ The growing water requirements in the Lephale area in the Mokolo River catchment to the north and north-east of the Crocodile River catchment exceed the available water from the Mokolo River system. The transfer of surplus water in the Crocodile River system to the Lephale area (Mokolo-Crocodile Water Augmentation Project) will be implemented 2019/2020.</i> <i>○ The following interventions have been identified in the Strategy –</i> <ul style="list-style-type: none"> <i>▪ The Rand Water service area in the Crocodile West River catchment will in future continue to be supplied from the Vaal River System and additional re-use will be considered only when</i> 			

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	<p><i>surplus becomes available.</i></p> <ul style="list-style-type: none"> ▪ <i>The areas north of the Magaliesberg outside the Rand Water supply area will receive increased treated effluent from the metropolitan areas as a future source of water.</i> ▪ <i>In the Waterberg area (north of Crocodile West catchment) the optimal utilisation of local resources will continue and surplus water in the Crocodile West River System will be transferred to the Lephalale area. Intervention to supply short-duration shortfall will be evaluated by investigating demand side management and/or potential augmentation by transferring treated wastewater from the Vaal River System to the Crocodile West River System.</i> ▪ <i>Available groundwater resources should be utilised in all areas and opportunities for conjunctive surface / groundwater utilisation should be explored.</i> ▪ <i>Continue with the Crocodile (West) Annual Operating Analyse.”</i> <p>3.2.1.3.1 Thaba Tholo Response to Final Scoping Report Response 258:</p> <p>3.1.2.3.1.1 Please substantiate the argument that the flows in the Crocodile River now are more than the “<i>natural flow</i>”. When and how was the “<i>natural flow</i>” measured? Please provide detailed reports.</p> <p>3.1.2.3.1.2 Please explain, with reference to the NWA or other relevant legislation what “<i>return flows</i>” are and how legally “<i>they can be targeted for the transfer</i>”.</p> <p>3.1.2.3.1.3 Kindly provide us with the DWS Standard Principles for Water Transfer as referred to in this response 258.</p> <p>3.1.2.3.1.4 In terms of the NWA (<i>inter alia</i> we refer to sections 2(g); 2(h); 2(i); 2(k); 3 and 16) and Section 24 of the Constitution we submit that it is the DWS’ responsibility to ensure that the</p>			

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	<p>Crocodile River is managed in the interests of all its water users and that the river ecology is sustainably conserved to the greatest extent possible and that therefore DWS is not empowered to manage the River as a flood channel at the expense of other water users. To perpetuate this style of water management has disastrous consequences for downstream areas such as the Lowveld and downstream and lower lying countries such as Mozambique which then experience much more severe and frequent flooding as the river system's natural ability to manage heavy rainfall events is destroyed and the artificial river management systems implemented by DWS are inadequate.</p> <p><u>3.2.1.4 Final Scoping Report Response Number 293</u> Refer to the following:</p> <ul style="list-style-type: none"> Final Scoping Report Response 4 and Final Scoping Report Response 258 for responses with respect to existing lawful water users as set out in the NWA; and <p><u>Final Scoping Report Response Number 293</u> <i>"Require an indication of what information is outdated, as stated in the letter. As mentioned in the Scoping Report, DWS conducted a Feasibility Study, which was completed in 2010. In addition, in order to address the impact of the reduced water demand from the revised energy planning process, DWS initiated a Post Feasibility Bridging Study (completed in 2015) to review and update the Feasibility Study findings for MCWAP-2A. The important development principles that have been formulated in the Feasibility Study reports remain relevant. These documents still inform the basic configuration, design, construction and operation of the MCWAP. The bridging study aimed to redefine the capacity required for MCWAP-2A. Various technical reports are available on the project website: www.dwa.gov.za/Projects/MCWAP/. The presentations provided during the EIA related public and focus</i></p>			

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	<p><i>group meetings (refer to presentation contained in Appendix Q of the Draft Scoping Report) also included information from the Crocodile River (West) System Reconciliation Strategy (access to technical reports via the DWS website). These same sources of information will be used to compile the IWULA.</i></p> <p><i>The Reserve and Existing Lawful Water Use are specifically catered for in Chapter 3 and Chapter 4 of the National Water Act (Act No. 36 of 1998). In addition, these matters (amongst others) must be taken into consideration for the issuing of a licence in terms of Section 27 of this Act.</i></p> <p><i>The water balance was considered as part of the technical studies and derived from sophisticated risk analysis simulation techniques. These methods simulate the complete Crocodile River System on a monthly time step, which accounts for the observed characteristics of rainfall and runoff. One of the objectives of the Reconciliation Strategy 2015 included maintaining a positive water balance in future and reconciling growing water requirements and availability.</i></p> <p><i>In acknowledging the critical nature of water related concerns, Focus Group Meetings were convened with the irrigation groups, namely Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board and Makoppa Agriculture, in January 2018. Refer to a copy of the presentations provided during these meetings contained in Appendix Q of the Draft Scoping Report. The following matters were discussed during these meetings:</i></p> <ul style="list-style-type: none"> <i>• Background and Motivation;</i> <i>• Proposed Project Layout;</i> <i>• Verification of Existing Lawful Water Uses in the Crocodile River (West);</i> <i>• Availability of Water in the Crocodile River (West);</i> <i>• Management of Impacts regarding Existing Water Uses (Operating Rules);</i> <i>• River Management System; and</i> <i>• Environmental Impact Assessment.”</i> 			

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	<p>3.2.1.4.1 Thaba Tholo Response to Final Scoping Report Response 293:</p> <p>3.2.1.4.1.1 Please provide us with a copy of (or reference where it may be located) The DWS Post Feasibility Bridging Study completed in 2015.</p> <p>3.2.1.4.1.2 Although a monthly Water Balance approach is standard practice and sufficient and although the supplementary reports suggest that the existing lawful water rights have been accounted for, they are not explicitly quantified in the reports and nowhere is an indication given about the frequency or level of assurance with which these existing lawful water rights will be met under a future management scenario compared with the recent past. This information must be made available as it would be part of the comprehensive yield model setup.</p>			
358.	<p><u>3.3 Thaba Tholo Concern: A rushed public participation process and failure to adequately consider alternatives</u></p> <p><u>3.3.1 Final Scoping Report Response No 294</u></p> <p>“The Public Participation process for seeking authorisation under the National Environmental Management Act (No. 107 of 1998) for the proposed project is being undertaken in accordance with GN No. R. 982 of 4 December 2014 (as amended). Section 12 of the Scoping Report provides an account of the Public Participation process that has been conducted to date, in accordance with the aforementioned regulatory requirements. In addition, the Plan of Study for the EIA (Section 14.5 of the Scoping Report) presents the approach to Public Participation during the EIA Phase. Figure 116 in the Scoping Report outlines the public participation process and the timeframes are aligned with the periods stipulated in GN No. R. 982 of 4 December 2014 (as amended).</p> <p>Various options to supply the required water were considered</p>	Gunn Attorneys	Letter (01/06/2018)	<p>3.3.2.1 Refer to No. 296 and No. 315.</p> <p>3.3.2.2 DWS issued the following self-explanatory statement on 8 May 2018: “The Department of Water and Sanitation (DWS) welcomes the full joint parliamentary inquiry by the Portfolio Committee on Water and Sanitation and the Standing Committee on Public Accounts (Scopa) that is set to investigate the financial state of the department. The Department will fully cooperate with the due processes of parliament in line with terms of reference that were discussed by the joint meeting today. While the parliamentary process unfolds, the department will continue to ensure that water and sanitation services continue to be delivered unabated to the people of South Africa.”</p> <p>In addition the following statement by DWS on 6 June is relevant: “The Minister of Water and Sanitation, Gugile Nkwinti, today, Wednesday,</p>

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	<p>during the Technical Pre-Feasibility and Feasibility Studies. The proposed water transfer scheme was identified to be the most preferable due to a variety of factors, and it is now being assessed as part of the EIA. Only layout alternatives are under consideration. Section 9.3.1 of the Draft Scoping Report explains the various options considered for the proposed abstraction weir and the selection criteria used as part of the Conceptual and Pre-feasibility stages of the project. In addition, also refer to the following report: P RSA A000/00/9109 - Pre-feasibility Stage: Supporting Report 4: Dam, Weir and River Engineering (available on the project website).</p> <p>Also refer to the following sections of the Draft Scoping Report:</p> <ul style="list-style-type: none"> • Section 3 – Project Background and Motivation. This includes the project's status as a Strategic Integrated Project (SIP), where SIP1 aims to unlock SA's northern mineral belt in one of the poorest provinces (Limpopo) through key infrastructure provision in the Waterberg and Steelpoort districts and initiating new energy and industrial development (amongst others); • Section 8 – Need and Desirability; and Section 10.3.2 – implications of the No Go Option. <p>Considerations from DWS' draft NW&SMP: Volume 2 (March 2018):</p> <ul style="list-style-type: none"> • At present Eskom's coal-based power plant fleet consists of 10 base load power plants (used during normal demand) and 3 return to service (RTS) power plants (used during peak demand). These power plants have diverse technical parameters and use a combination of cooling technologies which is bound to provide different water usage profiles. Within the context of the current Integrated Resources Plan, South Africa's energy mix is bound to change in order to provide sufficient energy security. However, the abundance of local reserves of coal is likely to keep coal a dominant fuel source. • DWS signed a MoU with Eskom in which Eskom 			<p>6 June 2018 marks 100 days at the helm of the Department of Water and Sanitation after his appointment by President Cyril Ramaphosa. Since his appointment in this new portfolio he has announced bold plans to turn things around and accelerative service delivery imperatives of the department. In his first 100 days, Minister Nkwinti has already developed a five-pillar turn-around strategy to address issues of service delivery, namely:</p> <ul style="list-style-type: none"> • A National Water Resources and Services Authority; • A National Water Resources and Services Regulator; • A Water Resources and Services Value Chain; • A Water Resources and Services Master Plan; and • Institutional Rationalisation and Organisational Alignment. <p>Minister Nkwinti has outlined his plans of instilling the culture of achieving more with less in the department, thus reducing the manner in which money is being spent.</p> <p>This provides an opportunity to citizens to rebuild the DWS.</p> <p>3.3.2.5 DWS and TCTA are well experienced to implement mega water projects throughout the RSA and Lesotho. The LHWP and Tugela-Vaal GWW are some of the many successful water projects.</p> <p>3.3.2.5.1 Refer to the target dates in No. 356 above to provide water for the FGD to reduce pollution.</p> <p>3.3.2.5.2 RSA requires a suitable and appropriate energy mix, including coal.</p>

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	<p>committed it will be systematically moving from wet cooled to dry-cooled power generation systems, to reduce their water foot-print. This undertaking was already implemented for the new coal power stations, Kusile and Medupi with a water allocation estimated at 15,4 million m³/a.</p> <ul style="list-style-type: none"> The supply area of the Vaal River System stretches far beyond the catchment boundaries of the Vaal River and includes most of Gauteng, Eskom's power stations and Sasol's petro-chemical plants on the Mpumalanga Highveld, the North-West and Free State goldfields, iron and manganese mines in the Northern Cape, Kimberley, several small towns along the main course of the river, as well as the Vaalharts Irrigation Scheme. It will soon be extended to also supply water to the developments on the Waterberg coal-fields near the town of Lephalale in the Mokolo catchment. The size of the Vaal River System, the various inter-basin transfers coupled with the extensive bulk water distribution infrastructure and the geographical location of the water users in relation to the position of the water resource components provides for a complex mix of variables that influences both the demand and availability." <p>3.3.2 Thaba Tholo Response to Final Scoping Report Response 294:</p> <p>3.3.2.1 We disagree that that sufficient alternatives were considered in the Technical Feasibility and Pre-Feasibility Studies as the fundamental premise and motivation for the Scheme is flawed which is that coal driven development is in the best interests of the area and in line with acceptable national policy. If proper long term planning is done a sustainable solution for the area must be found which does not rely on destructive, polluting and thirsty coal mines and coal fired stations.</p> <p>3.3.2.2 It is public knowledge that the DWS is bordering on insolvency and there are allegations of financial mismanagement. This has been the subject of media scrutiny, public outcry and a parliamentary inquiry as</p> 			

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	<p>per the attached article. In the context of MCWAP II (a potentially illegal and massively expensive White Elephant project costing at least R12 billion to feed archaic fossil fuel projects) this is very relevant. Refer, for example to the recent article from Business Day (published on 14 May 2018), https://www.businesslive.co.za/bd/national/2018-05-08-parliament-to-crack-the-whip-as-crisis-engulfs-water-department/ and attached as Annexure "A". We quote the text most applicable to this Scheme:</p> <p>"Parliament is forging ahead with plans to get to the bottom of the crisis engulfing the Department of Water and Sanitation. The portfolio committee on water and sanitation and the standing committee on public accounts will on Tuesday consider the terms of reference of the inquiry into the woeful administrative and financial state of the department. Earlier in 2018 the two committees resolved to establish a commission of inquiry into the affairs of the department. Nomvula Mokonyane led the department, whose finances are so dire that it is now broke. Mokonyane was shifted to the communications portfolio following President Cyril Ramaphosa's reshuffle. Auditor-general Kimi Makwetu has also flagged the department for incurring billions of rand in irregular expenditure."</p> <p>The department has attributed its financial crisis and its decision to dip into its overdraft facility to the failure of municipalities to pay for services, a situation which was worsened by major budgetary cuts amounting to R2.6bn in the 2016-17 financial year. The department is owed about R11bn by municipalities and local water boards. In March, Treasury officials and Makwetu detailed</p>			

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	<p>in Parliament how department officials ignored or deviated from tendering processes while Mokonyane was at the helm.</p> <p>In the process, department officials splurged billions of rand on excessive project management and professional fees, leaving the department in financial distress.</p> <p>The department was also riddled with leadership instability and a skills crisis which had compounded its woes.</p> <p>The Treasury has previously told Parliament about departments using deviations, invoking emergencies that did not exist, as a means to bypass procurement regulations.</p> <p>Since 2014-15, irregular expenditure incurred by the department had risen, Makwetu told MPs.</p> <p>"The financial position [of the department] is a strain to the fiscus ... we are where we are largely because of deviations over the year[s] — things like duplicate payments, spending on projects that are not budgeted for, payments for projects that are not complete. We see a lot of irregular expenditure and overpayments," said Makwetu.</p> <p>The department has had different acting directors-general for almost five years and individuals had been appointed in an acting capacity in crucial roles for periods ranging from six months to just over a year."</p> <p><u>3.3.2.2.1 Final Scoping Report Response 313</u></p> <p>"Government identified and approved 18 SIPs across the RSA to support economic development and address service delivery in the poorest provinces. SIP 1 entails the unlocking of the Northern Mineral Belt with Waterberg as the catalyst. Investment in rail, water and transmission infrastructure and energy generation will catalyse unlocking rich mineral resources in Limpopo resulting in thousands of direct jobs across the areas covered. The MCWAP includes the water</p>			

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	<p>infrastructure needed for SIP 1.</p> <p>The DWS planning processes are informed by the IRP process combined with consultations with the Department of Energy, Eskom and interest groups from industry. The IRP process is being monitored from the first IRP report of 2010, the update in 2013 as well as the latest draft distributed in 2016.</p> <p>Please note that the IRP process is not specific with respect to future location of power plant development. The DWS planning process for MCWAP -2 was thus also based on consultation with Eskom and potential IPP developers in this area.</p> <p>The DWS planning for the MCWAP 2 initially included for potentially 4 large coal fire power stations and some small IPP's in the Waterberg area. The 4th coal fire power station was only envisaged beyond 2035.</p> <p>Based on the available planning horizon of the IRP as well as the perceived reduced need for a 4th power station in future, the more recent planning in DWS was based on a potential of maximum 3 large coal fire power stations and a limited number of IPP's in the Waterberg area. It should be noted that the third facility may also potentially be made up by a combination of IPP's.</p> <p>The draft IRP 2016 Base Case assumes some further coal fire power station development up to 2030. However, the portion of the electricity production from coal in the total technology mix is being reduced consistently.</p> <p>This appears to be aligned with the development of at generation capacity by 2030. The decommissioning of Kriel (3000MW), Komati (1000MW), Grootvlei (1200MW), Camden (1561MW), Arnot (2000MW) and Hendrina (2000MW) Power Stations is scheduled before 2030. It is assumed that Medupi and Kusile will effectively replace this capacity.</p>			

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	<p>It is of interest that further 10000MW new coal fire power generation is planned beyond 2030 up to 2050 (Draft IRP 2016-Base case). However the CSIR and other interest groups strongly oppose this. The latest DWS planning allows for potential future phased development should this current unlikely development scenario be required.</p> <p>The DWS approach of planning for the development of more coal fire power capacity in the Waterberg area is deemed realistic and aligned with the latest trends in energy planning.</p> <p>The need for Phase 2A is thus is not primarily to supply water to new coal fire power plants. The immediate short term driver entails supplementing the FGD demand from Medupi, which cannot be supplied from the Mokolo source.</p> <p>The need Phase 2A is driven by Medupi's and Matimba Power Stations' total water requirements which exceeds the water available (yield) from Phase 1 (Mokolo Dam). Following studies the DWS identified the Crocodile River (West) as the most suitable water resource for industrial purposes in the area.</p> <p>The existing developments in Lephalale are currently dependent on a single source of water (Phase 1). Lephalale water requirements are already at its limits in terms of its licence. Without additional water the water availability in the town will be constrained.</p> <p>Phase 2A will also free up water supplied from Phase 1 to the town only when Phase 2A is implemented and existing Phase 1 users such as Eskom and Exxaro are able to access water from Phase 2A.</p> <p>Furthermore, a drought in the Mokolo catchment will place a significant portion (approximately 20%) of Eskom's generation at risk and the town's water supply will be severely constrained. Water is required from the Crocodile River (West) to mitigate this risk.</p>			

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	<p>The total water allocation is made from an integrated river system management approach. The systems yield determination was optimised by using differentiated assurance of supply to the different types of users.”</p> <p>Final Scoping Report Responses Number 40 and 300 regarding climate change.</p> <p><u>3.3.2.3 Final Scoping Report Response Number 40</u></p> <p>”As is common accepted practice, the potential impact of climate change to river flows has been considered in the hydrological modelling, where a margin for error in the future predictions has been considered. This is based on historical data of wet and dry periods for the area, as well as all known water use that affects river runoff. Due to the small surface area of the inundation area behind the abstraction weir, in terms of global climate change factors, no noticeable impact on the climate of the region is anticipated. Infrastructure will be designed to be sufficiently robust to withstand severe rainfall events. It must be noted that the majority of water for the proposed transfer would be return flows.”</p> <p><u>3.3.2.4 Final Scoping Report Response Number 300</u></p> <p>”The climate change impacts associated with the power stations, coal mines and other intended water users need to be assessed as part of the respective environmental assessments conducted for each of these developments, as they are the sources of the impacts.</p> <p>The climate change impact assessment that was instructed to be undertaken for the Thabametsi Coal Fired Power Station was for that particular development, based on its impacts to climate change.</p> <p>The risk analyses are conducted for 1000 plausible streamflow and rainfall stochastic sequences. These sequences cater for a range of extremes, where the wettest sequence is wetter</p>			

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	<p>than the wettest period experienced historically and the driest sequence drier than the worst drought experienced historically. The variability of the stochastic analysis is thus catered to a certain degree for potential changes within these extremes.</p> <p>Studies conducted where various global climate models were used to estimate the likely implication on water availability (yield) of system showed widely varying results and found that either increases or decreases will occur in water availability as a result of Climate Change. Due to these observations it has been acknowledge that Climate Change adds another layer of uncertainty to water resource assessment and planning.</p> <p>Considering the recent advances made in developing methods of assessing uncertainty in water resource analysis there are proposals under consideration by the DWS and other funding organisations to expand the uncertainty assessment methodology by also incorporating the effects of Climate Change. The key in achieving this is by integrating available research products of Climate Change and uncertainty. This will require developing procedures (including software systems) and establishing analytical techniques that can be used in studies such as these.</p> <p>Considerations in terms of climate change from DWS' draft NW&SMP: Volume 2 (March 2018): This NW&SMP gives effect to the mandate given to the water sector through the Constitution, the White Paper on a National Water Policy for South Africa (1997), the Strategic Framework for Water Services (2002), the National Sanitation Policy (2017), the National Water Act and the Water Services Act. In addition, it takes into account other relevant policy and legislation such as the Industrial Policy Action Plan (IPAP), the Irrigation Strategy, the National Climate Change Response White Paper, the National Environmental Management Act, the Public Finance Management Act, the Municipal Finance Management Act, and the Municipal Structures and Systems Acts.</p> <p>A number of important strategies and operational policies have</p>			

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	<p>been compiled since the enactment of the national policy and water acts in order to flesh out and implement the legislation and policy. This includes a Water and Sanitation Sector Policy on Climate Change (2017).</p> <p>The study on Future Climates in South Africa (DEA, SANBI, GIZ, 2013) concluded that climate change will have a limited impact on water supply at a national level but could be quite significant at regional level under particularly drier futures. The greatest concern regarding climate change, are the isolated water resource systems that are dependent on a single resource or small geographical area with limited hydrological variability, including small farm dams in headwater catchments and water supply schemes for rural towns. Systems with greater integration and diversification have greater resilience to climate change uncertainty, such as the Integrated Vaal River System. Also, more variability due to climate change, including more flush floods, may require more storage to provide the required yield of a system.</p> <p>Although climate change brings an added uncertainty to water resources, the impacts can and should be mitigated. The relatively gradual nature of climate change allows time for well-considered adaptation and mitigation measures. However, there is growing concern that the decreasing monitoring through rainfall and flow gauging networks are no longer sufficient to accurately detect these trends to ensure mitigation measures are planned and put in place timeously. [Note: this emphasises the need to for the proposed River Management System for the MCWAP- 2A]</p> <p>The impact of climate change on resource availability and water requirements should be taken into account in all future planning, including Reconciliation Strategy studies. Mitigation measures can then be introduced as their necessity becomes evident, but then adequate data is essential to support the decisions to be made. Therefore, it is vital that the monitoring of rainfall, evaporation and runoff be continued rigorously, and the hydrological monitoring network improved to ensure that</p>			

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	<p>the actual effects of climate change are measured accurately and brought as quickly as possible into the analysis of resources.</p> <p>Existing Lawful Water Use will continue. No impact on food security – note virtual water as referenced during Focus Group meetings.”</p> <p>3.3.2.5 It is submitted that the MCWAP II is being driven by archaic and outdated technology recommended by IRP 2010 and before. Large scale infrastructure projects are failing due to poor planning and environmental issues which are not properly investigated. This is well documented in the following article from National Geographic entitled “Massive Infrastructure Projects are Failing at Unprecedented Rates”. https://news.nationalgeographic.com/2017/11/mega-projects-fail-infrastructure-energy-dams-nuclear/. The article is attached as Annexure “B”. Some of the comments made in the article are instructive and worth repeating:</p> <p>“Though few recognized it at the time, 2011 may mark a turning point for the era of building mega energy and mining projects around the world, according to experts. That year, a series of natural disasters energized civic resistance to giant projects. At the same time, alternative and renewable energy technologies have evolved as cheaper, safer options. And more traditional industrial projects that have moved forward have tended to be smaller scale. In March 2011, an earthquake and tsunami destroyed the 41-year-old, 4,700-megawatt Fukushima Daiichi nuclear power station in northern Japan, one of the 15 largest nuclear electrical generating plants in the world.</p> <p>Seven months later and 3,000 miles east, two more mega energy projects failed in India. Early in</p>			

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	<p>December a large group of farmers and activists, supported by a Himalayan state government's concern about fisheries and flooding, barricaded access roads and shut down construction of the \$1.6 billion, 2,000-megawatt Lower Subansiri hydropower dam on the border between Arunachal Pradesh and Assam. On December 31, 2011, along the Bay of Bengal coast in Tamil Nadu, Cyclone Thane wrecked the \$2 billion Nagarjuna oil refinery as it was nearing completion. Operations at the hydropower dam and the refinery never resumed.</p> <p>In the years since, a number of mines, mega power plants, and other huge industrial infrastructure projects have failed around the world. A series of ecological, social, market, and investment forces have aligned on six continents to foil industrial developers who want to tear at the Australian landscape for coal, drill through Arctic ice for oil, move villages out of Himalayan valleys for hydropower dams, scrape South American mountainsides for new mines, divert rivers in South Africa to cool power plants, clear forests to mine Alberta sands for oil, construct a new nuclear plant in South Carolina, and race across the countryside with new pipelines to transport liquid fuels.”</p> <p>.....</p> <p>“As recently as 2010, in its Master Energy Plan, Bangladesh envisioned building 19 large coal-fired power plants by 2030 to power its textile-based export economy. Visible progress has been made on just one plant, near Rampal, but even that is the site of fierce protests over alleged land seizures and potential water and air pollution. Seven other projects, financed by Korean, Chinese, and Japanese investment banks, have been shelved entirely, largely due to rising costs and public opposition.”</p> <p>3.3.2.5.1 It is also international best practice to site large power</p>			

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	<p>projects as close as possible to the resources which they require to use intensively (such as water). It is submitted that this aspect should be studied further in the EIA phase.</p> <p>3.3.2.5.2 MCWAP II therefore remains an expensive, inappropriate and ill-fated development. The reliance on coal and basic mineral beneficiation means that South Africa will remain a developing country, underskilled and will not develop to its potential. Employment and embracing clean technologies, skills and education are required.</p>			
359.	<p><u>3.4 Thaba Tholo Concern: Structure of the Scheme – role and objectivity of DWS</u></p> <p>3.4.1. Final Scoping Report Response No 295 “Noted. Appeal procedures provided for in NWA. Comment to be substantiated.”</p> <p>3.4.2. Thaba Tholo Response to Final Scoping Report Response 295 DWS is the player (water user for MCWAP II and applicant for a water use licence) and the referee (adjudicator for existing lawful water use and authorising authority for the MCWAP II WUL) and stands to profit from selling the water to water users instead of letting it pass downstream to neighbouring countries. How can DWS ever be an objective regulator in this scenario?</p>	Gunn Attorneys	Letter (01/06/2018)	3.4.2 The authority vests in the Minister of Water and Sanitation in terms of the NWA, as referred to above. DEA will independently evaluate the EIA to consider authorisation in terms of NEMA.
360.	<p><u>3.5 Thaba Tholo Concern: The Role of TCTA</u></p> <p>3.5.1 <u>Final Scoping Report Response No 296</u> “Planning of MCWAP-2A is done by DWS.TCTA is still busy facilitating negotiation of Water Supply Agreements between DWS and major Users of this scheme which form the basis for the financial viability. Viability is a DWS function.”</p> <p>3.5.2 Thaba Tholo Response to Final Scoping Report Response 296 Please provide copies of the Water Supply Agreements. In draft form and once finalised and signed.</p>	Gunn Attorneys	Letter (01/06/2018)	3.5.2 These agreements are confidential and TCTA/DWS will only release them if instructed through PAIA or Court Order.

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361.	<p><u>3.6 Thaba Tholo Concern: Financing of the Scheme</u> <u>3.6.1 Final Scoping Report Response Number 297</u></p> <p>“The Government of South Africa made the decision on the Scheme based on the water needs to the Lephalale area. Financing of the Scheme will be partly from the Fiscus and commercial loans backed by water supply agreements between the DWS and the Users. Minister directed TCTA to co-finance and implement MCWAP subject to Environmental Authorisation. The water users repay such off-budget loans for the project after concluding off-take agreements.</p> <p>The estimated project budget based on the 75 million m³capacity is approximately R12 billion.”</p> <p>3.6.2. Thaba Tholo Response to Final Scoping Report Response 297</p> <p>3.6.2.1 Please provide us with a copy of the decision of the Government of South Africa.</p> <p>3.6.2.2 It is stated that the decision was taken based on the water needs to the Lephalale area. What about the water needs of the water users below the Vlieepoort Weir?</p> <p>3.6.2.3 Please explain how the fiscus will finance the scheme and where will this money come from?</p> <p>3.6.2.4 Please provide the names of the commercial entities (banks) that will be providing loans to the Project as well as the names and contact persons of people at the entities (banks) that we may contact at the entities (banks) to discuss the Project.</p> <p>3.6.2.5 Please provide us with a copy of the relevant directive and other correspondence issued by the Minister to TCTA where TCTA is directed to co-finance and implement MCWAP.</p> <p>3.6.2.6 Please provide us with a copy of the Project budget.</p>	Gunn Attorneys	Letter (01/06/2018)	<p>3.6.2.1 Refer to the Infrastructure Development Act, No. 23 of 2014 (GN No. 37712). Reference is specifically made to Part 3 of such Act covering the approved Strategic Integrated Projects (SIP’s). SIP1 links to the MCWAP.</p> <p>3.6.2.2 Lawful water users downstream of Vlieëpoort were considered and are part of the Feasibility Studies conducted. Refer to response to No. 4 and No. 259 with respect to Existing Lawful Water Users as set out in the NWA.</p> <p>3.6.2.3 TCTA’s business model is to get a government guarantee, commitment from off-takers on the Scheme, out of which to raise commercial funding in the financial market. The financiers are then repaid over an agreed period at an agreed rate, with the government guarantee standing as surety for any default.</p> <p>Loan funding via TCTA will account for about 88% of the budget, the balance will be provided by the fiscus using normal budgetary processes to cover the social portion with regards to Lephalale.</p> <p>3.6.2.4 TCTA has not yet approached any funding institution with regard to this project and as such has no such names available to provide at this stage. Funding will only be secured if the project receives authorisation.</p> <p>3.6.2.5 The Stakeholder is requested to please follow due process in terms of PAIA and to request the information from TCTA through the appropriate channels.</p>
362.	<p><u>3.7 Thaba Tholo Concern: Non-compliance by the Scheme with International Water Law Obligations</u></p>	Gunn Attorneys	Letter (01/06/2018)	<p>3.7.2.1 Refer to No. 357.</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>3.7.1 Final Scoping Report Response Number 298 “The Crocodile River (West) and Mokolo River catchments form part of the Limpopo River Basin, which is shared by Botswana, Mozambique, South Africa and Zimbabwe. All the basin states are signatories to the Revised Protocol on Shared Watercourses in the South African Development Community (SADC) Region (SADC Revised Protocol). In general, it is incumbent upon the RSA to pursue and establish close cooperation with the neighbouring states with regard to the study and execution of all projects likely to affect the regime of a shared watercourse such as the Limpopo. South Africa must therefore exchange information with the other Watercourse States and, if found necessary, negotiate the possible effects of planned measures on the condition of the Limpopo Watercourse. MCWAP-1 entail the yield of the existing Mokolo Dam and MCWAP-2A utilise return flows originating from the Vaal River. It is therefore considered that the scheme does not fall within the conditions contained in the SADC Revised Protocol of a planned measure with possible adverse effects for other states in a shared watercourse as indicated in Article 4(1)(b) of the SADC Revised Protocol. As such, it is not considered to be necessary to negotiate the use of the water with the neighbouring states.</p> <p>Notifications in terms Article 4(1)(a) of the SADC Revised Protocol of the RSA’s intention to proceed with implementation of the MCWAP, were therefore given to the co-basin states. In the February 2010 letters to the co-basin states RSA stated that the RSA perspective is that there will be no significant adverse effect to any one of the LBPTC members as a result of the MCWAP, for the reasons given above. South Africa has therefore complied with the SADC Revised Protocol and international best practices.”</p> <p>3.7.2 Thaba Tholo Response to Final Scoping Report Response 298 3.7.2.1 Again the fictitious arguments of “return water flows” are used in the Final Scoping Report. It would seem</p>			<p>3.7.2.2 <i>Additional Response</i> <i>Refer to response above to 3.6.2.6.</i></p>

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	<p>impossible and illogical that a Scheme could carry out a river diversion of this magnitude and not have “an adverse effect” on the river and (international) downstream users.</p> <p>3.7.2.2 Please provide us with a copy of the Notifications given to basin states in terms of Article 4(1)(a) of the SADC Revised Protocol. Was the last notification given in 2010? If so this process must be undertaken again.</p>			
363.	<p><u>3.8 Thaba Tholo Concern: Non-compliance with the Constitution and National Water Act</u></p> <p>3.8.1 <u>Final Scoping Report Response No 299</u></p> <p>Refer to response to No. 4 and No. 258 with respect to Existing Lawful Water Users as set out in the NWA. Final Scoping Report Response No 299 “Section 3.4 of the Scoping Report states that operating rules for both the Mokolo and the Crocodile River (West) systems need to be developed by DWS in a separate process and must take cognisance of this and ensure that Existing Lawful Water Use is respected and protected.</p> <p>Refer to response to No. 4, 6 and No. 258 with respect to water availability for the proposed water transfer scheme.</p> <p>Professor DA Hughes only reviewed the Feasibility Study reports (as indicated). Detail system wide risk analyses were carried out as part of the Reconciliation Strategy Study on several occasions to inform all water resource planning activities in the Crocodile River Catchment including the Feasibility Study. The results from these system analyses informed what is covered in no. 6 and no. 258.”</p> <p>3.8.2 Thaba Tholo Response to Final Scoping Report Response 299</p> <p>The “Operating Rules” are critical to the success or failure of the Scheme. Please advise how our client may be involved in the formulation of the Operating Rules in order to ensure that</p>	Gunn Attorneys	Letter (01/06/2018)	<p>3.8.2 The current practice followed by DWS is to establish a System Operating Forum (SOF) where stakeholders such as municipalities, irrigation boards, committed commercial users, etc. are represented and stakeholders encouraged to participate. If the client is an agricultural user the participation will be through the representatives of the agriculture sector (e.g. Makoppa Agriculture) and in the case of industrial users (e.g. Eskom), through the representatives of industry. Makoppa Agriculture could be invited to provide input when the River Management Plan is formulated and for the subsequent annual operations.</p> <p>Also refer to No. 51 with regard to recharge of the aquifer, i.e. such flows and spills from upstream (downstream of Roodekopjes Dam) will be available for downstream use and recharge of the aquifer.</p> <p>For another industrial water use that requires a higher level of assurance than irrigation water use, any user is at liberty to apply for a water use licence (Chapter 4 of the NWA) and/or to participate in the MCWAP-2A, subject to meeting the conditions applicable for industrial users.</p>

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	<p>its existing lawful use is not compromised. We are advised by our water specialist, Professor Hughes that even based on the more recent reports now available with the Final Scoping Report, there remain gaps in the information that has been supplied. As noted above, the extent to which the existing lawful water use rights will be met is not explicitly stated in any of the reports. It is true that there are indications that these have been taken into account but there is also a statement that the DWS cannot guarantee any specific level of assurance of supply. However, the yield model results can be used to indicate what volumes of water have been allowed for (in the future scenario modelling) as well as how often these required volumes are met (i.e. the assurance frequency). The other issue that is not mentioned in the Final Scoping Report is the extent to which the proposed management system (including the weir and abstractions) will impact on the wet season flows below the weir and therefore on the recharge to the alluvial aquifer and the riparian wetland areas (both of which appear to be locally important).</p>			
364.	<p><u>3.9 Thaba Tholo Concern: Failure to comply with NEMA obligations and to consider climate change</u></p> <p>3.9.1 <u>Final Scoping Report Response No 300</u> Refer to Response Number 40 for response to climate change. Existing Lawful Water Use will continue. No impact on food security – note virtual water as referenced during Focus Group meetings.</p> <p>3.9.2 Thaba Tholo Response to Final Scoping Report Response 299</p> <p>3.9.2.1 The Lephalale projects will study the impacts of their projects on climate change. MCWAP II must study the impact of climate change on the reduced availability of water on the Crocodile West Catchment.</p> <p>3.9.2.2 The uncertainty related to climate change studies and models is noted, however, we believe that a risk averse approach is required in this instance.</p> <p>3.9.2.3 Please provide us with the climate change models used to estimate the likely impact on water availability and yield.</p>	Gunn Attorneys	Letter (01/06/2018)	<p>3.9.2.1 & 3.9.2.3 Refer to No.40 and No. 302 for responses to climate change. Information is available via the Reconciliation Strategy (2015).</p> <p>3.9.2.4 Refer to Section 13.3 of the Draft EIA Report.</p> <p>3.9.2.5 The reference to impacts to food security is contained in the Comments and Responses Report (No. 302). Please refer to No. 4.</p> <p>3.9.2.6 – 3.9.2.7. The progress on the Verification and Validation process was shared during the January 2018 Focus Group Meetings. Refer to No. 4 with regards to the provision for a gauging facility to monitor flows downstream of the abstraction works to be shared with Makoppa Agriculture.</p> <p>3.9.2.7 Please refer to the reports on DWS website (P RSA 000/00/12610: “Assessment of the ultimate potential and future marginal cost of</p>

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	<p>3.9.2.4 As the Final Scoping Report admits that climate change modelling “adds another layer of uncertainty to water resource assessment and planning” what has been done to mitigate against this and has the Final Scoping Report followed the best practice risk averse approach or will this be studied in the EIA?</p> <p>3.9.2.5 On page 164 of the Final Scoping Report it is stated that there is “no impact on food security”. Please provide justification for the statement since the essence of the Scheme is to prioritise water use for fossil fuel above agriculture and human needs.</p> <p>3.9.2.6 On page 164 it is stated that “Existing Lawful Water Use will continue” however nowhere in the Scoping Report or associated studies is this proven or substantiated</p> <p>3.9.2.7 Furthermore on page 164 there is a reference to “virtual water”. Please explain this concept and where it is to be found in the NWA or other applicable legislation.</p>			<p>water resources in South Africa” and P RSA 000/00/12510: “An assessment of rain-fed crop production potential in South Africa's neighbouring countries”) mentioned in the presentation during the Focus Group Meetings during January 2018. In essence, South Africa uses 60% of its scarce water resources on irrigation, a substantial portion of which is used to irrigate crops which are regarded internationally as rain-fed crops. The question is therefore often being asked about the extent of alternative production areas in southern Africa (particularly in selected neighbouring countries) for the range of crops which are presently produced sub-optimally under irrigation in South Africa. DWS conducted an investigation to provide an answer to this question with adequate confidence to allow the rational pursuit of this concept which could have far-reaching mutual benefit for southern African countries.”</p>
365.	<p><u>3.10 Thaba Tholo concern: Defective Need and desirability argument</u></p> <p><u>3.10.1 Final Scoping Report Response No 301</u></p> <p>“Refer to response to No. 294 with regards to the status of the project in terms of SIP1. Also refer to the following sections of the Draft Scoping Report: Section 3 – Project Background and Motivation. This includes the project’s status as a Strategic Integrated Project (SIP), where SIP1 aims to unlock SA’s northern mineral belt in one of the poorest provinces (Limpopo) through key infrastructure provision in the Waterberg and Steelpoort districts and initiating new energy and industrial development (amongst others);</p> <p>Section 8 – Need and Desirability and Section 10.3.2 – implications of the No Go Option. Considerations from DWS’ draft NW&SMP: Volume 2 (March 2018): At present Eskom’s coal-based power plant fleet consists of 10 base load power</p>	Gunn Attorneys	Letter (01/06/2018)	3.10.2 Statement noted. <i>No response is required.</i>

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	<p>plants (used during normal demand) and 3 return to service (RTS) power plants (used during peak demand). These power plants have diverse technical parameters and use a combination of cooling technologies which is bound to provide different water usage profiles. Within the context of the current Integrated Resources Plan, South Africa's energy mix is bound to change in order to provide sufficient energy security. However, the abundance of local reserves of coal is likely to keep coal a dominant fuel source.</p> <p>DWS signed an MoU with Eskom in which Eskom committed it will be systematically moving from wet-cooled to dry-cooled power generation systems, to reduce their water foot-print. This undertaking was already implemented for the new coal power stations, Kusile and Medupi with a water allocation estimated at 15,4 million m³/a.</p> <p>The supply area of the Vaal River System stretches far beyond the catchment boundaries of the Vaal River and includes most of Gauteng, Eskom's power-stations and Sasol's petro-chemical plants on the Mpumalanga Highveld, the North-West and Free State goldfields, iron and manganese mines in the Northern Cape, Kimberley, several small towns along the main course of the river, as well as the Vaalharts Irrigation Scheme. It will soon be extended to also supply water to the developments on the Waterberg coal-fields near the town of Lephalale in the Mokolo catchment. The size of the Vaal River System, the various inter-basin transfers coupled with the extensive bulk water distribution infrastructure and the geographical location of the water users in relation to the position of the water resource components provides for a complex mix of variables that influences both the demand and availability."</p> <p><u>Final Scoping Report Response No 301</u></p> <p>Reference is made in Table 7 (items no. 11 and 12) within this section to the potentially significant environmental issues associated with the proposed project contained in Section 13</p>			

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>of the Scoping Report.</p> <p>Section 3.4 of the Scoping Report, which precedes the Need and Desirability discussion, states that operating rules for both the Mokolo and the Crocodile River (West) systems need to be developed by DWS which need to ensure that Existing Lawful Water Use is respected and Protected.</p> <ul style="list-style-type: none"> Reference is made to response Numbers 4 and 258 for responses with respect to Existing Lawful Water Users as set out in the NWA; and Number 6 responses to water availability for the proposed water transfer scheme. <p>3.10.2 Thaba Tholo Response to Final Scoping Report Response 301 Noted, no new issues are raised in this response.</p>			
366.	<p><u>3.11 Thaba Tholo Concern: Impact of Water Transfer Infrastructure on Thaba Tholo</u></p> <p>3.11.1 <u>Final Scoping Report Response No 302</u></p> <p>“To minimise impacts to the receiving environment and current land uses, the proposed pipeline route attempts to remain alongside existing linear-type infrastructure, such as roads (main roads and dirt roads), the railway line (i.e. section of approximately 56km), transmission lines, industrial corridors and farm boundaries. As part of the EIA Process, a 100 m wide corridor was assessed to facilitate optimisation of the pipeline route. The exact routing of the pipeline in terms of which side of the road it will be aligned still needs to be confirmed.</p> <p>Specific measures will be included in the EMPr to manage security related matters.</p> <p>The construction servitude will be fenced off. Provision will be made in the EMPr for fencing arrangements, where the management objectives will include:</p> <ul style="list-style-type: none"> Protect and maintain existing fences; 	Gunn Attorneys	Letter (01/06/2018)	3.11.2 Statement noted. No response required.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<ul style="list-style-type: none"> • Fencing arrangements to adequately protect livestock and game animals from construction activities; • Adhere to agreements made with individual landowners and/or land users regarding fencing; and • Minimise disturbance to animals. <p>Specific measures will be included in the EMPr for game fences and for the reinstatement of areas affected by construction. “</p> <p>Refer to Final Scoping Report Response Number 111 for the response to compensation.</p> <p>“Acquisition of land and land rights (“servitudes”) will be undertaken by TCTA, as the project’s implementing agent. TCTA’s land acquisition strategy will adhere to all statutory requirements prevailing at the time, such as, but not limited to the Constitution of the Republic of South Africa, Act 108 of 1996 (“the Constitution”), the Promotion of Administrative Justice Act (“Act No. 3 of 2000”), the Expropriation Act (“Act No. 63 of 1975), and the National Water Act (Act No. 36 of 1998) delegated by the Minister of Water and Sanitation.</p> <p>The determination of compensation will be undertaken by an independent valuer in accordance with the principle set out in Section 25 of the Constitution concurrent with Section 12 of the Expropriation Act. TCTA shall endeavour to compensate the affected parties’ fair and equitable amount. “</p> <p>Refer to Final Scoping Report Response Number 82 for response in terms of the Wildlife Impact Assessment. Keeping of validated records is important.</p> <p>“A Wildlife Impact Assessment will be undertaken as part of the EIA (refer to Section 14.4.3.7 of the Draft Scoping Report), taking into consideration the types of game kept on the farms and the requisite mitigation measures. The Wildlife Impact Assessment will be appended to the EIA Report for review by IAPs. The status of vegetation in the project footprint is to be</p>			

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>confirmed as part of the Terrestrial Ecological Study (refer to Section 14.4.3.2 of the Draft Scoping Report). Optimisation of final pipeline route to be considered in the design phase to avoid sensitive features (where possible). Provision will be made in the EMPr for the reinstatement and rehabilitation of the areas affected by construction activities, as well as managing impacts to flora and fauna. Where avoidance is not possible, permits will be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF) if protected trees are to be cut, disturbed, damaged, destroyed or removed in terms of the National Forests Act (No. 84 of 1998).</p> <p>3.11.2 Thaba Tholo Response to Final Scoping Report Response 302</p> <p>Noted, we will keep a watching brief on the pipeline alignment and respond accordingly as the route is refined.</p>			
367.	<p>3.12 Thaba Tholo Concern: Impact of Borrow Pits on Thaba Tholo</p> <p><u>3.12.1 Final Scoping Report Response No 303</u></p> <p>“Refer to response 302 above. Owner to continue with activities to maintain market value.</p> <p>To minimise impacts to the receiving environment and current land uses, the proposed pipeline route attempts to remain alongside existing linear-type infrastructure, such as roads (main roads and dirt roads), the railway line (i.e. section of approximately 56km), transmission lines, industrial corridors and farm boundaries. As part of the EIA Process, a 100 m wide corridor was assessed to facilitate optimisation of the pipeline route. The exact routing of the pipeline in terms of which side of the road it will be aligned still needs to be confirmed.</p> <p>Specific measures will be included in the EMPr to manage security related matters.</p> <p>The construction servitude will be fenced off. Provision will be made in the EMPr for fencing arrangements, where the</p>	Gunn Attorneys	Letter (01/06/2018)	3.12.2 Statement noted. No response required.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>management objectives will include:</p> <ul style="list-style-type: none"> . Protect and maintain existing fences; . Fencing arrangements to adequately protect livestock and game animals from construction activities; . Adhere to agreements made with individual landowners and/or land users regarding fencing; and . Minimise disturbance to animals. Specific measures will be included in the EMPr for game fences and for the reinstatement of areas affected by construction.” <p>Refer to Final Scoping Report Response Number 111 for the response to compensation (see above).</p> <p>“Refer to Final Scoping Report Response Number 82 for response in terms of the Wildlife Impact Assessment.</p> <p>“A Wildlife Impact Assessment will be undertaken as part of the EIA (refer to Section 14.4.3.7 of the Draft Scoping Report), taking into consideration the types of game kept on the farms and the requisite mitigation measures. The Wildlife Impact Assessment will be appended to the EIA Report for review by IAPs.</p> <p>The status of vegetation in the project footprint is to be confirmed as part of the Terrestrial Ecological Study (refer to Section 14.4.3.2 of the Draft Scoping Report). Optimisation of final pipeline route to be considered in the design phase to avoid sensitive features (where possible). Provision will be made in the EMPr for the reinstatement and rehabilitation of the areas affected by construction activities, as well as managing impacts to flora and fauna. Where avoidance is not possible, permits will be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF) if protected trees are to be cut, disturbed, damaged, destroyed or removed in terms of the National Forests Act (No. 84 of 1998).</p> <p>Keeping of validated records is important.”</p> <p>3.12.2 Thaba Tholo Response to Final Scoping Report</p>			

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>Response 303</p> <p>Noted, we will keep a watching brief on the location of borrow pits and respond accordingly as the location of the pits are finalised.</p>			
368.	<p><u>3.13 Thaba Tholo Concern: Impact on Thaba Tholo of Water Shortages caused by the Scheme</u> <u>3.13.1 Final Scoping Report Response No 304</u> “Overview of Thaba Tholo game farm, as well as context for concerns, noted.</p> <p>Water is allocated in terms of the NWA. Refer to Master Plan on DWS website with regards to water for agriculture.</p> <p>Refer to the following:</p> <ul style="list-style-type: none"> No. 4, 6 and No. 258 for responses with respect to Existing Lawful Water Users as set out in the NWA, to water availability for the proposed water transfer scheme; and with regards to the IWULA process.” <p>3.13.2 Thaba Tholo Response to Final Scoping Report Response 304</p> <p>Noted, no new information is disclosed.</p>	Gunn Attorneys	Letter (01/06/2018)	3.13.2 Statement noted. No response required.
369.	<p><u>3.14 Conclusion of the comments to the Draft Scoping Report</u> <u>3.14.1 Final Scoping Report Response No 305</u></p> <p>Refer to responses in the Final Scoping Report numbers: 293, 294, 297, 298, 299, 4, 6, 298, 300, 40, 301, 302, 111 and 82</p> <p>3.14.2 Thaba Tholo Response to Final Scoping Report Response 305</p> <p>Noted although we do not believe that the additional technical studies referred to (such as the Bridging Study Report) provide the requisite level of information and certainty required by our client, as is explained above in this response.</p>	Gunn Attorneys	Letter (01/06/2018)	3.14.2 Refer to responses above for matters raised in the letter from Gunn Attorneys.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
370.	<p>3.15 Way forward from the Draft Scoping Report 3.15.1 Final Scoping Report Response No 306 “Based on an understanding of the content of the letter, the premise of the statement that the proposed project is fatally flawed stems from “whether there is enough water in the Crocodile River (West) and catchment and secondly what the impact will be on lawful downstream water users” (extracted from No. 2.1.4 of the letter).</p> <p>Responses pertaining to the availability of water for the proposed water transfer scheme Existing Lawful Water Users as set out in the NWA are provided in No. 6 and No. 258. Refer to response to No. 293 above with regards to the sources of information for the EIA. “</p> <p>3.15.2 Thaba Tholo Response to Final Scoping Report Response 306</p> <p>Noted, we believe that we have made our points above and that no additional response is required.</p>	Gunn Attorneys	Letter (01/06/2018)	3.15.2 Statement noted. No response required.
371.	<p>4 Conclusion The Final Scoping Report presents a flawed project (technically and legally), based on insufficient information and assumptions with no specific guarantee of downstream water users’ rights such as our client. We hope that these issues will be addressed in the EIA phase of this project.</p>	Gunn Attorneys	Letter (01/06/2018)	Refer to responses above for matters raised in the letter from Gunn Attorneys. “Water rights” is an outdated concept i.t.o. the NWA, i.e. replaced by “entitlements”.
372.	<p>RE: COBUS VAN VUUREN/ DAM WALL</p> <ol style="list-style-type: none"> 1. We refer to the above matter; 2. Kindly provide us with all minutes of all meetings held with all interested land owners; 3. We also request copies of the Environmental Impact Reports; 4. We hope you find the above in order. 	Wynand du Plessis	Letter (14/06/2018)	<p><i>Additional Response</i> A CD was provided to the IAP on 12/07/2018, which contained the Final Scoping Report and all accompanying appendices.</p>
373.	<p>As I have mentioned in correspondence with you regarding this matter in the past, the only entity that has an unfettered right to water enshrined in the Water Act, is the Reserve. The activity that you intend, by de railing the water out of the Crocodile River may not infringe or impact negatively on the</p>	P. Badenhorst	Email (05/09/2018)	<p>Operating Rules will be established for the Lower Crocodile (West) system with MCWAP-2A releases to make provision for (amongst others) entitled multiple users along the river stretch (irrigation, transfer and Ecological Reserve), with varying assurance of supply</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	water rights of the Reserve by so doing. How do you intend to ensure that this does not happen please. Kindly circulate this request as well as your answer to me in this regard, to all the concerned institutions dealing with this matter. Only if I can be satisfied by you that no harm will be done to the Reserve as defined in the Water Act, can I accept your activity unchallenged from an environmental point of view.			criteria. In addition, the River Management System will monitor, control and manage the releases into the river, the flows in the river and abstractions from the river. This will also allow for the monitoring of the flow downstream, thereby allowing verification that the entitled downstream water requirements are met. <i>Additional Response</i> <i>Refer to Section 11.8.5 and Section 13.8.2 of the Draft EIA Report for a discussion on the Reserve.</i>
374.	Thanks for the info and the assurance that the reserve will be cared for. Question: does this assurance provide that the water will be allowed to flow over the measure wall of Water Affairs on my farm at Makoppa at least once every year as in the past, by restricting the derailment of water flow from the Crocodile river to Lephalele if necessary to ensure this catering of water for the reserve?	P. Badenhorst	Email (07/09/2018)	The Reserve will be determined in accordance with the NWA.

PUBLIC MEETINGS (SCOPING PHASE) – ACTION ITEMS

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
375.	G. Peblar mentioned that currently one of the dam's representatives has 4 Masters students conducting research on various aspects regarding the nutrient levels in the dam, and they started the process of monitoring again. This information will be provided through F. Botha and J. Breytenbach to D Henning. J. Breytenbach stated that F. Botha completed his Master's degree in 2015 on the nutrient levels into the dam. He found that the phosphorous levels have dropped significantly.	G. Peblar	Public Meeting – Hartbeespoort (13/03/2018)	F. Botha was engaged with further.
376.	E. van Dongen stated that the silt level in the dam increases at 0,2% per year. From when the dam was built till 2048 means that the silt level will lie at 25% in the dam. Which is a large volume if the water level is continuously dropping and silt increasing. Was this taken into account in the RMP zonation plan?	E. van Dongen	Public Meeting – Hartbeespoort (13/03/2018)	The RMP map showing the levels of the dam was not generated by the project team.

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
377.	P. Jordaan mentioned that his farm is situated by the road and the railway, and that the route has not yet been finalised and there are still alternative routes. He explained that alternative routes and borrow pits fall on his farm, and his access road will be used during the construction period. He added that it would mean that for 5 years of construction, there would be traffic in front of the entrance to his farm. He bought the farm to retire and there will not be any peace.	P. Jordaan	Public Meeting – Thabazimbi (14/03/2018)	<p>D. Henning explained that a land acquisition process will be followed after the EIA, where specific discussions and consultation will be conducted with each landowner.</p> <p>J. Kroon added that it is a proposed project and only once/if environmental authorization is issued, will a final route be chosen from the alternative routes.</p> <p>D. Henning explained that Nemaï and TCTA would arrange a meeting with P. Jordaan to discuss all the issues he raised.</p> <p><i>A landowner consultation meeting was arranged and held with the IAP on 05/05/2018. Refer to Appendix P of the Draft EIA Report for a copy of minutes of the meeting.</i></p>
378.	W. Engelbrecht mentioned that he had not received any e-mail and information about the borrow pits.	W. Engelbrecht	Public Meeting – Thabazimbi (14/03/2018)	<p>D. Henning explained that C. van der Hoven will get his details after the meeting and send a locality map that shows exactly how the project infrastructure possibly affects his farm.</p> <p><i>A locality map which shows all proposed project infrastructure in relation to the farm was provided to the IAP by email on 24/04/2018.</i></p>
379.	J. Erasmus explained that the most significant issue is the damage caused to the roads during construction, and that the roads are not reinstated and rehabilitated afterwards. The project needs to work together with the road authorities. The farmers currently use their own money and time to restore the roads. The condition of the roads thus needs to be properly managed. B. de Beer emphasised this matter and indicated that the contractors use 20 tonne trucks which damage the roads. This concern relates to large gravel roads as well as internal farm roads. This requires urgent attention. It was requested that this matter be included in the EIA process and not only forms part of the minutes of the meeting.	J. Erasmus	Public Meeting – Lephalale (15/03/2018)	<p><i>Refer to Section 12.4.5 (Management of Access and Traffic) in the EMPr (Appendix K of the Draft EIA Report).</i></p>
380.	A. Macheko enquired about the public participation process in the Lephalale area and how the project was communicated. He noted that Marapong and Lesedi were excluded during the notification. Transportation will need to be arranged for the	A. Macheko	Public Meeting – Lephalale (15/03/2018)	<p>D. Henning explained that the Marapong area is not directly affected, however, there might be socio-economic benefits to this community as a result of this project. He noted that as part of Scoping additional requirements for</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>members of the community if the venue is far away. He emphasised the importance of public participation for the project. He also stated that in the future the presentations must not only be prepared in English but also in Sotho. A. Macheke recommended that a notice be placed at the Marapong Spar in the EIA phase.</p>			<p>public participation may be identified. He indicated that a public meeting may be held in Marapong in the EIA phase at a suitable venue such as a school or library, and that this meeting will be conducted in Sotho. <i>No database was received to date.</i></p> <p>D. Henning requested a database of community members from A. Macheke, which will assist with future notification. He noted that the current database includes affected landowners, authorities, Councillors, stakeholders and Interested and Affected Parties (IAPs). The database may grow as the EIA process progresses.</p> <p><i>Site notices in English and Sotho were placed in the Marapong Spar, and at the Marapong Public Library.</i></p> <p><i>As part of the review of the Draft EIA Report, a hardcopy of the Draft EIA Report was placed at the Marapong Public Library. A public meeting was to be held either at the Marapong Public Library or Ditheku Primary School on 12/10/2018, however due to the unavailability of the venues a meeting could not be scheduled.</i></p> <p><i>The IAP was informed of the situation during the review period of the Draft EIA Report.</i></p>

FOCUS GROUP MEETINGS (SCOPING PHASE) – ACTION ITEMS

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
381.	B. Enslin asked whether the proposed routes and project components could be sent to Mooivallei landowners so that they can open it on Google Earth and see exactly how they will be affected by the project.	B. Enslin	Focus Group Meeting – Mooivallei Landowners (13/03/2018)	D. Henning explained that he could send through the KML of the project components along with the presentations. <i>KML files of the project components were provided.</i>
382.	W. de Clercq confirmed that it would be necessary to hold another Focus Group Meeting with the landowners of the Mooivallei area.	D. Henning	Focus Group Meeting – Mooivallei Landowners (13/03/2018)	<i>A Focus Group Meeting is scheduled with the Mooivallei Landowners on 03/10/2018 in Thabazimbi, during the review period of the Draft EIA Report.</i>
383.	G. Bauer requested that P. Van Rooyen's presentation, the slide on the dam levels, be revised to make it more user-friendly.	G. Bauer	Focus Group Meeting – Mooivallei Landowners (13/03/2018)	<i>A copy of the revised presentation was provided to the IAP on 18/04/2018 by email.</i>
384.	K. Hermann mentioned that the recommendation for the site visit of the existing Phase 1 pump station with the landowners will help to get an idea of the possible noise levels.	K. Hermann	Focus Group Meeting – Mooivallei Landowners (13/03/2018)	D. Henning explained that it will be arranged and invitations will be sent to all Mooivallei landowners through W. de Clercq. <i>A site visit to the Phase 1 pump station at the Mokolo Dam, was arranged and held with the Mooivallei landowners on 04/10/2018.</i>

LANDOWNER MEETINGS (SCOPING PHASE) – ACTION ITEMS

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
385.	G. du Preez asked what the size of proposed BP is on his farm, and whether after construction it can be kept open and used as a dam or drinking pan for his wildlife/cattle.	G. du Preez	Landowner Consultation Meeting – Zandfontein Farm (05/05/2018)	C. van der Hoven stated that he will send through the specific details of the BP. <i>A site layout map was provided to the IAP on 28/09/2018.</i>

COMMENTS RECEIVED FROM CROCODILE RIVER (WEST) IRRIGATION BOARD

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
386.	<ol style="list-style-type: none"> 1. The parties concerned are not happy with the "bulldozer" approach of how they are being dealt with in the negotiation of MCWAP Phase 2. 2. The parties also express their dissatisfaction with the non-response of their writings as well as the indirect response. 3. What is the position in the future with reuse of the Vaal River transferred water and locally used water? 4. The water that is under discussion, namely the Vaal River Water, is it really international water or is it man-made water together with the large town development rain runoff? 5. If MCWAP Phase 2 is still in the planning stage and still needs to be discussed through various processes, groups and meetings, how can contractors be advertising posts and convene interviews for the building of the pipeline? Are these meetings now just rubber stamping? 6. Is there any agreement between the Department of Water and Sanitation and the residents of Hartbeespoort Dam area that limits the withdrawal of water from Hartbeespoort Dam to an irrigation dam, from 15 to 10%? 7. When last was a survey conducted of the volume of Hartbeespoort Dam? Is it really still 186 million? 8. Is there and when was an impact study done on what will be the effect on the community of Thabazimbi and surrounding areas be. If the water transfer continues in conditions of water shortages? 9. Have possible dam areas been looked at now or in the past where dams can be built or raising existing dams in order to increase storage space in the area? An additional dam or dams or the raising of existing dams can reduce the impact of MCWAP Phase 2 on the affected communities and irrigation areas. The following question raised is how the water will be managed over 170 kilometres from Roodekopjes Dam to Vlieëpoort weir without major losses if there is not enough storage space at Vlieëpoort, or wherever it is, the dam can also contribute to assured water in the downstream area. 	Crocodile River (West) Irrigation Board	Letter 21/09/2018	<p><i>No formal Focus Group Meeting was possible on 2 October 2018, as planned. The planned presentation which was intended to be shared on 2 October was nevertheless copied by Nemaï Consulting to the Crocodile River (West) Irrigation Board on 18 October 2018. A summary is provided below:</i></p> <ol style="list-style-type: none"> 1. Although robust negotiations took place, it cannot be described as a "bulldozer" approach. 2. The response was consistently included in the CRR. Nemaï stated that it would in future also respond directly to the IB. 3. Treated water from wastewater plants targeted for use by industrial sector and the MCWAP-2A <ol style="list-style-type: none"> 4.1 Vaal Dam water include run-off from surface water, water imported from neighbouring catchments (e.g. Tugela, Usutu) including Lesotho (LHWP), water released from wastewater plants, groundwater, seepage from irrigation, etc. It is part of the nation's water resources – Section 1(1)(xxvii) of NWA. 4.2 Hartbeespoort Dam: water include run-off from surface water (hardened catchment), ever increasing water released from wastewater treatment plants, groundwater, seepage from irrigation, etc. Also part of the nation's water resources – Section 1(1)(xxvii) of NWA. 4.3 Bordering countries cannot demand any water artificially "produced". 5. No construction tender will be advertised before Environmental Authorisation is obtained (if issued). The pro-active action by potential tenderers is within their right to position themselves to submit a competitive tender, if/when issued. 6. The answer is NO, there is no written or verbal

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE
	<p>10. Have there been meetings with the irrigation areas and individuals in the rest of the catchment area. Above Hartbeespoort-, Roodekopjes-, Klipvoor- and Vaalkop Dam which surely will also be affected by the transfer. If so, please provide the outcome of the meetings and if there are minutes, it will also be awaited.</p> <p>11. Another matter that will soon have to be addressed is the operating arrangements of the area as it will affect the irrigation area.</p> <p>12. Problems may still arise on the way forward, but many can be answered by answering the letters addressed to Nemaï.</p>			<p>agreement between the DWS and any landowners, estates or developments etc. that the dam level would not be drawn down.</p> <p>7.1 The last survey was undertaken in 2008</p> <p>7.2 Frequency: Every 15 years</p> <p>7.3 0,2% average annual loss of capacity</p> <p>7.4 Usable storage: 186,44 million m³</p> <p>8. There is not a shortage of water to meet the Existing Lawful Water Use (ELWU). Operating rules as previously shared will apply.</p> <p>9. Yes, the DWS considered the raising and/or construction of new dams on Crocodile River. Investigations were undertaken as part of the MCWAP Feasibility Study and reported on and the results shared with the agricultural sector. Outcome is consolidated in EIA Report (Section 9.3). The discharges from sewage purification plants are “produced” and will be released in a steady stream, viz no storage needed as it is a “sustainable” resource. Water will be released in a steady stream to match demand from mainly Hartbeespoort via Roodekopjes. This informs the need to design and operate the River Management System as highlighted previously. Users from the MCWAP obliged to create 18-day storage targeted water for conveyance to Lephalale.</p> <p>10. Yes, discussions were held with Hartbeespoort IB. Other IB’s not part of the EIA.</p> <p>11. We agree entirely that talks on the River Management System and System Operating Forum should proceed. Crocodile (West) IB should nevertheless use the window of opportunity until the MCWAP-2A commission and increased re-use by Tshwane to prepare for the situation that the use of the artificial augmentation will gradually impact.</p> <p>12. Noted, no response is required.</p>

4 COMMENTS AND RESPONSES – ENVIRONMENTAL IMPACT ASSESMENT PHASE**4.1 General**

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE BY	RESPONSE
387.	<ol style="list-style-type: none"> 1. We refer to the abovementioned matter as well as writings dated 12 July 2018 with attached documents which was received at our offices. 2. The writer examined the documentation and there seems to be a problem on your side with the description of my client's property. 3. The correct property description is as above namely portion of the farm Grootfontein KQ 629, Thabazimbi. 4. Your documentation indicates a different property description and will appreciate it if you can ensure that you will make the necessary corrections. 5. You can send all future correspondence relating to the affected property directly to the writer who represents Mr. van Vuuren. 6. In case there is any further progresses after the date July 2018, we will appreciate it that we are notified. 7. Please will you acknowledge receipt. 	W. du Plessis	Letter 28/08/2018	Nemai Consulting	The property description used in the EIA Report and IAP database is the Remainder of the Farm Hanover 629 KQ, which is based on the 2017 cadastral information. A locality map of the proposed project footprint in relation to this property was provided to the Mr. W. du Plessis.
388.	<p>Medupi FGD has received the Environmental Approval in this month. Since last three units of FGD would not be able to run without water from MCWAP2, JICA needs to explain the progress of MCWAP2 to our environmental committee in Japan. Eskom is not in position to officially reply about the project of TCTA and DWS even they committed part of MCWAP2. JICA was advised by Eskom to be part of I&AP of EIA process with the below message written in RED. I also attach the email which was shared by Eskom. Would be you be aware of the schedule for MCWAP2 EIA? We obtained EIA scoping report published in April 2018. We would like to understand the content of EIA draft if it has been published. Please refer to the attached email – a suggestions would be that if you have an interest in the project EIA (as I know JICA does have an interest) do request the author to be registered and an Interested and Affected Party (I&AP) of the EIA process. You will then obtain information/updates on the</p>	T. Koza JICA	Email (21/09/2018)	DWS Nemai Consulting	<p>Noted, the Environmental Authorisation for the Medupi FGD was issued on 6 September 2018 by the DEA and subsequently amended.</p> <p>The Draft EIA Report was lodged for review from 28 Sept – 29 Oct 2018. The report will then be finalised and submitted to the DEA and a decision is expected in Feb 2019. All IAPs will be notified of the decision, once received.</p> <p>Separate notification of the review of the Draft EIA Report was sent out on 26 September. The notification provides details of how the report can be accessed from the project website.</p> <p>Mr. T. Koza and Mr. Takimoto were registered as IAPs.</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE BY	RESPONSE
	process similar to this email. Mr. Takimoto from JICA headquarter requested that JICA to be part of I&AP. Would you kindly tell me how we can be I&AP? Should we send the official letter to DWS? In that case, would you kindly tell us whom we should address to?				All EIA queries to be directed to Nemaï Consulting.
389.	Dear Donovan, do you have a map for me to see where and on or close to which farms the proposed pipeline will run?	Prof JH Meiring	Email (27/09/2018)	Nemaï Consulting	A locality map showing the location of the proposed pipeline and borrow pit in relation to the Farm Taaiboschpan 320 LQ, was provided to the IAP.
390.	Good day, During the week we received a notice of the above-mentioned project at the farm's fence, <i>but it was removed a day later</i> . I would like to hear from you whether our farm will be affected by it. The farms names are as follows: Farm Remainder of the Farm Rhenosterpan 361 LQ Steenbokpan and Farm Rietfontein 360 LQ Steenbokpan.	P. van Aarde	Email (27/09/2018)	Nemaï Consulting	The farm Rhenosterpan RE / 361 LQ is directly affected by the proposed pipeline route D1, which follows the railroad servitude. The farm Rietfontein 360 is not affected, but is adjacent to the pipeline route. A locality map was provided to the IAP on 2/10/2018.
391.	Are an interested party in the project due to the fact to provide equipment to contractors on site.	J. C. Havenga	Reply Form (27/09/2018)	Nemaï Consulting	Noted. Particulars included in the IAP database.
392.	FARM WITKLIP PORTION 1, THABAZIMBI DISTRICT - IN THE NAME LADPRO CC CK. We just want to know if you might be able to send us a copy of a map that can indicate where the pipeline will traverse our property.	I. Kriek	Email (27/09/2018)	Nemaï Consulting	A locality map showing the location of the proposed pipeline routes in relation to the farm Witklip Portion 1 was provided to the IAP on 02/10/2018.
393.	We have a permit to mine sand 30 km from Steenbokpan shop in the Matlabas river. We are currently supplying Medupi Power Station of washed river sand and have been supplying them for the past six years. We can also supply from the Thabazimbi area. Please contact me if you need any further information.	M. Barkenhuizen	Email (27/09/2018)	Nemaï Consulting	The IAP was registered. The IAP's contact details will be passed on to the Contractor if the services will be required, once construction commences.
394.	Good day. May you kindly confirm you availability for a site visit of MCWAP-2A, see proposed dates below: Date: 23, 24 or 25 October Time: 10 H30	T. Tshiruvhela	Email (27/09/2018)	Nemaï Consulting	<i>A site visit was undertaken with the officials from the DWS: Limpopo on 25/10/2018.</i>
395.	1) I would like to know whether the entire water flow downstream of the river will become blocked during the construction of the weir. 2) Planned period from construction to completion. 3) Our livelihoods as irrigation farmers depend on the flow of water in the river. Currently there are long periods during which the river does not flow. How are you going to convince	B. v. d. Linde	Reply Form (27/09/2018)	1. DWS 2. Nemaï Consulting	1. ELWU will be released during construction, i.e. the river diversion works will accommodate such releases. 2. Refer to the indicative implementation programme, Section 9.9 of the Draft Scoping and EIA Reports, which shows (amongst others) the following:

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	<p>the community that more water will flow than the current flow with the pipeline? Excuse my pessimism, but I do not believe you can convince us now. Let the river flow constantly for a 2 year period before construction and then we might be convinced.</p> <p>4) Before any construction can start, financial Compensation MUST be reached between the Department of Water Affairs and registered Water Users, with regards to their permitted water use. Will financial compensation be negotiated before the construction begins?</p> <p>5) We have NO guarantee that we will get water flow on a semi-regular basis in the future. The graphs and presentations are on paper, and paper is very patient. Practically it is not feasible if we currently look at the history of water supply.</p> <p>6) I paid a premium for my farm due to my registered water registration from the Department of Water Affairs. Even the banks see the water registrations as a fixed asset on the value of my property. My registered water use is my license for water to be allowed to use within my limitations. Now I am unable to expand the capacity, due to the uncertainty about future water supply.</p> <p>7) How will the affected water users be financially reimbursed for the loss of property value, as well as loss to future income? If you have read the letter, I thank you in advance for the attention given and expect confirmation thereof.</p>			4. DWS	<ul style="list-style-type: none"> o Commencement of construction - Fourth Quarter 2019; and o Construction duration - 42 months. <p>3. Refer to response to No. 259 and No. 4 with regards to ELWU and availability of water for the proposed water transfer scheme. Hartbeespoort Dam is not yet filled and therefore no need to release any water for the ELWU.</p> <p>4. No compensation involved as ELWU will prevail. See response to bullet no. 3 above.</p> <p>5. See response to bullet no. 3 above. It demonstrates the need for the River Management System (explained in response to No. 23) involving the agricultural sector.</p> <p>6. See response to bullet no. 3 above. An ELWU is not a Water Use Licence but an entitlement. See response above to No. 3 and No. 4.</p> <p>7. See response to bullet no. 4 above.</p>
396.	According to the map, the first borrow pit will be on the border of Hanover and Mooivalei and the rest will surely be downstream. Do I understand correctly - no borrow pits will be on or near Grootfontein?	B. Grobler	Email (28/09/2018)	Nemai Consulting	No proposed borrow pits are planned on the Grootfontein farm. The borrow pits required for construction material for the MCWAP-2A pipeline start at Hanover / Mooivallei in Thabazimbi, and continue all the way to Lephalale.
397.	Would you like to know - the exact location of the pipeline in Mooivallei area and whether there is any feedback to whether crops like lucerne may be planted over it.	M. Mare	Email (01/10/2018)	Nemai Consulting	<p>A locality map showing the Mooivallei area was provided to the IAP on 05/10/2015.</p> <p>Lucerne may be planted inside the permanent servitude <i>but the servitude holder (DWS) will have the rights to access the government waterwork at any time.</i></p>
398.	<p>With reference to your correspondence received, as well as our conversation, we provide comments.</p> <p>1. As you know, the official route marked the "Central Route"</p>	D. Smit	Email (01/10/2018)	DWS	The existing borrow pit will be used as a spoil site for excess material from the pipe trench. The option to move the boundary of BP-28 a distance of 25 m away

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	<p>as indicated on the map, thus affecting the property Blaauwpan KQ 133 directly.</p> <ol style="list-style-type: none"> 2. Borrow pits are required for back filling material for the pipeline, and so "Borrow Pit - BP 28" has been identified. 3. The question we have is why do not they make use of the existing pit, or is the material not suitable? 4. If they continue with BP-28, we request that the borrow pit's eastern border area be at least 25 m from the boundary fence between Tarentaalpan and Blaauwpan. According to the coordinates it is +/- 10m from the boundary fence and can cause problems in the long term. 5. If they cannot use the existing borrow pit, excess material that gets excavated during construction of the pipeline may be placed into the existing borrow pit so that it can be rehabilitated. <p>Keep us informed of changes.</p>				<p>from Tarentaalpan is noted and will be investigated as a mitigating measure.</p>
399.	<p>The pan on Taaiboschpan (Southern – Eastern corner next to the game fencing) is situated in the ancient Limpopo river bed and is fed with water from relative low (but higher than the pan's bed) sand dunes or elevations (after saturation with water during rain) from all directions. The moment you dig a trench) next to or as close as 500 m or more from the pan, the water will gradually flow into the trench and lay the pan dry. This is totally undesirable and will change the ecology of both Enkeldraai and Taaiboschpan as both pans will drain dry in a matter of weeks. May I please request to speak to your environmental specialist to discuss the matter please.</p>	Prof JH Meiring	Email (01/10/2018)	Nemai Consulting	<p>A meeting was held with the landowners of the Farm Taaiboschpan on 31/10/2018. During this meeting the landowners further expressed their concern for the impact that the pipeline will have on the pan located on their property.</p> <p>The wetland specialist had considered the impacts on this pan as part of his assessment. However, as further mitigation, a deviation of the pipeline route was identified (termed option D4) to avoid the pan by more than 500m (based on a buffer noted by the concerned landowner). Route D4 will terminate at a different point along the pipeline that was previously authorised as part of MCWAP Phase 1.</p> <p>Route D4 affects the Farm Enkeldraai, and the landowner of this property indicated that the pipeline can traverse his farm (refer to No. 255, No. 403 and No. 437).</p> <p>DEA was notified of the addition of the route D4.</p>
400.	<p>We confirm receipt of your notices of 27 and 28 September 2018. We further confirm that a representative of our client will</p>	N Engelbrecht	Email (01/10/2018)	Nemai Consulting	<p>Acknowledgement noted.</p>

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	attend one of the meetings as set out in the notice.				
401.	<p>1. This letter is addressed to your firm and the Department of Water and Sanitation following the meetings held on 2 October 2018 at Koedoeskop and 3 October 2018 on the farm Staankraal of Mr. Gerhard van Rensburg.</p> <p>2. The meeting at Koedoeskop was attended by representative from your firm, the Department of Water and Sanitation, TCTA, Hartbeespoort Irrigation Board, Koedoeskop Irrigation Board, as well as Makoppa Agriculture. The meeting at the farm Staankraal was only attended by representatives from your firm, the Department and Makoppa Agriculture.</p> <p>3. From the onset we would like to place the following on record, as communicated to us by you during the meeting at Koedoeskop:</p> <p>3.1. The Mokolo and Crocodile River (West) Water Augmentation Project Phase 1 and Phase 2A began in 2008/2009.</p> <p>3.2. Phase 2A ceased in 2010 as the further demand and need for water by Eskom and Sasol decreased.</p> <p>3.3. Phase 1 was completed and is operational since June 2015.</p> <p>3.4. Initially, Phase 1 and Phase 2A were handled as a single development, however, it was decided to split them and Phase 1 was completed after Phase 2 was placed on hold.</p> <p>3.5. During 2015 it was decided to resuscitate Phase 2A and the result of that decision is contained in the Scoping Report (Draft) signed on 28 February 2018.</p> <p>3.6. The signing of the Scoping Report (Draft) was preceded by various public meetings and Makoppa Agriculture was notified to attend some of them.</p> <p>3.7. The meeting which was held in the city hall of Thabazimbi on 25 May 2016 (Appendix O: Scoping Report 28/2/2018), as well as a further meeting held on 25 January 2018 (Appendix Q: Scoping</p>	Makoppa Agriculture	Letter (08/10/2018)	Section 1: Nemai Consulting	<p>The following response was provided in a letter sent to Makoppa Agriculture on 16/10/2018.</p> <p>Herewith the feedback on your correspondence of 8 October 2018 regarding the above-mentioned project.</p> <p>In essence, you raise two matters, namely:</p> <ol style="list-style-type: none"> 1. The procedure followed to seek Environmental Authorization for the proposed development of the MCWAP-2A; and 2. Certain technical aspects, specifically the finalisation of investigations and acquisition of expert reports by Makoppa Agriculture and Makoppa Agriculture's willingness to seek alternative solutions. <p>1. <u>Comments pertaining to the EIA Procedure</u></p> <p>The following serves to provide an overview of certain aspects of the Environmental Impact Assessment (EIA) Process in order to clarify points No. 3.13 - 3.20, 4, 5, 6, 13.1 and 13.2 of your letter (see also section 6.6.2 of the Draft EIA Report):</p> <ol style="list-style-type: none"> 1.1. Separate focus group meetings were held with the Hartbeespoort Irrigation Board, Crocodile River (West) Irrigation Board and Makoppa Agriculture in January 2018. The purpose of these meetings was to provide an opportunity for these parties to raise their specific comments and to discuss key issues. During the meetings there was also a technical presentation by Mr. Pieter van Rooyen regarding the availability of water in the Crocodile River (West) as well as the management of impacts in relation to Existing Water Uses. 1.2. As part of the presentation made during the Focus Group Meeting with Makoppa Agriculture on 25 January 2018, an overview was provided of the EIA Process, including the intention to submit the

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	<p>Report 28/2/2018), were attended by members of Makoppa Agriculture.</p> <p>3.8. The meeting in 2016 was held and the people that attended were informed of the proposal to construct a weir on the Crocodile River at Vlieëpoort.</p> <p>3.9. During the meeting you, Mr. Donovan Henning, undertook to arrange a meeting with mainly the members of Makoppa Agriculture seeing that various members from Makoppa Agriculture who irrigate from the Crocodile River were never given notice of the plans to construct the weir.</p> <p>3.10. During January 2018, short notice was given to convene a meeting with the members of Makoppa Agriculture, and this meeting took place on 25 January 2018.</p> <p>3.11. During the meeting it was suggested that Makoppa Agriculture will communicate with you, Mr Donovan Henning, in writing.</p> <p>3.12. On 22 February 2018 a letter was sent to you, Mr Donovan Henning, which acknowledgement of receipt was provided on 26 February 2018.</p> <p>3.13. The Department of Water and Sanitation as well as you, Mr. Donovan Henning, signed the application for authorisation on 28 February 2018 (Appendix C: Scoping Report (Draft)) without any reference to the letter from Makoppa Agriculture dated 22 February 2018.</p> <p>3.14. Makoppa Agriculture was also not notified of the intention to sign and submit the application for authorisation.</p> <p>3.15. After the signing of the application for authorisation, Makoppa Agriculture was also not notified and a copy of the application for authorisation was first made available to Makoppa Agriculture in April 2018.</p> <p>3.16. The application signed on 28 February 2018 was submitted to the Department of Environmental Affairs during April 2018 without notifying Makoppa</p>				<p>Application Form to the Department of Environmental Affairs.</p> <p>1.3. The first Application Form was signed on 26 February 2018. Please note that the format and content of the Application Form are prescribed by the Department of Environmental Affairs, in terms of Regulation 16 (1) (a) of the EIA Regulations of 2014 (as amended). Comments received from Interested and Affected Parties are not included in the Application Form, but in the Scoping Report and the EIA Report.</p> <p>1.4. The Application Form and Draft Scoping Report were then submitted to the Department of Environmental Affairs on 5 March 2018. The Department of Environmental Affairs acknowledged receipt of the Application Form in writing on 8 March 2018, and the Departmental Reference Number (14/12/16/3/3/2/1058) was provided.</p> <p>1.5. Notification regarding the Application for Environmental Authorisation as well as the public review period of the Draft Scoping Report was provided to Interested and Affected Parties (including Makoppa Agriculture) in March 2018. A copy of the Draft Scoping Report (with a copy of the Application Form as Appendix C) was also provided to you, in your capacity as Chairman of Makoppa Agriculture, in March 2018.</p> <p>1.6. Public meetings to present the Draft Scoping Report were held in March 2018.</p> <p>1.7. The Comments and Responses Report was continuously updated with the comments received from Interested and Affected Parties, which included your correspondence dated 26 February 2018.</p> <p>1.8. The Final Scoping Report was submitted to the Department of Environmental Affairs on 20 April 2018.</p> <p>1.9. The Final Scoping Report was accepted by the Department of Environmental Affairs on 14 May</p>

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	<p>Agriculture.</p> <p>3.17. During the meeting at Koedoeskop, Mr. Henning indicated to the attendees that the application which was submitted on 28 February 2018 had lapsed and that a new application for authorisation to finalise Phase 2A had been signed and submitted to the Department of Environmental Affairs during the last week of September 2018.</p> <p>3.18. Makoppa Agriculture was again not notified of the submission of the new application to the Department of Environmental Affairs.</p> <p>3.19. A copy of the new application was provided to the members of the Makoppa Agriculture (Mr. W Potgieter) during the meeting at Koedoeskop.</p> <p>3.20. That your recommendation regarding the new application for authorisation has already been made and it is recommended that the application be granted.</p> <p>4. During both meetings, your firm as well as the Department of Water and Sanitation who is the Applicant in the application for authorisation of the project, were informed that Makoppa Agriculture does not support the application for authorisation by the Department of Water and Sanitation dated 28 February 2018, that there are objections to the application and the application will be opposed. You, Mr Henning, was asked during the meeting at Koedoeskop whether the application dated 28 February 2018 had already been submitted to the Department of Environmental Affairs, whereupon you Mr. Henning stated that the application was submitted at the end of April and a reference number was provided by the Department of Environmental Affairs.</p> <p>5. You, Mr. Henning, further informed all the attendees during the meeting at Koedoeskop that the application of 28 February 2018 had lapsed and that a new application for authorisation for the project had been submitted by the Department of Water and Sanitation in the last week of September 2018. The Department of Environmental Affairs again provided a reference number. You, Mr.</p>				<p>2018 (refer to Appendix B of the Draft EIA Report). This allowed the continuation of the EIA Phase.</p> <p>1.10. An extension of the period for the submission of the Final EIA Report was then requested from the Department of Environmental Affairs due to, inter alia, the overall scope of the mega project to be investigated as well as the various specialist studies that had to be undertaken. Although the Department of Environmental Affairs did not grant the extension, it was indicated that if the application lapsed, a new application and the Draft EIA Report could be submitted to the Department of Environmental Affairs in terms of Regulation 21(2) of the EIA Regulations of 2014 (as amended). The timeframe prescribed in these regulations would still be valid. In terms of Regulation 21(2)(b) of the EIA Regulations of 2014 (as amended), the Interested and Affected Parties (including Makoppa Agriculture) were notified of the following on 4 September 2018 (refer to Appendix O of the Draft EIA Report):</p> <ul style="list-style-type: none"> • That the initial application lapsed at the end of August 2018; and • That the intention was to resubmit the application and to continue with the EIA in terms of Regulation 21(2) of the EIA Regulations of 2014 (as amended). <p>1.11. The new Application Form (refer to Appendix D of the Draft EIA Report) was submitted to the Department of Environmental Affairs on 26 September 2018.</p> <p>1.12. A copy of the Draft EIA Report (with a copy of the Application Form as Appendix D) was also delivered to you, as the chairman of Makoppa Agriculture, by hand on 27 September 2018.</p> <p>1.13. A copy of the Department of Environmental Affairs' acknowledgment of receipt of the new Application Form as well as the Draft EIA Report, which contains the new departmental reference</p>

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	<p>Henning, will provide both reference numbers to Makoppa Agriculture.</p> <p>6. We also placed on record that Makoppa Agriculture was not aware or carried any knowledge of the new application and that you, Mr. Henning, provided a copy of the new application for authorisation to Mr. W Potgieter during the Koedoeskop meeting.</p> <p>7. The following was pointed out by Makoppa Agriculture to you and the Department of Water and Sanitation during the meeting held on 3 October at Staankraal:</p> <p>7.1. That Makoppa Agriculture does not support the new application for authorisation, object to it and that it will also be opposed.</p> <p>7.2. That the new application for authorisation is merely just a repetition, with the exception of certain additions from the application that has already lapsed.</p> <p>7.3. That Makoppa Agriculture requests an undertaking from your firm and the Department of Water and Sanitation to not proceed with any further steps, studies or meetings to finalise the new application for authorisation, pending the finalisation of investigations and obtaining experts' reports by Makoppa Agriculture. Makoppa Agriculture undertake to complete these investigations and experts' reports within 12 months.</p> <p>8. You, Mr. Henning, requested that Makoppa Agriculture compile this request in writing and this letter is the result of that.</p> <p>9. Nema Consulting CC and the Department of Water and Sanitation is hereby requested to provide a written undertaking to Makoppa Agriculture that all processes, investigations and meetings will be suspended for a period of 12 months to finalise the application for authorisation of September 2018 to afford Makoppa Agriculture the opportunity to finalise its own investigations and expert reports pertaining to the disputes.</p> <p>10. We also requested you to provide copies of the minutes of the meetings held of 2 and 3 October to us as soon as possible.</p>			<p>Section 2: DWS</p>	<p>number (14/12/16/3/3/2/1100), was sent to you by e-mail on 5 October 2018.</p> <p>1.14. In accordance with Appendix 3 of the EIA Regulations of 2014 (as amended), an EIA Report must provide reasoned opinion as to whether the proposed activity should or should not be authorised. Such an opinion is provided in Section 16.3 of the EIA Report in your possession.</p> <p>1.15. Note that provision is made in the EIA Regulations of 2014 (as amended) for the Interested and Affected Parties to be informed that an appeal can be lodged against the decision of the Department of Environmental Affairs in terms of the National Appeal Regulations. This notice will only be issued after the final EIA Report has been reviewed by the Department of Environmental Affairs and a decision has been made. This point has not been reached yet.</p> <p>In accordance with the EIA Process, your latest correspondence of 8 October 2018 will also be included in the Comments and Responses Report.</p> <p>2. Technical Aspects The Project Team reported as follows, in response to your preceding letter:</p> <p>2.1. That the feedback to your letter does not attempt to comment on the correctness, or to provide comments on the full extent of each item, which can be done at a later opportunity. The focus is rather on the core aspects.</p> <p>2.2. For summary and convenience purposes, what was explained to Makoppa Agriculture during the meeting on 3 October on the farm of Mr. Gerhard van Rensburg is repeated. The facts are briefly as follows: The Hartbeespoort Dam supplies water to the Hartbeespoort Irrigation Area from the storage of natural runoff. For example, Roodekopjes Dam,</p>

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	<p>11. We reaffirm that this new application for authorisation is a major source of concern for our members and is viewed in a very serious light. We again reaffirm our willingness to seek alternative solutions to accommodate all affected parties and we assure you of our co-operation to find a workable solution for all affected parties.</p> <p>12. Should you fail to provide the written undertaking within 7 days from this date, Makoppa Agriculture will have no other choice but to approach the High Court for the appropriate legal assistance with accompanying cost order.</p> <p>13. We urgently await your response, especially in light of the following:</p> <p>13.1. The new application was already submitted at the end of September 2018.</p> <p>13.2. Your recommendation that the application for Phase 2 of the project must be authorised has already been made;</p> <p>13.3. Your statement that the Department of Environmental Affairs may already grant authorisation for the project, in terms of the new application, early in 2019.</p> <p>We kindly request that you acknowledge receipt of this letter on behalf of yourself and the Department of Water and Sanitation.</p> <p>We await your feedback.</p>				<p>Klipvoor Dam, etc. provide water from storage of the natural runoff to the Crocodile River (West) Irrigation Area. Makoppa Agriculture receives water from the runoff of the Bierspruit and Sand River as well as overflow water from the natural runoff upstream. Makoppa Agriculture also utilises the substantial underground storage in the alluvial deposits in the area. The return flows that occur in the catchment areas such as Hartbeespoort Dam, Klipvoor Dam, and others, have long been reserved for domestic and industrial use. These are the return flows that are earmarked for transfer by the proposed MCWAP-2A. The basis of this planned transfer is not to impair the existing legal entitlements of the irrigation users, including Makoppa Agriculture. This summary is explained by the following points. (See the attached map that shows the return flows from the wastewater treatment works).</p> <p>2.3. Information provided during meetings and in the project reports forms the basis for the composition of the EIA Report and the accompanying Comments and Responses Report. These include previous communication and reports from the Department of Water and Sanitation, through amongst others the EIA Process and the Reconciliation Strategies, that the water earmarked for transfer via the MCWAP-2A is the increasing volume of effluent from wastewater treatment works released in the upstream catchment area (especially Hartbeespoort Dam and Klipvoor Dam), which originates outside the Crocodile River (West) catchment area. In this way, existing legal entitlements of users in the Crocodile River (West) will not be affected. The nature of the return flow is such that it is available at a uniform rate in the area and can thus be used as such, which thus nullifies the need for creating large additional storage for the purposes of the MCWAP-2A. The Minister of Water</p>

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					<p>and Sanitation will also exercise his right to protect the reuse of the effluent to be used for the MCWAP-2A.</p> <p>2.4. That the necessary information has been shared with you on several occasions and in different ways, and therefore Makoppa Agriculture is requested to take into account the above information and reports when you comment on the EIA.</p> <p>2.5. Since the 1980s the Department has been using reconciliation strategies in key development areas for water management. Sophisticated modelling has evolved over time that is accepted on an international front. The same processes were followed in the Crocodile River (West) and this was reported on in detail during the EIA. The strategies are not developed in isolation and the user sectors, including agriculture, actively participate in the steering committee set up for that purpose. It is recommended that Makoppa Agriculture contact Mr. Fritz (a former chairman of Makoppa Agriculture) and other members of Makoppa Agriculture and Organized Agriculture, who have since the initiation of the reconciliation studies by the department constructively partaken in the activities of its steering committee, to request that all relevant documents be shared with the current representative of Makoppa Agriculture. These documents should give Makoppa a much clearer picture of the processes that the Department of Water and Sanitation follows to shape the policy of balancing the demand for and availability of water. It also supports the National Water Resource Strategy published in 2004 and 2015. In this way, Makoppa Agriculture should be able to save a significant amount of money by not paying attention to unnecessary aspects of the proposed study.</p> <p>2.6. The Department also uses the reconciliation strategies to reflect, inter alia, on the desirability of</p>

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					<p>additional impoundment to balance demand and availability. The 2015 strategy did not provide for any additional storage as an economically viable solution for future use. (The 2015 report is on your CD.) The Department is already planning the review of the 2015 Reconciliation Strategy and Makoppa Agriculture will be invited to nominate members to serve on the Steering Committee, as in the past. It is through this process that the allocation of water to different water user sectors is done. If necessary, feasibility studies will be done afterwards.</p> <p>2.7. Makoppa's letter unfortunately does not contain a Draft Terms of Reference for professional experts which the Project Team could consider to create an informed view of the scope of the proposed study by Makoppa Agriculture. However, from its own experience, the team believes that skilled professional experts can come to a conclusion within a very short period of time.</p> <p>2.8. That Nema Consulting is requested to provide the presentations that were scheduled to be presented on 2 and 3 October 2018 to you for additional background information. It will also be included in the comprehensive "Comments and Responses Report", which gives Makoppa Agriculture the opportunity to comment on it and raise your comments.</p> <p>2.9. The Department has throughout the development of the MCWAP held the opinion that the existing lawful entitlements of all users and specifically the irrigators, as in Makoppa Agriculture's case, will be maintained. This approach remains applicable. The next challenge is to design and implement an appropriate river management system with existing irrigation users in order to achieve this goal. Makoppa Agriculture's role and participation in it is not small and is reaffirmed.</p> <p>2.10. In light of the above, the Project Team does not</p>

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					<p>support suspending the project for 12 months, as requested by Makoppa Agriculture. An extension of time is, however, is granted to Makoppa Agriculture to submit their comments on the EIA to Nemaï Consulting, by 15 November 2018.</p> <p>A map was attached to the letter which showed the discharges from the wastewater treatment works.</p>
402.	<ol style="list-style-type: none"> 1. Substantial physical irreversible change in the aesthetic view of the proposed borrow pit on Farm Leeuwbosch cannot be restored with rehabilitation and has a definitive negative influence on the pristine wilderness tourism experience at Farm Leeuwbosch, borrow pits in this area are not accepted. 2. Detailed design and layout of the break pressure reservoir on Farm Leeuwbosch will need to be provided to limit the visual and noise impact of the reservoir. Again, the pipeline development will have a significant detrimental impact on the pristine wilderness tourism experience of the environment on the farm Leeuwbosch in the Waterberg Biosphere Reserve. 	L. F. Fouche	Reply Form (08/10/2018)	Nemaï Consulting	<ol style="list-style-type: none"> 1. The impacts of the borrow pits will be assessed in the EIA Phase, as part of the separate process that is being undertaken for this component of the project. 2. Details of the break pressure reservoir are provided in Section 9.5 of the Draft EIA Report. A general layout is provided in Figure 53 and a drawing is contained in Appendix H. From a visibility perspective, the break pressure reservoir will be formed by shallow excavation and surrounding earthfill embankments suitably grassed.
403.	There will be no concerns if you place the pipeline on the Enkeldraai side.	S Sauer	Email (11/10/2018)	Nemaï Consulting	<p>Alternative D1 was identified as the preferred alternative pipeline route in the northern section of the project area. The exact routing of the pipeline within the 100 m corridor that was assessed as part of the EIA will be optimised and confirmed during the design phase.</p> <p>A meeting (refer to No. 399) was held with the landowners of the neighbouring farm (Taaiboschpan) on 31/10/2018. During this meeting the landowners further expressed their concern regarding the impact that the pipeline will have on the pan located on their property.</p> <p>Refer to No. 399.</p>
404.	<ol style="list-style-type: none"> 1. How many community members will be prioritised when it comes to employment; 2. Will your project up skill community members; 3. What are your corporate social investment; 4. We as the community request at least 80% of employees 	J Moatshe	Reply Sheet (11/10/2018)	TCTA	<ol style="list-style-type: none"> 1. Depending on the construction and contracting strategies still to be developed, it is estimated that at least 500 community members will be employed on the project. 2. As part of the TCTA's Policy on Transformation,

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	<p>must be from the host community;</p> <p>5. We also request your project to transfer skills to the people before the process of the project;</p> <p>6. We would like to have engagement about environmental impact assessment and heritage sites.</p>				<p>project specific strategies for socio-economic development will be developed and implemented that will include training and skills development of the local communities.</p> <p>3. The TCTA is a Government Entity and corporate social investment is not particularly allowed under the PFMA. However, through its appointed contractors, The TCTA implements CSI in partnership with all relevant stakeholders.</p> <p>4. Employment on the project will be based on skills required and availability. The host community is not defined and an arrangement with all affected communities will have to be established to determine the quotas.</p> <p>5. This may be challenging as the required skills for the project can only be imparted by the contractors. The TCTA has not yet appointed the contractors for this project and once appointed, the programme for delivering the project begins. On the job training will be provided for the identified community members who meet the minimum requirements for certain job categories.</p> <p>6. The TCTA will engage local communities during sensitivity walk through survey to confirm sites where there might be burial sites along the project footprint prior to site clearing.</p>
405.	<p>Can I please obtain a copy of the presentations with regards to the limnology of HBPD as well as the socio-economic impact?</p> <p>The MCWAP could also help to improve the impact of the non-implementation of the “waste discharge charge system WDCS due to the deprived WDCS funds which could have been used to manage the water quality in the HPBD. This includes sediment removal (dredging) that already reduces 15% of the capacity of the HBPD. Sediment recycling will definitely relieve eutrophication and also create job opportunities for organisations to process the sediment for making bricks etc. So there are not only benefits for socio-economic development in Lephalale but also for Hartbeespoort Dam area. The</p>	F Botha	Email (11/10/2018)	Nemai Consulting	<p>A copy of the presentation was provided to the IAP on 17/10/2018.</p> <p>While there were no specific measures identified to mitigate the impacts of the MCWAP-2A on Hartbeespoort Dam, general catchment measures were recommended as part of the Hartbeespoort Dam Specialist Opinion. These measures need to be implemented by the mandated authorities.</p> <p>The MCWAP-2A will not contribute towards the WDCS. It needs to follow the normal budgetary processes of the DWS.</p>

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	government should look holistically at the MCWAP that influences the upstream and downstream environment.				
406.	<p>This proposed mining project will affect the entire area that are situated along the water sources up stream for the proposed area where this proposed mine will be situated.</p> <p>Furthermore, it will generate to the world's carbon footprint, which in fact we should try diminish and eradicate where-ever possible, find and invest in alternative renewable energy then waste money on these huge undertakings. The Hartbeespoort Dam was constructed only for the use of the agricultural enterprises situated down-stream below the Dam and not for any other purpose. In the months from August to November the Hartbeespoort dam's water capacity shrinks to some 35% which means, and I speculate here, that if tapped on the rest of the water capacity this dam will be drained at the worst possible scenario to a stage that the dam will be empty in the months mentioned above. There will be no water left for the agricultural sector, which will have catastrophically consequence for all concerned.</p> <p>Borrow Pits – Should this project go ahead those pits could be utilised and prepared as water storage facilities, coffer dams, which would be beneficial to the coal mining projects as well as for the agricultural sector to alleviate water shortages in the winter time.</p>	E. R. Schuette	Email (11/10/2018)	DWS	<p>Chapter 3 of the Constitution covers co-operative governance. The DWS is obliged to promote SIP 1 as set out in the EIA, i.e. to unlock the Waterberg mineral belt.</p> <p>DWS representing the Government is also bound to supply water to Eskom's Medupi Power Station, including the FGD for which Eskom has already received an Environmental Authorisation on 6 September 2018.</p> <p>In addition, the Draft Integrated Resource Plan (IRP) was issued on 27 August 2018 for public comment for 60 days. Writer is advised to use that opportunity to raise his issues with respect to the world's carbon footprint.</p> <p>The scheduled irrigation to Hartbeespoort Irrigation Board from Hartbeespoort Dam will continue within its current constraints. The effluent from wastewater treatment plants are earmarked for the MCWAP-2A.</p> <p>The projected fluctuation of the water level in the dam was presented during the Scoping and EIA Phase.</p> <p>The area-capacity characteristics of borrow pits are not favourable to be used as storage facilities.</p>
407.	Could you please let me have the slides that were presented at Tuesday's meeting 9 October at Harties NG Kerk.	D. Holmes	Email (11/10/2018)	Nemai Consulting	A copy of the presentation was provided to the IAP on 17/10/2018.
408.	<p>Thank you for the meeting at Kumba Bioscope Hall, Thabazimbi on the 10th October 2018 at 13h00 at which I was in attendance.</p> <p>I would like to pose the following questions after the meeting:</p> <ol style="list-style-type: none"> 1. If the water supply in the Crocodile River to the Vlieëpoort Abstraction Weir is at any given stage insufficient to 	M. White	Email (11/10/2018)	DWS	<ol style="list-style-type: none"> 1. Please refer to the presentation made by Mr. Pieter van Rooyen during the Focus Group meetings held during January 2018 (Appendix Q of the Final Scoping Report). The scheduled entitlements of the Crocodile River (West) Irrigation Board will continue as gazetted, thus no compensation is payable. The MCWAP-2A will use the return flows generated in the catchment.

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	<p>supply the Lephalale power stations, will any usage restrictions be implemented on the farmers upstream of the Vlieëpoort Weir. If so, how will the restrictions be calculated and implemented and will there be any form of compensation to the farmer? In particular, I am a lucerne farmer and am registered with the Crocodile River-West Irrigation Board. The lucerne crop is planted and grown for five to six years before it is replaced. There will be an impact on the growth of the crop if the water usage is restricted or stopped for a season and it will take at least a year and at great cost to re-establish the same crop. Once again, will there be any form of compensation for this loss? It is also therefore imperative for me to understand how the water flow will be affected in managing our crop.</p> <p>2. The possible construction of a crump weir for low flow gauging about 70 metres downstream of the Paul Hugo (A2H116) diversion weir at the approximate location: 24°41'40.86"S, 27°24'32.92"E (shown in Figure 61) is very close to or possibly on the western border of our irrigation lands. What will the impact during the construction of this weir on our farming operations be and what will the time period be for the construction of the weir?</p> <p>I appreciate the chance to voice these questions as this development could seriously impact on our livelihood.</p>				<p>Also refer to No. 345.</p> <p>2. The crump weir will not impact on the irrigated lands if they are outside the river banks. It should be possible to construct the new gauging weir within a year. The Implementing Agent will consult if authorisation is provided.</p>
409.	<p>Hope this email finds you very well! I hope you can help me. Do you by any chance have a map of the three options for the final leg of the pipeline route when it gets closer to Steenbokpan, or maybe even a list of the farms it will potentially cross. Sasol requested this information to determine whether any of their properties in the Steenbokpan area will be affected. If you could let me know I would really appreciate it very much.</p>	J. Snyman	Email (12/10/2018)	Nemai Consulting	A locality map of the northern section of the pipeline routes was provided to the IAP on 15/10/2018.
410.	<p>It was nice to meet you yesterday and I think it was a good meeting, although there were few people. But as you say, rather a few people that contribute to the discussions than many people which doesn't mean anything. Would it be possible for you to e-mail me yesterday's slides? Good luck with the work that you do.</p>	L. Kruger (Mogol Pos)	Email (12/10/2018)	Nemai Consulting	A copy of the public meeting presentation was provided to the IAP on 17/10/2018.

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411.	<p>You asked me to send you an e-mail regarding the boreholes that are used by all of the Estates on the western side of Hartbeespoort Dam. There is no municipal water supply to the western end of the dam. All of the estates have boreholes to supply all of their water needs, including drinking and sanitation. If the lowering of the water level of the dam affects the water table, these estates will not have water. Frikkie Botha in the audience said that they could perform certain tests to see if there is any back fill of the boreholes from the water in the dam. You can contact the Westlake Estate Manager on the following number. Frans Ellis</p>	P Hollick	Email (14/10/2018)	Nemai Consulting	<p>We received the attached report from a local geohydrologist (Johan Wentzel), entitled Hydrogeological Characteristics of Hartbeespoort Dam. He noted the following: "From this report you will see that the dam is underlain by shales and diabase (that weathers to a dense clay). Both rock types are very impervious and groundwater found in them (if any) will not be linked to the dam itself. The only place where interaction occurs is along the three fault lines. The wall is built on one of these fault lines and groundwater below the wall is definitely fed by the dam (Dr. Kai Witthuser, pers comm)." This view is also supported in the attached thesis. Lowering the water level in the dam will not affect groundwater at all, except along the fault lines, but there the groundwater level is far below the lowest level of the dam.</p>
412.	<p>As per the attached acknowledgement at receipt we give herewith reasons why the establishment of borrow pit should not be located as proposed by yourselves.</p> <ol style="list-style-type: none"> 1. The present borrow pit location is situated within 200 m of a dwelling and the access road proposed is the existing access to that dwelling and passes within 30 m of the dwelling and associated outbuildings. 2. Haarlem Oost is conducting business in hunting and Eco Tourism and has paying clients making use of these facilities on a regular basis. The dust and disruption to this business will mean we would have to shut down operations during construction period resulting in large losses of income and potential future bookings. 3. The proposed borrow pit is situated within 200 m of the existing skinning, cold room and carcass preparation area which are part of the income generated by the business. As you would be aware the dust and disruption generated by traffic carting fill material to the site would not be conducive to this type of activity. 4. The access to this proposed borrow pit area would also have a negative effect on our ability to carry out our day to day business activities; especially hunting. This would 	K. Myles	Reply Form (15/10/2018)	Nemai Consulting	<p>The impacts of the borrow pits will be assessed in the EIA Phase, as part of the separate process that is being undertaken for this component of the project. There will also be further engagement with the affected landowners.</p>

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	<p>The above focussed offering made the estate extremely desirable for buyers with a specific lifestyle expectation and those buyers invested huge amounts in these properties because the Estate provided in those expectations.</p> <p>Estates who share the same type of offering, albeit different in style and purpose, are:</p> <p>Directly affected: -</p> <ul style="list-style-type: none"> • The Coves (residential with foreshore) • Leloko (residential with foreshore) • Kashan (residential with foreshore) • Lakeland (residential with foreshore) • Magaliespark – (residential and tourist with added top golfing. Tourist pleasure boat rides and waterpark facilities) • Caribbean Beach Estate – (residential and major golfing) <p>Indirectly affected: -</p> <ul style="list-style-type: none"> • De Rust – (undeveloped state – and privately owned land with access to fisherman camping) • The Islands <p>2. Receding shoreline – Hartbeespoort Dam. It must be noted that at an average of 80% water capacity, the upper Western reaches of the dam, where the Magalies river flows into the dam, have a 2 to 3-meter dry shoreline. For Magaliespark, The Coves, Westlake, Leloko, Kashan and Lakeland this means that private coves are mostly laid bare and access to the dam for watercraft is very difficult if not impossible. Even as far as Caribbean Beach Estate, water access for watercraft may be impossible because of shallow water. The expected</p>			<p>DWS</p> <p>DWS</p> <p>DWS</p>	<p>Impacts to Hartbeespoort Dam need to be considered within the relevant regulatory framework.</p> <p>The Hartbeespoort Dam was constructed to serve primarily as a storage unit to serve water supply objectives and as such its water level will naturally fluctuate to maximise water utilisation. Any developments outside the government waterworks were developed at the sole risk of the developer and/or registered landowners.</p> <p>Refer to the response to No. 411 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on boreholes.</p> <p>Refer to response to No. 434 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on security, property value and tourism.</p> <p>Dams, as government waterworks, are developed (planned, implemented and operated) to serve water supply objectives (NWRS since the NWA was promulgated and White Papers for particular projects before that). Land rights are acquired for impoundment and occasional extreme flood management purposes. Multilevel outlet facilities are usually provided to release the best quality water and to follow the storage level in the impoundment at any point of time. Flood control dams, e.g. Qedusizi Dam upstream of Laysmith in KZN, are kept empty to temporarily store flood water to be released in a control manner to safeguard downstream areas.</p> <p>It is important to quote Section 31 of the NWA. "31. The issue of a licence to use water does not imply a guarantee relating to: (a) the statistical probability of supply; (b) the availability of water; or</p>

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	<p>receding shoreline at the height of the water provision periods, and during the winter months (dry season), when the dam will reach a probable low 60% or maybe more of capacity, the waterline may recede to a trickle run from the Magalies river in the middle which will reach the waterline proper to around a diagonal line from the East of Lakeland Estate across to Kashan Estate. This situation will then prevail for a few months a year.</p> <p>3. Negative effect on property values and local (micro) economy</p> <p>Following on the background given in 1 above, it is very clear that a situation described in 2 above will have a devastating effect on;</p> <ul style="list-style-type: none"> • Investors' ability to exercise the lifestyle invested in. • Drastically failing property values of the waterfront stands and the difficulty in re-selling (because of the diminished offering). • The loss of adequate approved and constant available water supply from the dam to irrigate golf courses, common areas and farmland resulting on extreme pressure on existing boreholes as an alternative to irrigate from. • Pressure on existing boreholes which are used for water reticulation to estate homes for human consumption because of additional irrigation of golf courses and common areas. • Additional costs and delays in Government approvals in respect of applications for sinking of more boreholes to carry the demand load. • Pressure on the underground water reserves though forced adding of more, - and deepening of existing boreholes. (the position of the dam has an effect on our water table and receding water levels will inevitably result in receding water table) • Possible closure/loss of golf course facility as a result of non-availability of water during the greater part of the year. 				<p>(c) the quality of water.”</p> <p>It implies comprehensively that the availability and quality of water is not guaranteed.</p>

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	<ul style="list-style-type: none"> • Increased costs for Estate Security as Estates will become easily accessible on foot from the dry dam including; <ul style="list-style-type: none"> ➢ Huge financial outlay in costs of removable security barriers/fencing to control access from the dry dam (some waterfronts are in excess of 600 meters in distance). ➢ Expensive and labour-intensive manpower for additional security. • The loss of income from fishing and camping activities at De Rust – at least 1 km shoreline. <p>Request</p> <p>That over and above the original written inputs sent in during the previous round by all the Western shore property owners, the above – for individual property owners – be considered.</p>				
414.	<p>This property is situated directly next to the intended water works and related infrastructure of the MCWAP project. Mr du Plessis use this property as his head office for his extensive farming operations on numerous farms on the Crocodile West Irrigation area and for his irrigation on the Makoppa sections (see list). This property is also used as a game breeding farm for Buffalo, eco-tourism, mountain biking and hunting. This property is extensively developed and specialist studies on all factors must be conducted as the intended works on his doorstep will most certainly impact his property and the use and the value. Any impact on Hampton may impact his whole operation and any impact on his water rights or legal water use may have a dire impact on this extensive operation. All here is planned to the T and an extensive study must be conducted on Hampton and his other properties.</p> <p>The issue of compensation for water or compensation for the impact on the market value must be discussed. The owner is concerned about silting, water availability and the impact this intended construction and new water user may have on the use and value of his irrigation properties. The water study makes it clear that the Minister may impeded on water use if</p>	B. Enslin (on behalf of L. du Plessis)	Reply Form (23/10/2018)	<p>Nemai Consulting</p> <p>Nemai Consulting</p> <p>TCTA</p> <p>Nemai</p>	<p>From feedback received, it is understood that the homestead and lodge/camp is located on top of the ridge on the Farm Hampton. The visibility analysis for the balancing dam (refer to Figure 140 in the Draft EIA Report) shows that the infrastructure will be visible from the southern portion of the farm. Eco-tourism activities in this part of the farm could be adversely affected. Photographs of examples of balancing reservoirs and a high-lift pumping station are provided in Figures 29 – 32 in the Draft EIA Report.</p> <p>The footprint of the proposed project is not directly located on the Farm Hampton 320 KQ. The EMPPr attempts to address impacts (such as noise, dust and visual impacts) through a host of mitigation measures.</p> <p>Relevant factors related to impacts will be dealt with once the final route has been determined within the corridor assessed as part of the EIA and the design has been approved.</p> <p>The Wildlife Impact Assessment found that noise</p>

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	<p>needed or when in a critical stage water is needed to ensure water availability for the MCWAP scheme. We know that this water pipeline has higher priority guarantee than irrigation farming and use. This factor and the impact this may have on the market value of these properties must be addressed and investigated.</p> <p>We are aware that Water Affairs or TCTA cannot guarantee water, but can they guarantee that the availability as it has been for many years will not change - this remains a huge concern and is not good for the marketability of these properties. Who will buy these properties and what will they pay with the knowledge of what may happen due to this project?</p>			<p>Consulting</p> <p>DWS</p>	<p>generated by construction of the balancing dam, desilting works and high-lift pumping station will adversely affect the land-use options applied on Hampton 320 KQ, where eco-tourism and hunting are the main revenue generators. The specialist recommended that affected parties be informed in writing of construction progress and that they be warned well in advance (require 12 months' notice) prior to physical construction (excluding pre-construction activities). Pre-emptive action can then be taken by the affected parties.</p> <p>Refer to response to No. 259 and No. 4 (specifically note the reference in the NWA to the "qualifying period") with regards to ELWU and availability of water for the proposed water transfer scheme.</p> <p>Refer to response to No. 67 with regards to silt.</p> <p>Land acquisition will be undertaken in accordance with prevailing legislation at the time when the land acquisition takes place. The valuer will independently perform his valuation.</p>
415.	<p>Hunting and game breeding near or at borrow pits – specialist studies the following properties will be impacted by borrow pits</p> <p>Mecklenburg 310 KQ P 1- Game breeding and hunting; Karoobult 126 KQ P 0 – Game breeding and hunting; Buffelsvlei 127 KQ P 0 – Game breeding – very expensive 170 herd strong buffalo project Leeuwbosch 129 KQ P1 – area of pit rented with option to buy Rietfontein 15 KQ P 4 – the pit is on ptn 0 but next to my client's breeding camps and hunting concession Inkerman 819 KQ P 0 - game breeding camps Zandfontein 382 LQ - THIS WILL DIRECTLY IMPACT JULIUS ERASMUS ON Rooipan 357 LQ P 4 Rooipan 357 LQ P 4- CUMULATIVE IMPACT WITH PIT ON</p> <p>Zandfontein 382 LQ P 0 - Please ensure studies that takes all</p>	B. Enslin	Reply Form (23/10/2018)	Nemai Consulting	<p>The impacts of the borrow pits will be assessed in the EIA (Borrow Pits) phase, as part of the separate process that is being undertaken for this component of the project. There will also be further engagement with the affected landowners.</p>

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	factors in account on these properties and the fact that these borrow pits may have a massive impact over a long period of time. Game will have to be relocated and big trees will be destroyed and all hunting will cease. Future potential losses on brand building for hunting concessions must be addressed and discussed and progeny loss must be dealt with.				
416.	<p>Comments on the “Baseline Aquatic and Impact Assessment Report” and “Wetland Impact Assessment Report” for the proposed MCWAP Phase 2A EIA.</p> <p>Please find below a summary of comments on the specialist Aquatic Ecosystem Assessment Report, compiled by The Biodiversity Company, and the Wetland Delineation and Assessment Report, compiled by Index (Pty) Ltd, for Phase 2 of the proposed MCWAP-2A development.</p>	G. Tyler	Letter (25/10/2018)	Nemai Consulting	Introductory section of letter. No responses are required.
417.	<p>1. <u>Aquatic Ecosystem Assessment Report (The Biodiversity Company 2018)</u></p> <p>While the assessment was technically sound, there are considerable gaps in knowledge. These mainly pertain to the ecological reserve and associated impacts to flow and water quality and cumulative impacts across catchments.</p> <p><i>Implementation of the Ecological Reserve</i> The Draft EIA Report refers to the “River Management System” (RMS) and “Operational Rules” which will be implemented, presumably to regulate flows downstream of the Vlieëpoort Weir, based on to the EWR of the Crocodile River (West). However, there is very limited information provided on what exactly the “River Management System” will entail, nor its implementation and infrastructural requirements. No mention is made of the River Management System in The Aquatic Assessment Report.</p>	G. Tyler	Letter (25/10/2018)	DWS	<p>Report P RSA A000/00/8609 - Feasibility Stage: Supporting Report 10: Requirements for the Sustainable Delivery of Water contain details on the proposed RMS. The summary was copied to the 2015 Reconciliation Strategy, report No: P WMA 03/A31/00/6615/2, available on the DWS Website.</p> <p>A crucial part of the river management functions during the operational stage of the MCWAP-2A, will be to manage the timing and magnitude of water releases required from the Hartbeespoort, Roodekopjes, Klipvoor and Vaalkop Dams in order to supply the water allocated to the MCWAP and the other authorised users between these upstream dams and the Vlieëpoort Abstraction Weir, and to manage and monitor the abstractions. Similarly, the releases from Vlieëpoort Abstraction Weir for authorised users downstream of Vlieëpoort, which includes the EWR will need to be managed. As such a river abstraction and management system to manage abstractions from, and the river flow in, the Crocodile River (West) between Hartbeespoort Dam and Vlieëpoort Abstraction Weir including the releases and spills from such works as well as the</p>

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					<p>Moretele River from Klipvoor Dam to the confluence with Crocodile River (West) and the Elands River from Vaalkop Dam to the confluence with the Crocodile River (West), will need to be designed in consultation with the users. It includes the construction of new and rehabilitation of existing flow gauging stations to be used as part of the river management system as shared during the public meetings. It is intended to include a servitude of aqueduct acquired in terms of the NWA over such stretches of the said rivers.</p> <p>It is planned that the RMS be in operation at least 1 year prior to the commissioning of the MCWAP-2A.</p>
418.	<p>Abstraction is briefly considered in Table 29 where the impact is described as follows "Loss of flow and floodplains downstream of sacrifice zone". However, this is not described in any detail and it is not clear what these impacts will be, nor the impacts to flow, water quality and habitat (relative to the current flow regime) during the operational phase of the project and after implementation of the River Management System. For example, reduced flows will result in a decline in water quality due to reduced dilution downstream of the weir, while riparian and floodplain habitats may become more restricted due to reduced lateral connectivity.</p> <p>This represents a serious gap in knowledge and assumes that the RMS will be effectively implemented.</p>	G. Tyler	Letter (25/10/2018)	DWS	<p>The impacts listed in the Specialist Study were based on the assumption that the RMS will be effectively implemented.</p> <p>Refer to No. 23 for response in terms of the RMS.</p>
419.	<p>Impacts due to the weir (the physical structure) and impacts due to abstraction and flow regulation, are inter-related. That is, impacts due to the weir cannot be adequately assessed without also considering altered flows due to abstraction for the MCWAP and releases as per the River Management System. If these activities are, in fact, to be considered separately, the latter (the River Management System) should ideally precede the former (infrastructure associated with Phase 2A).</p> <p>In addition, climate change and potential changes in runoff (e.g. due to water restrictions or increased recycling of water)</p>	G. Tyler	Letter (25/10/2018)	Nemai Consulting	<p>The following recommendation was included in Section 16.4 of the Final EIA Report: "The River Management System must be in place prior to the commissioning of the transfer scheme".</p> <p>Refer to No. 417 and No. 418 for responses with regards to the RMS.</p> <p>Refer to No. 41 and No. 80 for responses with regards to the Reserve.</p>

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	need to be considered.				
420.	<p><i>Sediment removal and return – cumulative impacts</i> The impacts due to sand-mining at borrow pit SS1 (removal of sediment from the river bed) are considered in isolation. Removal of sand from the riverbed is likely to result in increased flows and increased erosion as subsurface alluvial flows are reduced. In addition, water quality is likely to decline due to increased turbidity. These impacts, together with reduced flows from the weir (due to abstraction) and the removal of an additional 2% of sediment via the desilting works, are likely to result in modifications, in the long term, to instream and riparian habitat downstream of the weir. While it is understood that the sediment load is currently elevated due to erosion upstream, if sediment yield is reduced by approximately 2% per annum, the cumulative impact to habitats 50-100 years from now, remains uncertain. The manner of returning the sediment to the Crocodile River from the desilting works also needs to be included in the impact assessment and management recommendations.</p>	G. Tyler	Letter (25/10/2018)	The Biodiversity Company (aquatic specialist)	<p>The following recommendation was included in Section 16.4 of the Final EIA Report: It is recommended that a sediment study be conducted by a fluvial-geomorphologist to determine the baseline sediment balance associated with the Vlieëpoort Abstraction Weir, and the potential risks and benefits of sediment abstraction and return during the operational phase of the MCWAP-2A.</p> <p>Provision is made in the EMPr to manage impacts from instream works, such as siltation.</p>
421.	<p><i>Impacts to the Matlabas River</i> The impacts to water quality in the Matlabas River due to valve scouring were not clearly determined in the Aquatic Ecosystem specialist report. The report states that “The findings of the study were based on a single low flow survey, limiting spatial and temporal findings within the reaches, and therefore the confidence of the findings are [sic] low.... The ecological status of the Matlabas River needs to be determined during the high-flow period-prior to construction. This will determine the requirements for crossing the watercourse (i.e. open trench) - as well as for scouring (i.e. draining water from the pipeline- typically during maintenance”. In addition to valve scouring- impacts due to pipeline leaks at the river crossing were not considered in the report.</p>	G. Tyler	Letter (25/10/2018)	The Biodiversity Company (aquatic specialist)	The ecological status of the Matlabas River needs to be determined during the high-flow period, prior to construction. The high flow survey needs to address potential impacts of the valve scouring on water quality, erosion and sedimentation of the Matlabas.
422.	No information is provided on the volume or quality of water that will be released into the Matlabas River during scouring (or from pipeline leaks). However- the water that will be abstracted from the Crocodile River has a much higher salinity	G. Tyler	Letter (25/10/2018)		Refer to No. 421 for response with regards to the proposed scouring into the Matlabas River.

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	(and is probably eutrophic downstream of Hartbeestpoort Dam).				
423.	<p>Water released during valve scouring and/or leaks is likely- therefore- to be of a much lower quality than is currently evident in the Matlabas River (which had a relatively good water quality at site MAT 1- with a low salinity- based on Table 1 of the Aquatic Ecosystem Report. The salinity is likely to be higher during low flow periods due to evaporative losses). Therefore- the salinity and nutrient concentrations are likely to increase in the Matlabas River. This- in turn will cause a proliferation of algae (particularly during warm summer months) (Chutter and Walmsley 1992) - which may affect oxygen fluctuations (due to photosynthesis) and will compromise habitats (as benthic and marginal habitats tend to become smothered by algae). Supersaturated conditions (i.e. where rates of photosynthesis exceed respiration) may cause gas bubble disease in fish and favour the growth of blue-green algae - which may become a nuisance (DWAF 1996). It is therefore strongly recommended that a detailed water quality assessment be conducted so that the impacts due to scouring and/or spills can be adequately assessed. Transfer of biota (e.g. algae- cyanobacteria- crustaceans- etc.) via the pipeline have also not been considered. The likelihood of the transfer of biota (especially algae and planktonic organisms that may become problematic) to the Matlabas River should be assessed.</p>	G. Tyler	Letter (25/10/2018)	<p>The Biodiversity Company (aquatic specialist)</p> <p>TCTA</p>	<p>During the recommended high flow assessment, a diatom profile of the Crocodile and Matlabas should be undertaken and problematic species identified.</p> <p>The CSIR undertook a screening study to understand the potential changes in water quality that may arise as a result of scour valve discharges of water from the MCWAP-2A pipeline (abstracted from the Crocodile River) into the Matlabas River.</p> <p>The following conclusions were drawn from this study:</p> <ul style="list-style-type: none"> • Water discharged from the MCWAP pipeline is of a poorer quality than the receiving Matlabas River and scour valve discharge will result in short term increases in Total Dissolved Solids, nutrients and Chemical Oxygen Demand. • Median daily flows in the Crocodile and Matlabas rivers are highest during the wet summer months, particularly January and February. • Water quality in the Crocodile and Matlabas rivers is generally better during the summer months, particularly January and February. • The months of January and February therefore provide the most favourable conditions for the Matlabas River to assimilate and dilute poorer water quality discharged from the MCWAP pipeline. • Performing scour valve discharge operations at lower flow rates for a longer period of time will have further benefit through reducing peak concentrations of water quality variables (and associated potential acute toxic effects) that could occur in the Matlabas River. • The most serious effects on aquatic ecosystem health are likely to be related to decreased Dissolved Oxygen concentrations in the Matlabas

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					<p>River as a result of elevated Chemical Oxygen Demand concentrations associated with biofilm scoured from the pipeline.</p> <p>Based on these conclusions, the following recommendations were made:</p> <ul style="list-style-type: none"> • Scour valve discharge operations should preferably take place during January and February when high flows are most likely to occur in the Matlabas River. As a general guideline, scour valve operations should take place when flows in the Matlabas River exceed 0.8 m³/s. • Scour valve discharge operations should be avoided during low flow periods in the Matlabas River (particularly during the winter and spring months). • A Low scour discharge scenario (e.g., 0.35 m³/s over 8 hours) is recommended over that of a High discharge scenario (e.g., 1.14 m³/s over 2 hours). • A High scour discharge scenario should only be considered when Chemical Oxygen Demand concentrations in the scour discharge are likely to result in severe anoxic conditions (0 mg/L Dissolved Oxygen) for the Low scenario (i.e., > 5 mm under the current modelled scenarios). This would keep the duration of these adverse anoxic conditions as short as possible. • Monitoring of Chemical Oxygen Demand concentrations in scour discharge should be performed so as to gain a better understanding of potential effects on Dissolved Oxygen in the Matlabas River. Depending on the magnitude of measured / observed Chemical Oxygen Demand concentrations, alternative scour valve operations could be considered (for example, if measured Chemical Oxygen Demand levels are similar to what is predicted in this study, then more frequent scouring of the pipeline could be considered so as to prevent greater accumulations of biofilm).

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424.	<p>Cumulative Impacts to the Limpopo River There are likely to be cumulative impacts associated with return flows in the Mokolo Catchment. It is likely that the surface and ground water quality will decline in the Mokolo, Lephale and Limpopo River catchments due to runoff and releases from new mining developments near Lephale, which will be supplied with water by the MCWAP. Cumulative impacts were not considered in any detail in the Aquatic Ecosystem Assessment Report, which states simply:</p> <p>“The scale of the anticipated impact will be limited to the immediate river reaches and is therefore considered a local impact. The impact is reversible should the weir structure be removed and rehabilitated. However, the impact will occur through the life of the project which is considered a long-term impact. Overall the cumulative impact of the proposed project was derived to be moderate.”</p> <p>Again, the impacts associated with the development (weir, pipelines) were considered in isolation and the operational impacts (abstraction and flow regulation) were largely excluded.</p>	G. Tyler	Letter (25/10/2018)	DWS	The maximum re-use of the water will be promoted for the users that receive water from the MCWAP-2A. The water will thus not be discharged. Refer to response to No. 29.
425.	<p>International Rivers The impact of reduced flows and a decrease in water quality (e.g. through reduced dilution) in the Limpopo River and increased contamination from expanding mining developments in the Lephale area, are not clear. The Limpopo River forms the border between Botswana, Zimbabwe and South Africa. It also flows along the northern border of the Kruger National Park. It is presumed that this is considered in the “River Management System” but, again, no information is provided. While flows in the Crocodile River may be regulated by the RMS, runoff from mining expansions in the Lephale area will have additional cumulative impacts to surface water and groundwater which may result in the reserve not being met in the receiving Limpopo River.</p>	G. Tyler	Letter (25/10/2018)	Nemai Consulting The Biodiversity Company (aquatic specialist)	Refer to response to No. 29 and No. 424. The mitigation measures to manage impacts to water resources associated with mining expansions form part of the regulatory frameworks and environmental processes (such as water use licensing) governing these activities. According to the Scoping Report, the MCWAP-1 entails the yield of the existing Mokolo Dam and the MCWAP-2A proposed to utilise return flows originating from the Vaal River. It therefore does not fall within the conditions contained in the SADC Revised Protocol of a planned measure with possible adverse effects for other states in a shared watercourse as indicated in Article 4(1)(b) of the SADC Revised Protocol. As such, it is not considered to be necessary to negotiate the use of the

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					<p>water with the neighbouring states. Notifications in terms Article 4(1)(a) of the SADC Revised Protocol of the RSA’s intention to proceed with implementation of the MCWAP, were therefore given to the co-basin states. In the February 2010 letters to the co-basin states RSA stated that the RSA perspective is that there will be no significant adverse effect to any one of the LBPTC members as a result of the MCWAP, for the reasons given above. South Africa has therefore complied with the SADC Revised Protocol and international best practices.</p> <p>Furthermore, the EWR addresses international obligations.</p>
426.	<p>Conditions of authorisation</p> <p>Considering the gaps in knowledge discussed above, authorisation of this project should be subject to the following conditions:</p> <ul style="list-style-type: none"> The impacts associated with the implementation of the River Management System and associated “Operational Rules” should be assessed and integrated into the authorisation process. Phase 2A should not be authorised based on the assumption that the RMS will be effectively administered and that the reserve will be met – i.e. the effectiveness of the RMS to achieve the EWR in the Crocodile (West) and Limpopo systems needs to be demonstrated first. Cumulative impacts to the Limpopo River and how the reserve will be met (particularly in terms of water quality) downstream of the Lephalale area also needs to be clarified. Changes to runoff volumes from Gauteng due to climate change (e.g. implementation of water use restrictions) should be factored into the RMS. 	G. Tyler	Letter (25/10/2018)	<p>Nemai Consulting</p> <p>DWS</p>	<p>It is noted that the EWR is enforced via the provisions of the NWA and not NEMA. The setting of conditions related to the EWR thus form part of the water use licencing process.</p> <p>A meeting was held with the DEA in April 2018 to discuss the outcomes of the Scoping Phase. During this meeting it was noted that there are key matters associated with MCWAP-2A that are related to and mentioned in the NWA, such as ELWU (allocation of water) and the Reserve. DEA indicated that it is not a legal requirement to run the Integrated Water Use Licence (IWULA) and EIA Processes in parallel. The DEA also stated that should Environmental Authorisation in terms of NEMA be issued, it does not absolve the applicant in terms of other Environmental Legislation, such as the NWA. The DEA further mentioned that an Environmental Authorisation, if issued, may include a condition which states that authorisation is required in terms of the NWA prior to the commissioning of a project.</p> <p>It is planned that the RMS be in operation at least 1 year prior to the commissioning of the MCWAP-2A.</p>

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				Nemai Consulting	A mitigation measure that emanated from the Baseline Aquatic and Impact Study is that the minimum flows for the EWR stipulated in the Reserve Determination be implemented through the operational phase of the proposed project.
427.	<ul style="list-style-type: none"> A comprehensive surface and ground water quality assessment should be conducted to determine anticipated impacts to the Crocodile River and its associated alluvial floodplains after abstraction commences from the weir, as well as to the Hartbeespoort Dam and the Matlabas River. 	G. Tyler	Letter (25/10/2018)	The Biodiversity Company (aquatic specialist)	Refer to response to No. 420 with regards to a sediment study at the Vlieëpoort Abstraction Weir by a fluvial-geomorphologist.
428.	<ul style="list-style-type: none"> A summer survey within the Matlabas River must be conducted, including a more detailed assessment of the impact of valve scouring/spills on water quality (and associated proliferation of algae), erosion and sedimentation in the Matlabas River. 	G. Tyler	Letter (25/10/2018)	Nemai Consulting	Refer to response to No. 423 with regards to the Matlabas River. Note that the following recommendation is already included in Section 16.4 of the Draft EIA Report: <i>The ecological status of the Matlabas River needs to be determined during the high-flow period, prior to construction. This will determine the requirements for scouring (i.e. draining water from the pipeline, typically during maintenance).</i> The aforementioned recommendation was expanded to include the suggestion made.
429.	<ul style="list-style-type: none"> The likelihood of the transfer of biota to the Matlabas River should also be assessed. 	G. Tyler	Letter (25/10/2018)	Nemai Consulting	Recommendation to be included in Section 16.4 of the Draft EIA Report.
430.	<ul style="list-style-type: none"> Similarly, the Bierspruit and Sand River, which were not assessed as they were dry at the time of sampling, should be assessed during the wet season (February-April). 	G. Tyler	Letter (25/10/2018)	Nemai Consulting	Recommendation to be included in Section 16.4 of the Draft EIA Report.
431.	<ul style="list-style-type: none"> A fish way must be constructed at the Vlieëpoort Weir in consultation with a fish expert. 	G. Tyler	Letter (25/10/2018)	Nemai Consulting	Note that the following recommendation is already included in Section 16.4 of the Draft EIA Report: <i>Make provision for a fishway at the Vlieëpoort Abstraction Weir, based on the considerations stipulated in the Baseline Aquatic and Impact Study.</i>
432.	<ul style="list-style-type: none"> The long-term impacts on the geomorphology of the receiving river downstream of the Vlieëpoort Weir due to the interception of sediments should be investigated. 	G. Tyler	Letter (25/10/2018)	Nemai Consulting	Recommendation to be included in Section 16.4 of the Draft EIA Report.
433.	<p>2. <u>Wetland delineation and Assessment Report (Index 2018)</u> The wetland specialist report identified floodplain areas</p>	G. Tyler	Letter (25/10/2018)	Index (wetland specialist)	A simulation was done as part of the EIA to determine the levels of the water following construction of the weir. This simulation indicates the area that would be

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	<p>(including oxbow lakes) upstream of the weir. The report states that the area of inundation will not extend into these riparian and floodplain areas. Instead it states, "Abstracting water at the Vlieëpoort Weir will likely cause fluctuating river levels upstream. Flow level variation is a natural process at present. While the effect may be exaggerated when pumping commences, the impact is unlikely to be significant. The riparian zone may increase in size because of the raised water level."</p> <p>It remains unclear what the functional importance of these floodplain wetlands and riparian areas are. Based on the Terrestrial Fauna and Flora Specialist Report (Nemai 2018), these floodplain wetlands play an important role in biodiversity support (including providing habitat for threatened species). The impact of inundation and associated fluctuations in water levels is therefore unclear. It seems likely that fluctuating water levels will impact on riparian zones and floodplains, at least at certain times of the year. No riparian vegetation assessment is available in this report. There is also no discussion on the effect of reduced flows downstream of the weir on adjacent riparian and floodplain areas.</p> <p>Several pans were identified along the pipeline routes. No detailed information has been provided on the wetland vegetation or fauna found within these pans and photographs have not been provided for all pans. The pans are collectively described as follows in Table 9: "Habitat and biota will not be affected by construction of the pipeline" and, in the conclusion, "The construction of the pipeline through the depressions pose low risk and will only influence the habitat for the duration of construction. However, it is possible to move the pipe alignment to miss the pans altogether."</p> <p>These findings contradict the findings of the Terrestrial Fauna and Flora Specialist Report (Nemai 2018) which mentions that habitat for threatened species (including Storks and African Bullfrogs) exists within certain pans. Threatened species were also recorded within the floodplain wetland and riparian areas</p>				<p>inundated once the weir is operational is not dramatic.</p> <p>Upstream: Vlieëpoort Weir is a relatively low weir with minimum storage capacity on a large river with limited flood absorption capacity during moderate flooding (outflow<inflow) and no flood absorbing capacity during significant to extreme flooding (outflow=inflow). Land is acquired to 1:100 event plus 1,5/15m buffer zone. Thus no releases required upstream as water levels will be higher than status quo situation. Vegetation below full supply level will die.</p> <p>Downstream: ELWU retained but it already included some return flow during the "qualifying period". The River Management System will endeavour to keep Vlieëpoort Abstraction Works as close as possible to full supply level for operational purposes. River will return to conditions before qualifying period. Flood levels are largely unchanged due to insignificant flood absorption capacity of Vlieëpoort Abstraction Works.</p> <p>The gauging station at Vlieëpoort Abstraction Works and thus River Management System will be used to check whether the ELWU is released and if any other possible obligations are met.</p> <p>The wetland study focused on soil conditions and vegetation as indicators of wetlands. Riparian vegetation is discussed in detail in the 'Baseline Aquatic and Impact Study for the Proposed Mokolo and Crocodile (west) study that was compiled by The Biodiversity Company as part of the present EIA.</p> <p>Following mitigations suggested in the report, the pipeline route will be placed outside of the pan and its buffer. Because the route misses the pans, the vegetation was only described in general.</p> <p>The report was updated and includes more detail on</p>

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	<p>associated with the Crocodile River upstream and downstream of the Vlieëpoort Weir.</p> <p>The following additional information is absent from the report:</p> <ul style="list-style-type: none"> • Loss of wetland areas have not been quantified. • The presence or absence of NFEPA wetlands (Driver et al. 2011) was not discussed. • Wetland functional assessments of the wetlands affected by the proposed activities using the WET-EcoServices tool. <p>In summary, the wetland assessment report does not provide detailed ecological information on the wetlands that will be affected by the activities. Authorisation should therefore be subject to the following conditions:</p> <ul style="list-style-type: none"> • A riparian vegetation assessment- based on VEGR_1 level 3- both upstream and downstream of the weir- including impacts due to inundation upstream of the weir and decreased flows downstream of the weir. • A wetland functional assessment of pans and floodplain wetlands- including impacts due to inundation upstream of the weir and decreased flows downstream of the weir. • A wet-season fauna and flora assessment of pans to determine the presence of threatened plant and animal species. • The re-routing of the pipeline to avoid pans. 				<p>vegetation and a list of species found at the pans (refer to Section 6).</p> <p>The wetland study should be seen as part of a multidisciplinary evaluation. Threatened species were note identified as part of the wetland study. It is discussed in the 'Baseline Aquatic and Impact Study for the Proposed Mokolo and Crocodile (west) study that was compiled by The Biodiversity Company as part of the present EIA.</p> <p>The extent of wetland loss is described in Section 6.2 in the updated wetland report. The sizes are as follows:</p> <ul style="list-style-type: none"> • Vlieëpoort Weir: <ul style="list-style-type: none"> ○ Wetlands: <0,5 ha. ○ Riparian vegetation: 11,4 ha. • Inundated area: <ul style="list-style-type: none"> ○ Wetlands: none. ○ Riparian vegetation: Uncertain. • Matlabas Crossing <ul style="list-style-type: none"> ○ Wetlands: none. ○ Riparian vegetation: <0,5 ha. • Pans in on the northern sandy plains <ul style="list-style-type: none"> ○ Where the pans are inundated for prolonged periods of the year and wetlands have developed, the pipeline route suggested is outside of the wetland and its buffer. No wetlands will be lost. ○ Taaiboschpan will be temporarily inundated during the rainy season. <p>NFEPA was added as a section in the updated report. Refer to Section 3.</p> <p>The report was updated to include EcoServices. Refer to Section 8.3.</p> <p>The following is noted with regards to the suggested conditions of the authorisation:</p>

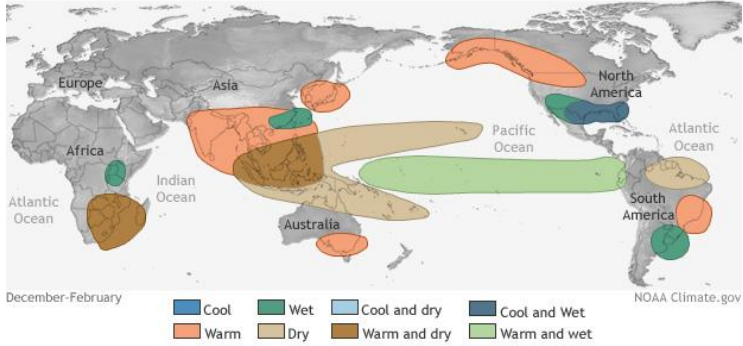
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				DWS Index (wetland specialist)	<ul style="list-style-type: none"> • It is the opinion of the wetland specialist that a riparian vegetation assessment at Level 3 will not significantly contribute to the wetland functioning for the reasons indicated in Bullet Point 1 above. • The pans will not be traversed; the routing in all instances is outside of the wetland and its buffer. The functioning is not expected to be influenced. <p>Augmentation of water to the Crocodile River from the sewerage processing plants at the northern part of Johannesburg and from Pretoria is the source of the water that is proposed to be pumped to Lephalele.</p> <p>As indicated in Bullet Point 1 above, Vlieëpoort Weir is a relatively low weir with minimum storage capacity. The level of the river upstream of the weir will continuously change and the impact will vary as the volume of water from Gauteng increases.</p> <p>The River Management System will address the environmental demand as one of the water users.</p> <p>Legal water use entitlements to water users up and downstream of the Vlieëpoort Abstraction Weir will not be affected. This implies that the flow downstream will be maintained, if available.</p> <ul style="list-style-type: none"> • The pans will not be traversed; the routing in all instances is outside of the wetland and its buffer. The functioning is not expected to be influenced. • The pans will not be traversed; the routing in all instances is outside of the wetland and its buffer. Pans are, therefore, already avoided (refer to Section 10.3).
434.	Proposed Mokolo and Crocodile River (West) Water Augmentation – Project (Phase 2A) (MCWAP-2A): Water Transfer Infrastructure (“The Project”)	Paul Ferraris (on behalf of Lawrence)	Email and Reply Form (26/10/18)		Refer to response to No. 413 with regards to the implications of MCWAP-2A on Hartbeespoort Dam.

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	<p>I am resident at the Coves Estate in Hartbeespoort and I am opposed to the proposed action by the Department of Water and Sanitation. I hereby register as an Interested and affected party for the above mentioned proposed project. I oppose the Project for reasons which I elaborate on below:</p> <p>2.1. Security: The drainage of water from the Hartbeespoort Dam directly in front of houses at the Coves Estate would compromise security to the Estate as the dry dam would provide easy access to outsiders on foot. The cost of security would increase dramatically on account of the following:</p> <p>2.1.1. Significant financial outlay for the costs of removable security barriers/fencing to control access from the dry dam (some waterfronts are in excess of 600 meters in distance); and</p> <p>2.1.2. Expensive and labour-intensive manpower for additional security.</p> <p>2.2. Value of Property in surrounding area: 2.2.1. Property in the Hartbeespoort Dam area, more specifically, waterfront properties in estates such as the Coves are marketed based on, amongst others, their views of and access to Hartbeespoort Dam, the possibility of erecting private jetties on the property foreshore (in front of their house), fishing from private decks, the ability for all estate owners to access and enjoy the Hartbeespoort Dam for recreational use from the comfort of their own estate harbour access etc. Properties such as those in the Coves Estate are sold to purchasers based on the idea of <i>"buying into a lifestyle"</i>. The Project would greatly reduce property prices in the area because of the difficulty of re-selling, based on the diminished offering.</p> <p>2.3. Local Tourism Hartbeespoort Dam has become a very popular holiday and weekend resort for the inhabitants of Johannesburg</p>	Schultz)		<p>2.1. Nema Consulting</p> <p>2.2. Nema Consulting</p> <p>2.3. Nema Consulting</p>	<p>2.1. The Socio-Economic Impact Assessment (Appendix I6 of the Draft EIA Report) identified the security risk to estates through greater beach area during low dam water levels. The aforementioned study noted the following in this regard:</p> <ul style="list-style-type: none"> ○ A risk analysis of the security impact would have to be carried out by individual properties and this would consider the topography adjacent and next each property, as well as distances to roads and other public access points. ○ As mitigation, notification would need to be provided to dam users of the completion of the project to allow time for such properties to re-evaluate their security measures. <p>2.2. The Socio-Economic Impact Assessment (Appendix I6 of the Draft EIA Report) considered the impact to property values. The study notes that should the proposed project impact upon property values, a relevant question is: to whom does the responsibility for the value change lie; the project proponent; or to the property owner? It is commonly accepted that any additional value ascribed to the property through the more or less constant dam water levels over the years would accrue to the property owner, despite the fact that the owner of the dam (the DWS) is under no obligation to maintain water levels constant. The reverse would also be true, a fall in the additional value of the property created by the more or less constant water levels, would also fall to the property owner.</p> <p>2.3. The Socio-Economic Impact Assessment (Appendix I6 of the Draft EIA Report) considered the impact on tourism. The study notes that the impact upon the economy through direct losses related to tourism can be seen through the lens of the diversified structure of the local economy. The contribution of</p>

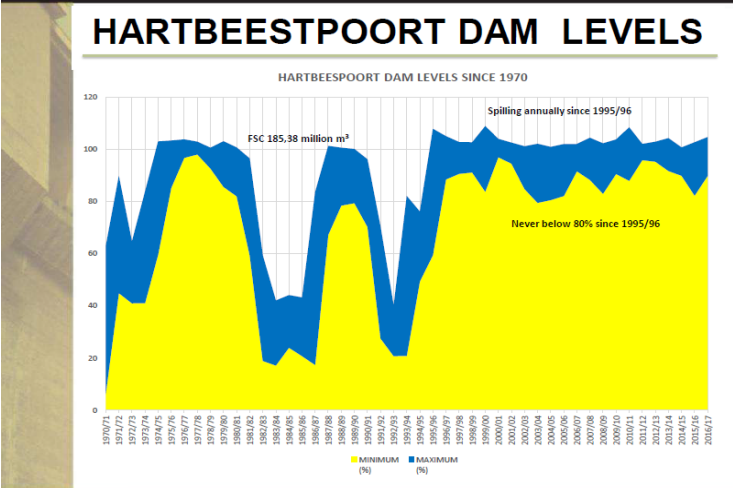
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	<p>and Pretoria. It is the principal water recreation area of northern Gauteng and many types of water sports are enjoyed on the dam. The Transvaal Yacht Club has been operating at Hartbeespoort Dam since its construction in 1923. This leads to the local community benefiting from the influx of these weekend tourists as considerable amounts of money spent by these individuals with the local community surrounding the dam. Should there be a fall-off in numbers of these weekend tourists, a significant financial impact on the local community will result.</p> <p>2.4. Bore Hole Water and Purification System</p> <p>2.4.1. The Coves Estate uses borehole water and a purification system. Should the dam level drop significantly, this could very well impact the water table and borehole system leaving the residents without potable water. A detailed study must be conducted in this respect before any decision is taken with regard to diverting of any percentage of the dam water.</p> <p>2.5. Dam Water</p> <p>2.5.1. It is my submission that water of the Hartbeespoort Dam belongs to all residents and people of the surrounding area and is only managed by the Department of Water and Sanitation. The National Water Act No 36 of 1998 specifically recognizes that "water is a natural resource that belongs to all people". I therefore believe decisions relevant to the Project should be made collectively by all relevant parties with a specific focus on those directly affected by the Project i.e. the residents and local community of Hartbeespoort Dam.</p> <p>2.6. Other Reasons.</p> <p>2.6.1. Hyacinth impacts. What will the impact be when the dam is at 60% and what impact will the reduced dam level have on the various seeds on the shoreline?</p>			2.5: DWS	<p>the economy of the catering and accommodation sector is 0,92% of the economy of the local municipality, data does not exist to determine the contribution of catering and accommodation related to direct access to the water's edge. However, it is likely to be a fraction of the total figure.</p> <p>Water levels will likely be lowest in the winter or early spring, with level returning to the full supply level during the late spring and summer months. Leisure tourism with a focus on the water surface has its peak seasons during spring and summer and the impact upon tourism is mitigated through this seasonal effect.</p> <p>2.4.Refer to the response to No. 411 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on boreholes.</p> <p>2.5.The Minister as the Trustee has the authority to decide on the utilisation of the water considering the needs for domestic, agriculture, industrial, environmental and recreational use. This authority is exercised in terms of Section 3 of the NWA.</p> <p>The Minister is also mandated to approve the MCWAP-2A in terms of section 109 subject to Environmental Authorisation (section 110). Also take note of Government's obligation to supply water to Medupi.</p> <p>2.6.See No. 290 for responses to impacts on hyacinth levels.</p> <p>3. See responses above.</p>

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	<p>2.6.2. Fish and aquatic life studies. With a potential of having 30-40% less water during the dry months in Hartbeespoort Dam, a detailed study would need to be undertaken on the impact on fish and aquatic life.</p> <p>3. I formally object to the proposed Project due to the reasons mentioned above. It is obvious that various detailed studies would need to be undertaken at great cost prior to even contemplating going ahead with the Project.</p>				
435.	<p>Preamble It must be stated right from the onset that the public meetings should have taken place with much more emphasis during the EIA planning stages of the Medupi Power Station. The significance of the draw down should have been made abundantly clear to all the citizens that rely on the Hartbeespoort Dam. It seems clear to the locals that Government and DWS hold the view that the Dam is seen as a playground to the rich for the various water sport past times for which it can be used. The reality is that the dam was originally built as an agricultural storage facility. Many farmers and indeed the regional economy are extremely dependant on the dam for their livelihood. While the mines in the area provide employment to a large portion of the population many more work in sectors that but for the dam would not exist. The dam has attracted residential development to the area and much of that is concentrated on the perimeter of the dam but there is vastly more residential development radiating away from the shoreline that has come about due to secondary commercial development as a result of the dam's existence. The presentation did reference the inconvenience to water sport enthusiasts when the dam level drops. This only emphasises the point alluded to in my earlier paragraph referencing the official view. I have no intention to regurgitate the scientific information presented in worldwide studies. They are easily found on the internet and in some instances I have provided the links. Suffice to say my assumptions are taken from those studies.</p>	D. Holmes	Letter (26/10/2018)	DWS	<p>Refer to the following responses:</p> <ul style="list-style-type: none"> • No. 413 with regards to the implications of the MCWAP-2A on Hartbeespoort Dam; • No. 411 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on boreholes; and • Refer to response to No. 434 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on security, property value and tourism. <p>The intention to use the increased yield due to artificial augmentation of the Hartbeespoort Dam for urban and industrial use in the region was already communicated as early as 1982 (White Paper L'82). Same was included in the NWRS-1 of 2004 and NWRS-2 of 2013. The NWRS' were completed following processes wherein the general public could participate freely. NWRS now part of RSA Law.</p> <p>The DWS is satisfied that the Reconciliation Strategy meets best practice standards. The DWS will continue to monitor and update as required.</p> <p>DWS do not agree with interpretation of water level statements by IAP.</p>

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	<p><u>Concerns to be Addressed</u></p> <p>Entryways to the dam There are 10 water treatment plants located within the Harties catchment area. None of which are maintained and controlled to the standard demanded in the water act. Many of these having at best periodic spillages. The Jukskei and Hennops rivers carrying large quantities of pollutants.</p> <p>Rainfall Not all factors have been built into the impound levels.</p> <p>It is widely accepted that ENSO (El Nino Southern Oscillation) affect our rainfall. However it is not the only factor that has influence. The Sea – Surface Temperature in the Indian and Atlantic oceans have been found to also influence South Africa's weather patterns. The analysis has been found to a more accurate forecast over the 100 year period – c1900 to 1998. (https://rmets.onlinelibrary.wiley.com/doi/pdf/10.1002/joc.656) In fact it has been found that we have experienced extreme drought situations at times when the El Nino effect has been mild. However, there have been occasions when El Nino and raised SST's have combined to produce really severe droughts. Such events have not been built into your study. During the northern winter of 2018 South Africa will experience a warm and dry summer – December to February as shown below.</p>				

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE BY	RESPONSE				
	<p>EL NIÑO WINTER IMPACTS</p>  <p>December-February NOAA Climate.gov</p> <p>Legend: ■ Cool ■ Wet ■ Cool and dry ■ Cool and Wet ■ Warm ■ Dry ■ Warm and dry ■ Warm and wet</p> <p>The combined effect of a low summer rainfall followed by a dry winter seen as a combined factor in your post 2024 scenario will have a far more profound effect on the level of the impoundment than your study is forecasting. It is also widely acknowledged that the mean average world temperature is on the rise. Warming is projected to occur in Africa during the 21st century with a plausible increase of 4 – 6^o C over the subtropics while SAWS claims that South Africa is warming faster than the global average. All of these factors will push the rainfall down. Your model will need to include the above elements in order to produce an accurate forecast. El Nino years have been associated with below average rainfalls, the impact has in some events been reduced by the sufficiency of ground water and soil water content carried over from previous seasons. The driest continuous period was 1930 to 1933 while the longest period of consecutive dry years was 1944 to 1949. In addition to the mentioned years the 1960's and 1982 – 1983 and 1991 - 1992 also recorded low rainfalls, the latter two periods being recorded as the most severe meteorological droughts of the 20th century but 2015 is notably the driest year in over 112 years.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Rainfall (mm)</th> </tr> </thead> <tbody> <tr> <td>2015</td> <td>403</td> </tr> </tbody> </table>	Year	Rainfall (mm)	2015	403				
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No.	COMMENT / QUERY / ISSUE		RAISED BY	SOURCE	RESPONSE BY	RESPONSE
	1945	437				
	1992	440				
	2003	446				
	1935	451				
	1919	451				
	1965	452				
	1926	468				
	1916	476				
	1927	488				
	1912	493				
	1982	496				
	1941	496				
	<p>It is interesting to note that as per your graph of dam levels, (slide 29), the dam level in 2015 did not drop to below 80% but it did come within a whisker of reaching the 80 % mark. Extrapolate that to the 2024+ scenario and drop the level by a further 6 meters the dam will be closer to the 30% mark. Desperately close to the lowest outlet point. 1992 to 1994 was obviously also an extremely dry period. In that event there would not have been sufficient water to allow the pumping to reduce the level by 6 meters. I can only think that the reason the dam did not drop below 80% in 2015 was due to the increased development in the Gauteng region resulting in higher flows through the water treatment plants in our catchment area.</p>					

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE BY	RESPONSE
	 <p>HARTBEESTPOORT DAM LEVELS</p> <p>HARTBEESTPOORT DAM LEVELS SINCE 1970</p> <p>FSC 185,38 million m³</p> <p>Spilling annually since 1995/96</p> <p>Never below 80% since 1995/96</p> <p>MINIMUM (%) MAXIMUM (%)</p> <p>29 WATER IS LIFE - SANITATION IS DIGNITY Toll Free: 0800 200 200 www.dwa.gov.za</p> <p>Know that the severest of the dry years are definitely not behind us it is obvious that the rose tinted glasses model presented at the meeting seems to be far removed from any form of reality. It would be prudent to re-look at the bigger picture and re-align the forecast bringing it closer to reality.</p> <p>Economic Development Economic Value Table</p>				

No.	COMMENT / QUERY / ISSUE				RAISED BY	SOURCE	RESPONSE BY	RESPONSE																																												
	<table border="1"> <thead> <tr> <th>Economic Sector</th> <th>Gross Value Added [2007, R' millions]</th> <th>Gross Value Added [2017, R' millions]</th> <th>Compound Annual Growth Rate [%]</th> </tr> </thead> <tbody> <tr> <td>Mining and quarrying</td> <td>R9 128</td> <td>R10 121</td> <td>1,04%</td> </tr> <tr> <td>General government</td> <td>R3 217</td> <td>R4 578</td> <td>3,59%</td> </tr> <tr> <td>Finance, insurance, real estate and business services</td> <td>R2 955</td> <td>R3 911</td> <td>2,84%</td> </tr> <tr> <td>Wholesale and retail trade, catering and accommodation</td> <td>R3 142</td> <td>R3 760</td> <td>1,81%</td> </tr> <tr> <td>Manufacturing</td> <td>R2 250</td> <td>R1 940</td> <td>-1,47%</td> </tr> <tr> <td>Transport, storage and communication</td> <td>R1 449</td> <td>R1 786</td> <td>2,11%</td> </tr> <tr> <td>Community, social and personal services</td> <td>R999</td> <td>R1 337</td> <td>2,96%</td> </tr> <tr> <td>Construction</td> <td>R737</td> <td>R948</td> <td>2,55%</td> </tr> <tr> <td>Agriculture, forestry and fishing</td> <td>R472</td> <td>R573</td> <td>1,96%</td> </tr> <tr> <td>Electricity, gas and water</td> <td>R531</td> <td>R469</td> <td>-1,23%</td> </tr> </tbody> </table>	Economic Sector	Gross Value Added [2007, R' millions]	Gross Value Added [2017, R' millions]	Compound Annual Growth Rate [%]	Mining and quarrying	R9 128	R10 121	1,04%	General government	R3 217	R4 578	3,59%	Finance, insurance, real estate and business services	R2 955	R3 911	2,84%	Wholesale and retail trade, catering and accommodation	R3 142	R3 760	1,81%	Manufacturing	R2 250	R1 940	-1,47%	Transport, storage and communication	R1 449	R1 786	2,11%	Community, social and personal services	R999	R1 337	2,96%	Construction	R737	R948	2,55%	Agriculture, forestry and fishing	R472	R573	1,96%	Electricity, gas and water	R531	R469	-1,23%							<p>Around the world wherever there is mining a town will develop. However, the town will grow to a population size that supports the quantum of mining activity. Adding water to the mix such as a dam or a lake immediately changes the profile and dynamic of the whole area with the inclusion of tourism. It is notable that outside of mining and government (R 14,699 Mil) the rest of commerce totals R 13,387Mil. 48% of the area's total economy. Brits has some mines but Harties has the dam and the tourism. Close the mines at Brits, the economy will take a dip due to the loss of income but damage the dam and the whole place will die. During 2016/17 when DWS stopped funding Metsi-a-Me, property prices dropped. Since renewed action started through the Steering Committee and now the Harties Foundation it is notable that house prices are starting to inch their way up again and will continue to do so as success is perceived with the hyacinth. This is not merely because of the rich wanting to boat on the water but is indicative of the direct relationship between the economic power of tourism and the survival or growth of the rest of the economic variants such as shops, supermarkets, tourist attractions and other service providers. It is an established fact</p>
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	<p>that every tourism Rand runs through the economy four times. The benefit to the economy is in the region of R 3.28 for each Rand spent. If only half of the commercial benefit stated above is attributable to tourism, R2Mil can be assumed to come from tourism in one form or other but to be fair it will be closer to R 5.5Mil. Harties has become world renowned as a tourist venue. There are many tourist both local and foreign that have enjoyed themselves in Harties to such an extent that they have invested in assets in the area because they come to Harties so frequently. Most of the residential estates around the dam have developed due to this scenario. More than R120Mil per annum is paid to the municipality annually in property rates from development emanating from this source. It is therefore unacceptable for the study to assume that to use the water to the extent that it is proposing and that the people around the dam must just “suck it up” creating the possibility of a major tourism fiasco is grossly irresponsible.</p> <p>Dwelling Table</p> <table border="1"> <thead> <tr> <th>Dwelling Type</th> <th>Totals</th> <th>% of Total</th> </tr> </thead> <tbody> <tr> <td>House, separate stand</td> <td>10 095</td> <td>48,0%</td> </tr> <tr> <td>Traditional Dwelling</td> <td>162</td> <td>0,8%</td> </tr> <tr> <td>Townhouses/Flats</td> <td>864</td> <td>4,1%</td> </tr> <tr> <td>Backyard Dwelling or Flatlet</td> <td>1 575</td> <td>7,5%</td> </tr> <tr> <td>Informal Dwelling</td> <td>7 977</td> <td>38,0%</td> </tr> <tr> <td>Not Applicable, Other and Unspecified</td> <td>344</td> <td>1,6%</td> </tr> </tbody> </table> <p>Income Value Table</p>	Dwelling Type	Totals	% of Total	House, separate stand	10 095	48,0%	Traditional Dwelling	162	0,8%	Townhouses/Flats	864	4,1%	Backyard Dwelling or Flatlet	1 575	7,5%	Informal Dwelling	7 977	38,0%	Not Applicable, Other and Unspecified	344	1,6%				
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	Income Values [No. of Households]	Totals	% of Totals				
	Very Low Income [R1 - R9 600 pa]	2 159	19,1%				
	Low Income [R9 601 to R38 200 pa]	3 908	37,7%				
	Middle Income [R38 201 to R614 400 pa]	2 882	36,5%				
	High Income [R614 60 and above pa]	567	6,7%				
	Totals :	9 516	100,0%				
	<p>Calculating out the Income Value Table for the number of households earning Range for the 9516 households is between R496 Mil and R 2,441 Mil. The above two tables do not state the period to which these stats apply. According to the 2011 Stats SA listing Madibeng has 160724 households broken down into the following main components:</p> <p>Agricultural 23621 Hartbeespoort 9012 Brits 8489 Mooi Nooi 4733</p> <p>The balance of 114869 households is assumed to be in various townships or rural settlements/camps. The stats schedule further shows that Madibeng population is 477381 and if our understanding of the numbers is correct 69.2% of the population is of working age (330348) and the unemployment rate is 30.4% (100426) leaving 229922 employed. According to the Economic Value Table the above population contributes R 28,086 Mil. While earning R2,441 Mil at best. Assuming the Income Value Table to be inaccurate when seen against Stats SA 2011 it would be reasonable to re-calculate the areas earnings. This has been done using the same proportional relationship for each of the earning brackets as applied to the Stats SA listing.</p>						

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	<p>With the earning probability adjusted in line with Stats SA, the earnings for the area suddenly become more significant (between a low of R9,438 Mil and a high of R 45,329Mil).</p> <p>Summary</p> <ul style="list-style-type: none"> • Global warming will have a far greater effect on the rainfall than initially predicted • ENSO and SST are to be built into the rainfall calculations • It would be prudent to assume that the dry cycles will start to occur more frequently and closer together • Result – impoundment levels will drop much further than currently predicted • Longer and more frequent drought episodes will cause the water table to drop so when the rains arrive the water table will be replenished first before there is significant drainage to the dam • Water Treatment Plants are not likely to improve • Spillage and untreated effluent will seriously impact on the dam particularly when levels are critically low. Lower dilution factor • Higher levels of cyanobacteria will impact negatively on investment and tourism to the area • The dam will be seen as a smelly festering swamp area for a number of months of the year • Local economy will be seriously and adversely affected 																																											

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	<ul style="list-style-type: none"> • Lower impoundment levels could mean no available water for agriculture if the dam falls below 20% • No viable agriculture will drive prices up • There would also be no water for Lephale • As water levels drop towards critical, pumping to Medupi would not be slowed down as the power station will be seen as a critical facility that would be favoured even above local agriculture • Additional options need to be seriously considered to pump water from other areas to Hartbeespoort is the area is to be sustainable <p>Conclusion A more realistic and pragmatic set of studies need to be carried out as a matter of urgency to ensure the viability of the whole scheme.</p> <p>Everyone needs to be very honest about the real impact on the whole of this area and the Billions that have already been invested by the private sector. The stakeholders have to be assured that their investments are being considered and assured of protection in the future.</p> <p>Every citizen in the area has an investment and is entitled to know that Government is not pushing them aside for its own goal.</p> <p>It is a very weak excuse to maintain that this development is necessary for the economic wellbeing and development of an emerging environment that will be fostered at the cost of an established and vibrant economic area to the extent that a possible livelihood of between R9,438Mil and a possible R 45,329Mil will be sacrificed to achieveWhat?</p> <p>It is with the utmost respect for the learned academics associated with all the work that has already been done that this request for another assessment be undertaken and as a matter of urgency.</p>				

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436.	<p>Why was the local press not informed?</p> <p>Tourism plays a big part – why is it being down played?</p> <p>Property values is the hardest hit developments should be considered – it is appalling that we are being ridden over roughshod in this way.</p> <p>It appears that there was little interaction to alert the public, as was obvious by the poor attendance at the last meeting. Were the various developments around the dam’s estate managers not notified? Only West Lake seems to have been. And why were the “specialists” not fully cognisant of the effect on boreholes. It all seems rushed and poorly prepared.</p> <p>Hartbeespoort dam’s water is polluted so it will add to the pollution caused by the Medupi power station.</p>	A. Gmur	Reply Form (28/10/2018)	Nemai Consulting	<p>Notices were placed in the following newspapers:</p> <ul style="list-style-type: none"> • The Star; • The Daily Sun; • Die Kwêvoël; • Kormorant (community newspaper in Hartbeespoort); • Beeld; and • Mogol Pos. <p>A public meeting was also held with IAPs situated by Hartbeespoort Dam on 13 March 2018 during the public review period of the Draft Scoping Report. During this meeting it was suggested that a focus group meeting be convened with a group of representatives from Hartbeespoort Dam. This meeting took place on 25 April 2018.</p> <p>Requests were made with various parties to source databases for Hartbeespoort Dam to supplement the contacts in the IAPs’ database. Mr. Frans Ellis offered to distribute all EIA notifications to the distribution list for estates surrounding Hartbeespoort Dam.</p> <p>Refer to response to No. 434 with regards to the influence of Hartbeespoort Dam’s fluctuating water levels on property value and tourism.</p> <p>The maximum re-use of the water will be promoted for the users that receive water from the MCWAP-2A. The water will thus not be discharged by these users.</p>
437.	<p>It came to my attention that the Crocodile Mokolo water project passes by the Farm Enkeldraai. We want to bring it to your attention that I as the owner will in no way oppose the project. It has come to my attention that there is a concern about the water pans in the neighbouring farm where the pipeline would be as the planned route. My recommendation is that the pipeline is moved to the Enkeldraai side. There is already existing Eskom powerlines on the Enkeldraai side with a servitude access road. In this way no natural water pans will</p>	T. J. Sauer	Reply Form (29/10/2018)	Nemai Consulting	<p>Alternative D1 was identified as the preferred alternative pipeline route in the northern section of the project area. The exact routing of the pipeline within the 100m corridor that was assessed as part of the EIA will be optimised and confirmed during the design phase.</p> <p>A meeting was held with the landowners of the neighbouring farm (Taaiboschpan) on 31/10/2018. During this meeting the landowners further expressed</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE BY	RESPONSE
	<p>be disturbed. Should there be problems, there is also another suitable route. The pipeline can be located further along the railway line until where the farm Enkeldraai borders the railway line and then turn the water pipeline through the farm Enkeldraai until its destination. This will mean that only one private farm is affected by total development. An off-take point is requested if it is activated, whether the pipeline is on Enkeldraai or neighbouring farms. You can contact me for any further inquiries.</p>				<p>their concern regarding the impact that the pipeline will have on the pan located on their property.</p> <p>Refer to No. 399.</p>
438.	<p>I would like to take this opportunity to comment on your intended MCWAP project. In the previous meetings we discussed about the impact that the pipeline will have beyond just construction. At the recent meeting, Mr. Jaap Kroon clearly said the project could not be held responsible for the cumulative impacts. However, he stated that the project is essential for the water supply for Eskom's FGDs. These are double standards. If the project does not take into account the impacts of the projects for which they provide water, they cannot take responsibility and use an excuse to supply water to the mentioned projects. If MCWAP is responsible for the operation of secondary projects, MCWAP is also responsible for its impact. The project ends in the Steenbokpan area, and it is therefore logical to assume that very few local people will benefit from the employment of this project. Our people can only rely on a few months of general work. It's no benefit to the people of this area.</p> <p>The water coming to the area, not a single drop of water comes to Steenbokpan or its people. I understand that Eskom will provide some of its water quota to the town. Steenbokpan or any other rural community does not get water from the town and will therefore not benefit from this project at all. The project therefore does not have any benefits for Steenbokpan and the people do not want it.</p> <p>The benefits that the project has for the larger Lephalale area is debatable for the following reasons:</p> <ul style="list-style-type: none"> The project brings grey water to the area and as far as we hear it will have a very negative impact on farmers in the 	E. Greyling	Email (29/10/2018)	<p>Nemai Consulting</p> <p>DWS</p>	<p>Refer to Section 13.23 in the Draft EIA Report, as well as the response to No 320 with regards to cumulative impacts.</p> <p>The climate change and socio-economic impacts directly associated with the power stations, coal mines and other intended water users need to be assessed as part of the respective environmental assessments undertaken for each of these developments, as they are the sources of the impacts. Any conditions and mitigation measures to address impacts associated with these developments will need to be imposed on and implemented by the respective project proponents.</p> <p>Co-operative requirements in terms of the Constitution (Chapter 3) must be sighted. Eskom is responsible for electricity and the DWS for water. The DWS supplies Eskom with water throughout the RSA. Note government guarantees and obligations provided to the World Bank and the African Development Bank.</p> <p>The DWS as a Government Department that complies with national governments SIP imperatives, legalised following public involvement.</p> <p>The MCWAP-2A is planned to convey bulk raw water. The pipe has been sized enabling abstraction by users for treatment and reticulation, e.g. Steenbokpan.</p> <p>Refer to responses to comments received in previous</p>

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	<p>Makoppa area which will suffer significant job losses. These are mostly farm workers, who usually do not have official qualifications, and who cannot easily find alternative jobs.</p> <ul style="list-style-type: none"> • The purpose of MCWAP is to unlock the raw materials of the Waterberg. This means the purpose of the project is to provide coal mines and coal-fired power stations with water. Our community is still in the process of restoring the impacts of building Medupi. We gained a lot of experience. • Coal projects offer temporary work, which makes people just used to making more money. Many people blame themselves and struggle to get used to smaller salaries. The businesses in the town also suffer from it. Many businesses spend too much money, and are now struggling to repay debt. Many closed or became bankrupt. • People entered the town with the hope of work. This increased the unemployment rate of the area because it is now higher than ever before. • Teens leave school, become pregnant and are left behind with fatherless babies. • Prostitution, violence and crime are taking place with drug and alcohol abuse. • The infrastructure of the town cannot bear the burden. Sewer flows in to the Mogol River. There is poor water pressure and poor waste disposal. • Then there is the destruction of roads by heavy vehicles to which MCWAP will have a direct impact on. • Pollution increases: air, water, soil, noise pollution is a major problem. • MCWAP will provide water for the proposed Thabametsi. The project will make a huge impact on greenhouse gases. <p>Regardless of the contradictions, Nemai Consulting, and everyone involved in MCWAP, must realize that you are here with the final nail in the bushveld's coffin. It's a project we do not need and we definitely did not ask for. To simply say</p>			Nemai Consulting	<p>letters from Makoppa Agriculture in No. 210 – 222, as well as No. 401.</p> <p>With regards to the maintenance of the roads used as part of the proposed project, refer to Section 12.4. (Management of Existing Services and Infrastructure) and Section 12.4.5 (Management of Access and Traffic) of the EMPr (Appendix K of the Draft EIA Report).</p>

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	Medupi needs water for three units FGD, does not justify water supply for Thabametsi and other projects like Temo and Namane coal.				
439.	<p>I have already emailed Donovan Henning regarding the first item on Sunday 14th October at 4:30pm.</p> <p>Water table and boreholes on the western side of the dam There is no municipal water supply to the western end of Hartbeespoort Dam. There are several estates at this end of the dam, and they all use borehole water. If the dropping of the dam level will affect the water table on the western side of the dam, it will mean that the boreholes will be affected. If the water level drops below the level of the boreholes, there will be no water to these properties, and they will become uninhabitable.</p> <p>Security With the dropping of the dam level, the water will recede from the current shoreline. This means that the existing security measures will be insufficient, as anybody will be able to walk through the mud to the (current) shoreline of the estates and other properties, and gain access. It will be difficult to maintain security, as I doubt that we will be able to fence this off (as, if the water level comes back up because of especially high levels of rain in the catchment area, fences below the water level will be a hazard to any boats using the dam). Most residents of these estates live in them for the lifestyle, and security that is provided. To maintain the same level of security with no water will increase the costs of running the estates dramatically.</p> <p>Property values I could not believe what I was hearing when listening to the socio-economic impact of the proposed changes, and when questioned, the presenter stated that they “had not taken into account the property values being affected”. How can this be? Surely this would be one of the biggest items on the social-economic impact study? One of the reasons that people live around the dam is the access to water sports. If there is no</p>	P. Hollick	Letter (29/10/2018)	Nemai Consulting	<p>Refer to the following responses:</p> <ul style="list-style-type: none"> • No. 413 with regards to the implications of MCWAP-2A on Hartbeespoort Dam; • No. 411 with regards to the influence of Hartbeespoort Dam’s fluctuating water levels on boreholes; and • No. 434 with regards to the influence of Hartbeespoort Dam’s fluctuating water levels on security, property value and tourism.

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	<p>water in the dam to the west of the road bridge, the property values will drop dramatically, as there will be no means of launching boats, fishing, etc. Many of the houses that are directly on the dam currently have their own jetties/launching facilities. Westlake also has coves, which also give access to the dam. The immediate shoreline and coves will just become muddy banks. The valuation of these houses will be affected the most, and these are typically the most expensive houses in the area.</p> <p>If the water table is affected by the dropping of the dam level, these properties will be virtually worthless.</p> <p>Reduced rateable valuation/Municipal Rates A large percentage of the Municipal Rates for the Madibeng Municipality must come from residences around Hartbeespoort Dam. This municipality is already struggling financially (they are pretty much bankrupt), and the majority of their income must be made up of municipal rates. If the real value of the properties around the dam go down, there is no way that these residents will accept the current municipal valuations on these properties, and they will object to the valuations. When these are reduced, Madibeng's income will be reduced dramatically, and they will not be able to meet their commitments.</p> <p>Local economy (day visitors) I think that the supplied value for tourism as a percentage of the GDP of the three Wards was below 1%. The person who worked this out has probably not been to the dam of a Saturday or Sunday. I do not have any figures, but these people do not drive to the dam, and drive back home, without spending money in the area. For example, there is no point trying to go to our local Spar shop, or Wimpy restaurant, on a weekend unless you go very early, as they will be full. I doubt that the increase in turnover over a weekend has been captured under "tourism", but it is a big part of the local economy. The local petrol station is also busy all-day Saturday and Sunday. Many of the vehicles have trailers with boats on them, and they are filling up both the vehicle and the boat with</p>				

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	<p>fuel. Some of these vehicles have North West number plates, but a significant number come from Gauteng. I do not know what else was included or excluded from the “tourism” figure, but if something so basic as this is likely to have been missed, I am sure that there is a lot more. There is no way that the tourism figure for Hartbeespoort Dam is less than 1%.</p> <p>The health aspect of dried mud and algae With the receding water levels, mud banks dry out. Along with the mud is the algae and hyacinth. When this is complete dry, and the wind gets up, this mix gets blown around the area. When the water level rises (typically during summer) the algae and hyacinth will start growing again. How dangerous is this mud/algae dust if it is breathed in? How likely is it to spread to uninfected areas?</p>				
440.	<p>Herewith our concerns, comments and questions regarding the above mentioned proposed project:</p> <ol style="list-style-type: none"> 1. What was the original plan for water for the Medupi project with the supporting mining activities and infrastructure? <ol style="list-style-type: none"> a. When was this additional water need identified? <ol style="list-style-type: none"> i. Medupi was constructed in a water scare area, close to the coal mines. What was the original thinking behind water supply? b. Please forward the original Water Needs study that was done. c. Confirm the current water usage (monthly / annual) for the greater Lephalale - Medupi district. d. Please confirm that the grey water is recycled in Lephalale e. What steps have been taken to build or extend existing dam capacity in Lephalale area – i.e. raising Mokolo Dam wall or building new dam. 2. Confirm the additional demand needed. 3. What is the forecasted demand for the total Medupi project, including all mines and supporting infrastructure. 4. What other options have been considered within Limpopo? <ol style="list-style-type: none"> a. What are the options for a Dam in the Limpopo 	M. Heyneke (on behalf of The Coves estate)	Letter (29/10/2018)	1c – 1e. DWS	<p>Refer to responses in No. 291 for similar comments raised.</p> <ol style="list-style-type: none"> 1. Refer to the following responses: <ol style="list-style-type: none"> a. No. 291 and No.435 with regards to the NWRS-1, NWRS-2 and earlier White Papers in previous regime. b. No. 291 for a list of the technical reports that are available on the MCWAP project website (www6.dwa.gov.za/MCWAP/technicalD.aspx). c. Refer to pre-feasibility studies and Reconciliation Strategies on the DWS Website. d. Treated effluent insufficient to meet increased requirements. Return flow to be used on site (No. 29). e. The MCWAP-1 augments the supply from Mokolo Dam and is already operational since June 2015. It serves as an interim measure to supply in the growing water requirements of Lephalale, Eskom and Exxaro. The sustainable yield of Mokolo Dam is not sufficient to meet the increased needs of the users including the pollution abatement measures (FGD) which is

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	<p>River?</p> <p>b. Waterberg – what options are available?</p> <p>5. Have the other dams in the Crocodile River been considered as the possible bulk storage dams; to absorb the fluctuations instead of the Hartbeespoort Dam?</p> <p>a. Vaalkop Dam</p> <p>b. Roodekoppies Dam</p> <p>6. What options are available from the Vaal Dam / Randwater supply system?</p> <p>7. Have you done a Social Impact Study for the Hartbeespoort Dam area, including:</p> <p>a. Tourism and Property Impact Assessment specific to the Hartbeespoort Dam.</p> <p>b. Have you done similar studies at the other possible options to compare the impacts?</p> <p>8. Hyacinth impacts</p> <p>a. What will the impacts be when the dam is at 60%?</p> <p>b. Seeds on the shoreline – what will the impacts be?</p> <p>9. Fish and aquatic life studies to be done on Hartbeespoort Dam and Crocodile River</p> <p>a. Potentially 30-40% less water during the dry months in Hartbeespoort Dam – what impacts will it have.</p> <p>10. Water quality study to be done</p> <p>11. Confirm the current silt levels in the dam, and the impacts on the actual holding capacity</p> <p>12. Confirm the current and projected inflow / outflow out of the Hartbeespoort Dam</p> <p>13. Confirm the estimated minimum water level of the Hartbeespoort Dam when this project is operational; during the dry season.</p> <p>a. Please confirm the direct impact on The Coves shoreline and the area west of the R512 Bridge (Magalies River inflow).</p> <p>14. Confirm the estimated fluctuation between the maximum and minimum levels when this project is under full demand.</p> <p>15. We have irrigation rights allocations (Portion 177 of the Farm De Rust 478 JQ) linked to the Hartbeespoort Dam.</p> <p>a. Will our rights be affected by this project?</p>			<p>2. Nemaï Consulting</p> <p>5. DWS</p> <p>8. Nemaï Consulting</p>	<p>an environmental and funding condition. A suitably sized transfer pipeline from the Crocodile River (West) can be implemented timeously to meet the increased requirements to support the RSA's economy. The solution will over the long term optimally utilise the full yield from Mokolo Dam and will be operated as a system together with the proposed MCWAP-2A when the latter is completed. The MCWAP-2A will also serve to provide the necessary assurance of water supply to the large end users from independent sources.</p> <p>It is noted that the volume of return flows exceed the volume that will be transferred by MCWAP-2A.</p> <p>2. Refer to Table 3 in the Draft EIA Report for the Combined Water Requirement Projection for the MCWAP, as well as Figure 4 for the Aggregated Water Requirement Projection.</p> <p>3. See response to bullet no. 2 above.</p> <p>4. Refer to No. 2 for response to alternatives, as well as Section 10 of the Draft EIA Report.</p> <p>5. It is best practice to keep storage in upstream impoundments thereby enabling storage for natural run-off when generated in intermediate downstream catchment.</p> <p>6. Refer to the response in No. 6 with regards to the Vaal System. In addition, also refer to the 2015 Reconciliation Strategy that is available of the DWS Website.</p> <p>7. Refer to the Socio-Economic Impact Assessment (Appendix I6 of the Draft EIA Report), Section 6.3.4 (Impact and mitigation assessment of Recreational or Tourism Business Impacts).</p> <p>8. See Section 3.4.1.3 from the Hartbeespoort Dam Specialist Opinion (Appendix I8 of the Draft EIA Report): Water hyacinth die back in the winter</p>

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	<p>b. With the dam level at 60%, how will we get access to the water source?</p> <p>c. Who will be responsible for our potential additional costs – moving pumps, additional energy costs, etc.</p> <p>16. What will the impact be on the Hartbeespoort Dam levels if Tshwane decides to recycle their grey water?</p> <p>17. What is the potential risks to Hartbeespoort Dam if this is done</p> <p>18. Water transfer from Johannesburg South</p> <p>a. What will trigger this process</p> <p>i. Minimum levels</p> <p>ii. Greater demand in Lephalale</p> <p>b. Where to is this water currently feeding?</p> <p>c. Who will be impacted by this transfer and why will they agree to it? We presume it is feeding the greater schemes supplying Randwater.</p> <p>d. If the process is triggered, how long will it take to get approval and construction before the water is actually transferred?</p> <p>19. What is the impact on the Crocodile River irrigation systems for agriculture?</p> <p>We are looking forward to your feedback.</p>			<p>9. Nemai Consulting</p> <p>10. Nemai Consulting</p> <p>13. Nemai Consulting</p>	<p>periods. Its minimum temperature tolerance is 12 degrees C. The leaves are prone to frost. The impact of the MCWAP-2A in winter or early spring (when the lowest dam water levels will be experienced) is unlikely to affect the current status of hyacinth in the impoundment. As the temperature rises in spring, the hyacinth begin to recover and once temperatures reach the mid 20's, hyacinth is at its most productive. Hyacinth are prolific growers and can double in mat size within 2 weeks. Hyacinth reproduces with runners but seed production can be many thousand per plant and can survive for over 20 years. During this period it is expected that the impoundment water level will be 2 m shallower than the recent past. As per the area capacity curve in Figure 3.3, the reduction in area is relatively small and thus there is unlikely to be any significant change to the prolific growth of hyacinth on Hartbeespoort Dam.</p> <p>9. The Hartbeespoort Dam Specialist Opinion (Appendix I8 of the Draft EIA Report) considered the impact of the proposed project on the limnology of the dam, and specifically potential consequences of the impoundment having variable water levels during certain parts of the year.</p> <p>10. Various water quality parameters were assessed as part of the Hartbeespoort Dam Specialist Opinion (Appendix I8 of the Draft EIA Report).</p> <p>11. Refer to response to No. 46 with regards to silt in Hartbeespoort Dam (0,2%/a loss).</p> <p>12. Refer to copy of presentation by P. van Rooyen in Appendix Q of the Final Scoping Report and the 2015 Reconciliation Strategy Report.</p> <p>13. Refer to Section 3.2.2 of the Hartbeespoort Dam Specialist Opinion (Appendix I8 of the Draft EIA Report), as well as Figure 3.4. The aforementioned figure presents the probability of impoundment storage volumes for a number of scenarios primarily of which is the inflow regime for the impoundment.</p>

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				14. Nemaï Consulting	<p>In times of drought where the inflow to the impoundment is primarily from the point source discharges in the catchment, the demand for water to the MCWAP-2A could result in the impoundment being operated at lower levels. The very worst case (1 of 1000 sequences), when 100% of the inflow water is needed for downstream use, the impoundment will be approaching its minimum storage level. At a more realistic volume, where 50% of the inflow to the impoundment is required downstream, the impoundment will drop from a full supply capacity (FSC) of approximately 195 million m³ to approximately 130 million m³ each winter, i.e. approximately 6 m below the full supply level (FSL) of the dam. Converting this to a physical reduction in water level can be extrapolated from the area capacity curve for the impoundment (Figure 3.5) and Table 3.1. When the dam is at 50% of its full supply capacity (FSC), the depth of the impoundment decreases by approximately 6 m. At the FSC the water depth is 29,950 m, at the dam wall. At 50% of the FSC the depth will be 24,260 m (14,430 + 9,830) which is still above the lowest outflow pipe which is at 20,120 m below the FSL. Table 3.1 summarises the different volumes/area. The change in surface area of the impoundment as is shown in Figure 3.6, where the dark blue area is at the FSC and the red area is at 50% capacity of the FSC, the average condition in winter after discharges for the MCWAP-2A.</p> <p>14. Refer to Figure 3.4 of the Hartbeespoort Dam Specialist Opinion (Appendix I8 of the Draft EIA Report), which shows the expected impoundment volumes with probability of risk.</p> <p>15. Refer to responses to No. 4 and to No. 259 with regards to Existing Lawful Water Use. Refer to response to No. 291 (bullet no. 15).</p> <p>16. Refer to responses to No. 49, No. 291 and No. 345 with regards to reuse by the Tshwane Municipality.</p>

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	<p>very little detail and mention of the possible impact this intended construction and operation may have on this property. The only mention of this property is that it will impact adversely on Hampton and that the use or impact is on hunting and eco-tourism. That, especially after my comments and discussions on meetings and per telecom, cannot be considered a proper study or investigation on the farm Hampton. I humbly request a proper study, including discussions with the owner, to make a proper assessment of the potential impact on this property.</p> <p>3. The farm Mooivallei 322 KQ Ptn 1 that belongs to Mr Marius Coetzee will be impacted to such an extent that this property will no longer be an economic unit and the mention that this is in the hands of TCTA and the acquisition process may put the owner in a position that TCTA's appointed valuers may say otherwise. The Agri Study does not adequately address this property and did not take into account my previous comments. I humbly request a more detailed analysis, taking all my inputs and the intended works into consideration. Surely the study of the expert must be more to the point and not be left to valuers and TCTA to decide, as they are not experts.</p> <p>4. The Agri study mentions ha grazing areas lost and is not in sync with the Wildlife study.</p> <p>5. The time of 12 months, as discussed in the last meeting may not be enough for certain land owners where game needs to be relocated and/or alternative land be sourced to erect new camps to make relocation possible-Wildlife study.</p> <p>6. The cumulative impacts on the farm Rooipan 357 Ptn 4 is in my opinion not adequately addressed in either the Agri Study or the Draft report. This intended activities that includes a break pressure reservoir, pipe line, construction camp, borrow pit and the current power lines, road and railway line is not addressed or assessed adequately and again left in the hands of valuers and TCTA who are not experts to voice an opinion. This leaves the owner Mr Julius Erasmus in an unfair and vulnerable position. We humbly request a more detailed analysis on this property.</p>			<p>4. Nemai Consulting & DWS</p> <p>4. Index (agricultural specialist)</p> <p>5. Nemai Consulting</p> <p>6. DWS</p>	<p>Mitigation in this regard may include compensation of landowners in terms of prevailing legislation when the rights are acquired for actual financial losses and servitude restrictions, as well as by implementing the environmental best practices and mitigation measures contained in the EMPr. The purchasing of Portions 1 and 2 of the Farm Mooivallei in totality will only be determined as part of land acquisition (separate legal process), if Environmental Authorisation is issued.</p> <p>4. The Agricultural Impact Assessment and Wildlife Impact Assessment analysed the impacts to the receiving environment from different perspectives, where the latter may have been more conservative. A detailed survey (schedule) will nevertheless be undertaken as part of the valuation process.</p> <p>The Agricultural Assessment describes the land that will be impacted on during the construction phase and for rehabilitation. For the pipeline it was assumed that 50 m on either side of the line will be influenced and 50 m around the borrow pits. This is purely from a functional level related to dust and noise.</p> <p>The Wildlife Assessment indicates a corridor of 40 m that will be cleared of vegetation during construction. The 40 m will then be relaxed to a servitude of 25 m to allow for vehicle assess.</p> <p>5. It is recommended in the EIA Report that affected parties be informed in writing of construction progress and that they be informed well in advance (require 12 months' notice) prior to physical construction (excluding pre-construction activities).</p> <p>6. The purchasing of Portion 4 of the Farm Rooipan in totality will only be determined as part of land</p>

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	<p>7. My continuous efforts on addressing the impact on property values is not adequately addressed and in my humble and expert opinion voided of the truth.</p> <p>8. A study from America that involves residential houses near pipe lines and the MKWAP PHASE 2 PROJECT traversing properties in the bushveld in South Africa with emphasis on game breeding, hunting, eco-tourism and general agricultural practises, is in no uncertain terms detrimental to property owners, as TCTA and their valuers will reference to this. As TCTA has expropriation powers, this reference must be taken out of the report in its totality as it will be referenced to by TCTA. Every single property must be assessed and there is no way that this study can be of any comparable value. I humbly request to take this out as it is totally subjective and the 2 scenarios worlds apart.</p> <p>9. We are currently assessing the “probability” that the current lawful water users downstream from the weir at Vlieëpoort may or may not be influenced w.r.t the water transfer from the Vaal system and the extraction at the weir to its end users presented. We are no experts on the model and the processes it involves and have appointed an expert from a well-known university to assist in this regard. The implementation of such a huge process is our concern and how a potential buyer for such a property will react to the fact that a weir and possible water shortage may occur upstream from an irrigation property. To what extent can or may this uncertainty impact on property values. This expert opinion will only be available in a few months and will be presented to Nemaï Consulting once completed. We were not in a position to start earlier as we had to wait for the draft EIA. We humbly request Nemaï Consulting to make a note of this scenario as no such study has been conducted.</p>			<p>7. Nemaï Consulting</p> <p>8. DWS</p> <p>9. Nemaï Consulting</p> <p>9. DWS</p>	<p>acquisition (separate legal process), if Environmental Authorisation is issued.</p> <p>7. Impacts to property value were considered as part of the Socio-Economic Impact Assessment (Appendix I6 of the Draft EIA Report). This matter will be attended to by the professional valuer in terms of the prevailing legislation at the time of acquisition, which is a separate legal process.</p> <p>8. The (professional) independent valuer will perform valuation which needs to be defensible in court.</p> <p>9. Refer to responses to No. 4 and to No. 259 with regards to Existing Lawful Water Use.</p> <p>Note that the process follows the timeframes prescribed by the EIA Regulations of 2014 (as amended).</p> <p>It is not true that the owner had to wait until this phase of the EIA, the relevant information w.r.t. water availability of water was already shared during the Scoping Phase.</p>
442.	<p>Comments on Reports:</p> <p>Wildlife Study: Over all a comprehensive and well discussed report but the following concerns</p>	B Enslin	Letter (29/10/2018)	1. NABRO Ecological Analysts (wildlife specialist)	1. Cognisance of breeding camp locations and species present on wildlife farms and ranches were noted, however, dissemination of this information is considered sensitive in nature, especially if the general onslaught on rare and endangered wildlife

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	<ol style="list-style-type: none"> 1. All the properties with game camps next to construction not marked on map. 2. 12 month notice before construction may be tight. 3. Relocation or impact on Buffelsvley 129 KQ not properly addressed. See the comments from the property owners and myself. 4. Impact on Hampton not properly addressed as this impact is adverse and permanent. This property holds a licence for buffalo, Rhino and other game species and revolves around eco-tourism, hunting, game breeding and the trade in endangered species. We humbly request a more intense study on this property. 5. Some properties are impacted to such an extent that the total operations (game breeding) will have to be relocated or halted as a result of the intended construction. Some properties will need to relocate some of their camps and animals. Progeny loss and project loss in such a scenario not addressed. We humbly request an input on this. This is of utmost importance as the study do mention certain possible losses but the progeny loss needs expert input as this may have huge implications along this route. 6. We cannot run the risk of leaving this to Valuers or TCTA to assess as they are no experts in this field and with TCTA'S expropriation rights, very bad for the process of just and equitable compensation. 			<ol style="list-style-type: none"> 2. TCTA 5. NABRO Ecological Analysts (wildlife specialist) 6. DWS 	<p>species are considered. On request of some affected landowners it was agreed to not make this information available to the general public</p> <ol style="list-style-type: none"> 2. In consultation with each landowner the requirements in mitigating the perceived wildlife impacts, <i>inter alia</i> based on recommendations stipulated in the Wildlife Assessment report, will be discussed and requirements agreed on well before the proposed construction date of the MCWAP-2A. The landowner will, however, also be informed in writing of the date (12 months' notice) when construction/site preparation is planned for each property impacted, by which time all agreed infrastructural changes and wildlife translocations must be completed. Pre-construction activities may proceed sooner. 3. Refer to response to No. 441 (first bullet) with regards to Buffelsvley. 4. Refer to response to No. 414 with regards to the potential impacts to the Farm Hampton. 5. Total cessation of breeding operations should not be necessary since infrastructural changes with associated wildlife translocations can be implemented (phased) based on sound animal husbandry and wildlife management principles. However, where cessation of breeding activities is inevitable compensation for projected losses (based on sound management practices and natural resource availability) may require compensation in terms of prevailing legislation at the time. 6. The professional independent valuer may appoint specialist(s) to assist.

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443.	Draft EIA: 1. P45- Grazing land lost must be correlated with the 100 m Barrier with reference to Wild life study. 2. P116- the river management system is the big issue and it is here where we worry. The study on the water augmentation is one thing, but the control and management of this system is what may cause problems-current status of implementation at SOE's not in favour of proper management and implementation. When will this be available? 3. P 241- second paragraph Hampton –see my notes on overview point no 4.	B Enslin	Letter (29/10/2018)	1. Nemaï Consulting 2. DWS	1. The Wildlife Impact Assessment recommended a buffer zone of 100 m between the construction corridor and wildlife breeding camps. 2. The outline is provided in the Supporting Report 10 (No. 3) and also summarised in the 2015 Reconciliation Study. It will be developed in parallel with the tender design in consultation with the users. 3. Refer to response to No. 414 with regards to the potential impacts to the Farm Hampton.
444.	Socio-economic study: 1. TABLE 23 p 52 top Land and servitude right acquisition. A partial taking (servitude) always leaves the remainder whole property burdened by the servitude. Impact is on the market value of all the property outside the servitude area and the actual servitude area. 2. P 64 bottom and 65 top/bottom Value of compensation. This statement is incomplete as many other factors may impact on a property in a partial Acquisition. I humbly suggest “and all other relevant factors that may impact the whole remainder property” Please see my notes on your reference to an American study in my overview no 8.	B Enslin	Letter (29/10/2018)	DWS	1-2. The prevailing legislation at the time will be applicable.
445.	Agri Study: 1. P7- Conclusion Properties in table 2. Mooivallei properties mention but nothing downstream from the weir at Vlieëpoort. Surely the downstream properties must be mentioned here. 2. P 7 – this statement is not true-please refer to my previous comments 3. P8 – table 3 Area lost w.r.t Wildlife study is wrong. 4. P 22- Mooivallei 342 KQ p1 Mitigation suggested here is in no uncertain terms a joke. The owner is not going to entertain such suggestions. The property has 1 600 cubic m of water rights and to suggest such non profitable work extensive mitigation is biased and not in the interest of the owner. The economic unit will	B Enslin	Letter (29/10/2018)	1 – 13. Index (agricultural specialist) 3. DWS	1. Lands Irrigated downstream of Mooivallei is indicated in Section 5.5. 2. Refer to bullet no. 1 above. 3. The area was calculated for the borrow pit, the access road and its buffer. Table 3, therefore indicates an area that will be temporarily impacted on until such time that the rehabilitation of the borrow pit is complete. Relevant surveys (schedules) will nevertheless be performed during valuation to mutual satisfaction.

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	<p>be destroyed and the owner cannot be expected to run around moving pipes. This must be removed from the study is it may cause serious harm to the owner in the negotiating process to acquire his property.</p> <p>5. 5.2.1.4 pg. 23 - first paragraph - A valuer must refer to a specialist report. A valuer is not an Agricultural Economist. The Agri Study must deal with this otherwise unfair to the land owner in negotiating process. Last paragraph - The report says that the borrow pits does not impact on infrastructure but says it impacts on roads and fences. The important fact here is that infrastructure is roads, bore holes, dams and improvements are lodges, fences, stores, game camps etc. The pits impacts on several properties in many different ways. It does not mean that if the pit is next to a house or lodge or game camp, it impacts.</p> <p>6. Table 6 must be corrected.</p> <p>7. 5.2.2 This is not well thought through and the mitigation a troublesome suggestion. Security on farms is not negotiable. This is critical to this project and landowners should be compensated to employ their security vetted by themselves. Rhino's for instance requires no introduction and the security upgrades for property owners to protect these animals should not even be remotely dealt with in the suggested manner. Many properties accommodate foreign hunters and all measures must be taken to assist property owners to ensure no incidents occur. The same for all aspects including but not limited to personal safety, the safety of employees and farm workers and in general all aspects to secure current status.</p> <p>8. 5.2.3 Highly unlikely that the suggested mitigation will curb impact-please re-think and address.</p> <p>9. 5.4 point 4 just before table 7- Aesthetic and visual are most certainly not the only impact. I understand that these impacts such as the above and others not mentioned falls outside the scope of work but, to mention just this creates disputes in the negotiating process. There are many other factors that must be taken into account during construction.</p> <p>10. P 27-Downstream users now has less assurance- I agree</p>			4. DWS	<p>4. The mitigation states, "The extent of the loss could be so large that the farming unit may no longer be economically viable. It will then have to be subdivided and consolidated with an adjoining farm in terms of Sub-division of Agricultural Land Act, Act 70 of 1970". The document therefore indicates that the economic unit may be compromised. The whole issue of viability however, should be determined by the valuer. The mitigation measures are just proposals for consideration.</p> <p>The government may use acquired severance land ("uitvalgrond") as it deems fit.</p> <p>5. The sworn valuer would normally appoint appropriate specialist to assist, of which an Agricultural Economist could be one. Regarding the borrow pits the impact on infrastructure will be temporary and only until the land rehabilitation is completed. Impact of both the pipeline and the borrow pits on infrastructure was not specifically addressed in the Agricultural Report. It is dealt with in the Socio-economic Specialist Report.</p> <p>6. Table 6 indicates the land used within the corridor of 100 m of the pipeline and 50 m from the boundary of borrow pits. This was the size of land that was assumed as the area that could be impacted on by the development from a farming perspective.</p> <p>7. Security could be problematic and it is suggested that an equitable solution be negotiated by the farm owners and the contractor (with possible input by the project manager and TCTA).</p> <p>8. The impact of dust and noise and other impacts on wildlife related activities and game farming is discussed in the Wildlife Impact Assessment, as well as in the EMPr.</p>

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	<p>but no mention what impact on market value this can have. If outside scope of work a separate expert study must be conducted.</p> <p>11. P 27 5.5.3 - Impact description with significance of 0 and duration with a 3 and probability of 2. This does not make sense. Mitigation clearly shows probability of uncertainty and the river management system is not yet in place.</p> <p>12. 6 Summary and conclusions. Not correct as on many properties there will be a great impact due to pits that are in or next to game camps and on some properties houses and lodges very close-it will impact.</p> <p>13. Top of page-overall there seems to be enough water-this statement is how the market will look at it. There may be, surely this will impact on the decision a potential buyer will pay for irrigation land- risk is now a huge factor that will impact on what a buyer will pay. Overall a good report but please look at my previous comments, my comments on the meetings and please be care full with statements that are not factual, comparable or just an opinion with no real basis. The land owners and TCTA must trade on equal footing during the land acquisition process. Please comment on my comments and anything I said must not be construed as an attempt to influence any party or to discredit ant writer of any report.</p>				<p>9. The other impacts are discussed in the Draft EIA Report.</p> <p>10. Refer to responses to No. 4 and to No. 259 with regards to Existing Lawful Water Use.</p> <p>11. High potential land in arid and semi-arid areas is only determined by the presence of irrigation (and installed irrigation infrastructure). If assumed that the lawful irrigators will continue to receive their entitled water allocation, then no high potential land will be lost Extent: low). The duration of the potential impact is for the operational life of the pipeline (Duration: 3). Due to normal variation in rainfall and runoff, there is a possibility that irrigation water for some periods may not be secure (Probability 2).</p> <p>12. There will be a temporary impact that will last till rehabilitation of the borrow pit is complete. Socio-economic impact and effect on wildlife was not considered in the Agricultural Assessment.</p> <p>13. Refer to No. 6 and No. 259 for responses to water availability for the proposed water transfer scheme.</p>
446.	<p>Draft Scoping Report Borrow Pits</p> <p>This report is basically a repeat from the draft EIA all comments made on the draft EIA is applicable on the draft scoping report for the pits. I think, after reading and commenting on the draft EIA that the Borrow pits are not adequately addressed and the impacts associated with such intended works. As many focus groups meetings were held where many different issues were discussed and brought to your attention, I think it is crucial to have a focus group discussion with the property owners where these intended pits will be located. The pits will be excavated for the whole term of</p>	B Enslin	Letter (29/10/2018)	Nemai Consulting Index (agricultural specialist)	<p>A meeting will be convened with the landowners that are affected by the proposed Borrow Pits during the EIA Phase. The details of this meeting still need to be confirmed.</p> <p>The borrow pits comprise approximately 131 hectares. If the additional working area is included, then the affected area is 167 hectares. The grazing capacity of land varies spatially between 7 and 11 ha/Large Livestock Units (LSU), with an average of 9 ha/LSU. The implication is that the loss of land will be for 16 LSU for a period of a few years, depending on the</p>

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	<p>construction and will comprise of offices, explosive storing sheds, works shops, offices and fuel storage. The Agri Study and the wild life study did not focus on the pits but rather just discussed it in an overview. The pits needs more attention please.</p> <p>When can we have such a meeting that all affected can have the opportunity to voice concerns and ask questions?</p> <p>Your assistance here will be greatly appreciated. Thank you for the opportunity to take part in this process.</p>			NABRO Ecological Analysts (wildlife specialist)	<p>rehabilitation process and climate. It was the specialist's opinion that the loss of grazing resources is not significant. Spatial location related to infrastructure was not considered because it would not affect land use and farming income.</p> <p>The borrow pits will be subject to the same wildlife impacts identified as for the MCWAP-2A construction servitude, albeit of extended duration and at a different scale. However, the same mitigation measures i.e. area to be fenced, no breeding camps with 100 m of the fence (thus creating a vegetation buffer to reduce noise levels) and full rehabilitation procedures after cessation of the burrow pit associated activities, will apply. Also refer to response No. 442 with regards to agreement and mitigation requirements before construction of the MCWAP-2A.</p>
447.	<p>I attended your public meeting held at the NG Kerk in Schoemansville on 9th October 2018 regarding EIA report for the PROPOSED MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJECT (PHASE 2A) (MCWAP-2A).</p> <p>I wish to formerly place on record that I OBJECT to this project because of the effect it will have on the socio economic and environmental impact on Hartbeespoort dam and its surrounding areas. I raised my concerns at the meeting of which are now of public record. I found your Hartbeespoort dam specialist opinion and the socio economic study very vague with minimal detail as to who all is really affected by this project. The impact studies also did not take into account the impacts during a drought where their findings were based on a period 1997 to 2017 where there has been no drought and the dam levels did not dropped below 87% on average. The normal average rainfall is experienced October to April each year therefore the dam fluctuations will not only be the "winter months" but also include autumn and spring months which is in effect 6 MONTHS.</p>	G. Law	Email (29/10/2018)	DWS	<p>Refer to the following responses:</p> <ul style="list-style-type: none"> No. 413 with regards to the implications of the MCWAP-2A on Hartbeespoort Dam; and No. 434 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on security, property value and tourism. <p>The Risk Analyses are undertaken for 1 000 plausible stream flow and rainfall stochastic sequences. These sequences cater for a range of extremes, where the wettest sequence is wetter than the wettest period experienced historically and the driest sequence drier than the worst drought experienced historically. The variability of the stochastic analysis is thus catered to a certain degree for potential changes within these extremes.</p>

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448.	<p>Farms Leliefontein 672 LQ and Zandheuwel 356 LQ</p> <p>Borrow Pits Comments:</p> <p>I do not like the borrow pit at all. Spent R2 000 000 to fence and electrify. Do a study for a suitable camp to breed sables. It cost a lot of money. We had to move them from another camp and it seems to be the most suitable camp. Zandheuwel's camp houses black herds for hunting and golden wildebeest. Payed R1 000 000 to get the farm predator free. Camp will no longer be suitable for the breeding of sables. R10 million paid for Leliefontein and game, upgraded the lodge for a further million. Borrow pit is at the entrance to the lodge and at the workers' homes that can cause health problems.</p> <p>A few aspects that should be taken into account, should it take place:</p> <ol style="list-style-type: none"> 1. Borrow pit must be matched like existing outside fence (pig wire, conveyor band and electrified wire). 2. Existing fence must be fitted with sliding gate with H-bars on either side. 3. Water in Sable antelope camp must be moved northwards to at least 100 meters away from borrow pit - there is no other suitable camp. 4. Noise from machinery can seriously affect the breeding process of sable antelope, golden wildebeest. If sable antelope are moved, but no adequate camp is available - will have to feed immensely. Serious loss of income. 5. Noise factor is close to the lodge which will be able to accommodate no clients during the construction phase. We must then temporarily stop the hiring of the lodges to prevent negative permanent damage. (Claim loss). The entire view of the lodge and entrance will be damaged. 6. The health of the workers will be highly impacted by dust. 7. Hunting of trophy animals with hunters will also have to be totally stopped due to noise and construction. Hunters will definitely not hunting at us with foreign clients. 8. These camps were cleared at the expense of at least R1 000 000 to be suitable for sable antelope breeding. 	B. Enslin (on behalf of A. Steenkamp)	Email (29/10/2018)	Nemai Consulting	<p>The impacts of the borrow pits will be assessed in the EIA Phase, as part of the separate process that is being undertaken for this component of the project.</p> <p>Mitigation measures suggested to be considered further for the EMP, as well as for compensation in terms of prevailing legislation at the time.</p>

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9.	Security at entry of the farm will be adversely affected.				
449.	Just a follow up regarding the WULA, has the process commenced as yet?	S. Mansingh (Gunn Attorneys)	Email (29/10/2018)	Nemai Consulting	<p>The process is currently in Phase 1 on the DWS electronic Water Use Licence Application and Authorisation System (e-WULAAS).</p> <p>A site visit was undertaken on 25/10/2018 with officials from the DWS: Limpopo Regional Office.</p> <p>We are busy compiling the documentation. Will advise once it is ready for public review.</p> <p>Please note that the users “taking water” from the MCWAP-2A will need to apply separately for a Section 21(a) water use licences.</p>
450.	<p>1. Background Lakeland was registered in 1975 and completed in the early 90’s. It comprises one hundred hectares of indigenous bush situated on Hartbeespoort Dam. The estate has a two-kilometre waterfrontage and ten hectares wetland with:</p> <ul style="list-style-type: none"> • 150 Privately owned homes • 228 Boat lockers • 49 Employees <p>The above focused offering made the estate extremely desirable for buyers with a specific natural environment expectation and those buyers invested huge amounts in these properties because the Estate provided exactly therein. It is assumed that previous inputs from affected parties (foreshore property owners — Estates and others) will respond to this repeat round again. As an individual Estate, supportive of the previous inputs from Estates and other affected parties, we would like to reiterate our concerns on behalf of the Owners and Estate Management — which were also previously included in the first round.</p> <p>2. Receding shoreline — Hartbeespoort Dam</p> <ul style="list-style-type: none"> • The Hartbeespoort dam was built to serve agriculture and inadvertently it has promoted a whole thriving town economy based on its attractiveness – the dam has 	H. Erasmus (on behalf of Lakeland Directors)	Reply Form (27/10/2018)	<p>DWS</p> <p>Nemai Consulting</p>	<p>1-3. Refer to the following responses:</p> <ul style="list-style-type: none"> ○ No. 413 with regards to the implications of MCWAP-2A on Hartbeespoort Dam; ○ No. 411 with regards to the influence of Hartbeespoort Dam’s fluctuating water levels on boreholes; and ○ No. 434 with regards to the influence of Hartbeespoort Dam’s fluctuating water levels on security, property value and tourism. <p>Hartbeespoort Dam will be allowed to function as a dam and supply to users (agriculture, domestic and energy) will be optimised. The Minister is the trustee of water resources in terms of the NWA (Section 3).</p> <p>4. Responses to follow on categories of comments.</p> <p><u>Economic Linkages Between the Economy and the Dam</u> The socio-economic report addresses the relative size of the various segments of the economy in the Madibeng Local Municipality. Catering and accommodation services, which is direct tourism,</p>

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	<p>become a popular place to live and visit- and we are not talking about lodge visits. Lodge visitors and tourism centers are not the only way to measure tourism. There can be no justification to remove much needed water from that functional and successful economic system, and make the entire system extremely vulnerable to drought, fire and extreme heat and lose the investment that people placed in the economy – much of which is heavily related to the dam either directly or indirectly.</p> <ul style="list-style-type: none"> • It must be noted that at an average of 80% water capacity, the upper Western reaches of the dam, where the Magalies river flows into the dam, have a 5-meter dry shoreline. For Magaliespark, The Coves, Westlake, Leloko, K'Shane and Lakeland this means that private coves are mostly laid bare and access to the dam for watercraft is very difficult if not impossible. Even as far as Caribbean Beach Estate, water access for watercraft may be impossible because of shallow water. • The expected receding shoreline at the height of the water provision periods, and during the winter months (dry season), when the dam will reach a probable low of 60% or maybe more of capacity, the waterline may recede to a trickle run from the Magalies river in the middle which will reach the waterline proper at around a diagonal line from the East of Lakeland Estate across to K'Shane Estate. This situation will then prevail for a few months a year. <p>3. Negative effect on property values and local (micro) economy.</p> <p>Following on the background given in 1 above, it is very clear that a situation described in 2 above will have a devastating effect on;</p> <ul style="list-style-type: none"> • The capital around Hartbeespoort dam will simply leave when such a significant amount of water is removed. No one wants to live or visit or have a business next to a mud pit carrying disease, mosquitoes and that generates a ghastly stench. • Property prices will crash. 				<p>comprises 0.92% (R270m, 2017 (in 2010 constant figures)) of the municipal GVA. Doubtless a portion of Wholesale and Retail Trade would also be attributable to activity directly related to tourism surrounding the dam. However, the indication is that the proportion of economic activity attributable directly to the dam itself is relatively small.</p> <p>The local economy has grown to the extent that it is strongly linked to the cities of Tshwane and Johannesburg owing to the natural advantages of the area in terms of sense of place as well as location. The investment in the area is driven mainly by these factors, rather than direct waterfrontage (or linkage) to the dam. Thus the impact of water levels will affect those closest to the water, but for those placed further away, the impact is likely to be muted.</p> <p>The report notes the hydrological model which states that the greatest impact will be in the winters, when tourism activity is lowest. The report notes the areas of impact, and indeed Lakelands and others higher up in the dam basin will be most affected.</p> <p>The report also notes that property values are impacted upon by various factors, including property location, interest rates, the characteristics of the neighbourhood, the features of the property, state of the property, size of property and security considerations. Not only proximity to the water.</p> <p>The report notes that having a dam 100% full is very unusual and makes the point that the additional value ascribed to properties through this consistency has accrued to the property owner thus far, despite the fact that the owner of the dam is under no obligation to maintain high water</p>

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	<ul style="list-style-type: none"> • People will cease to invest. • Support industries such as plumbers, carpenters, garden businesses, construction companies, shops, restaurants etc. who are all thriving right now will fold. • At a very time when the economy needs to support jobs and thriving economies this project will result in crashing a sustainable job creation hub to direct the water. • The true costs of this water need to include for example: compensation for property value loss, job losses, capital flight out the area, municipal rates and taxes losses, biodiversity losses, agricultural losses. • The Dam is a key feature. The socio-economic study completely underestimated the link between the thriving economy and the dam. The dam stimulates and attracts those with spending money to live and their relatives to come here every weekend. There is a great sense of place here that is totally underestimated in the EIA. Gauteng has very little parks. This is one of the urban green lungs. People get married here, they get engaged here, have parties here, live here, and invest in the natural beauty of the area and its biodiversity attractions and tourist sites. If you take away a large percentage of water in the dam you bleed the economy right in the jugular vein. The link between the dam as a sense of place and the economy was incredibly weakly portrayed in the EIA. • There are many poor people living in and around the dam and many of these people depend heavily on the wealthy who farm or live around the dam who either employ them and or who support them. This too needs to be costed because once the wealthier and therefore more mobile people leave then the informal sector will suffer. For example, the people of Lakeland support orphanages, drug rehabilitation centers, old age homes, small business training projects, food schemes, education for the poor and multiple biodiversity initiatives around the dam and in the biosphere reserve. Once they go, and they will when the dam becomes a stinking and shrunken body of water, then the poorest of the poor will also suffer. The 			DWS	<p>levels. The reverse would also be true, a fall in the additional value of the property created by the more or less constant water levels, would also fall to the property owner.</p> <p>If a property has been mis-sold, under the assertion that dam levels will remain constant, any claims relating to such misspelling should be addressed to the seller.</p> <p><u>Natural Capital Impact and Dependencies</u></p> <ul style="list-style-type: none"> ○ The Hartbeespoort Dam Specialist Opinion (Appendix I8 of the Draft EIA Report) considered the impact of the proposed project on the limnology of the dam. ○ The risk analyses that formed part of the Reconciliation Strategy are undertaken for 1 000 plausible streamflow and rainfall stochastic sequences. These sequences cater for a range of extremes, where the wettest sequence is wetter than the wettest period experienced historically and the driest sequence drier than the worst drought experienced historically. The variability of the stochastic analysis is thus catered to a certain degree for potential changes within these extremes. ○ Refer to copy of presentation by P. van Rooyen in Appendix Q of the Final Scoping Report. ○ Refer to response to No. 40 and No. 302 with regards to climate change. ○ Refer to the response to No. 451 with regards to alternatives assessed as part of a Strategic Environmental Assessment (SEA) versus an EIA. ○ Refer to response to No. 434 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on security.

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4.	<p>municipality rate base will also suffer.</p> <ul style="list-style-type: none"> • The EIA stated it will protect all water rights of existing users. In drought years the dam drops to 50% and with climate change and drought years will be more frequent, more devastating and last longer. The resilience factors the dam currently provides will be lost – the dam will not be able to sustain both the power stations and the drought experienced by the growing farming communities. • Investor's ability to exercise the lifestyle invested in. • Drastically falling property values (because of the diminished demand) • The loss of adequate approved and constant available water supply from the dam to irrigate golf courses, common areas and farmland resulting on extreme pressure on existing boreholes as an alternative to irrigate from • Pressure on existing boreholes which are used for water reticulation to estate homes for human consumption. • Additional costs and delays in Government approvals in respect of applications for and sinking of more boreholes to carry the demand load. • Pressure on the underground water reserves through forced adding of more - and deepening of existing boreholes. (The position of the dam has an effect on our water table and receding water levels will inevitably result in receding water tables) • Increased costs for Estate Security as Estates will become easily accessible on foot from the waterfront including; <ul style="list-style-type: none"> ○ Huge financial outlay in the costs of removable security barriers/fencing to control access from the dry dam (waterfront is in excess of 2000 meters in distance). ○ Expensive and labour-intensive manpower for additional security • The loss of income from fishing and camping activities at De Rust 8 km shoreline. <p>4. Request</p>			<p>Horizon Environmental Consulting</p> <p>Nemai Consulting</p> <p>Nemai Consulting</p> <p>DWS</p>	<ul style="list-style-type: none"> ○ Refer to response to No. 438 with regards to the DWS' role and obligations to supply water to Eskom in the RSA and for MCWAP-2A. ○ The Specialist Opinion on the potential impacts of MCWAP on Hartbeespoort Dam identified the current state of the dam with respect to water quality, the potential impacts that could arise from MCWAP and the implications these impacts would have on the functioning of the dam. ○ Refer to response to No. 41 and No. 80 with regards to the Reserve. <p><u>Stakeholder Analysis</u> Refer to response to No. 436 with regards to public participation for Hartbeespoort Dam.</p> <p>Note that the public meeting held in the Hartbeespoort Dam area during the EIA Phase was held on 9 October 2018, which was a Tuesday. The format of the engagement on this day included a public open session from 12:00 – 15:30, and then the public meeting that was held later on from 16:00 – 18:30. This format was chosen to provide IAPs a longer period to engage with the project team, depending on their availability during the course of the day.</p> <p>The following forms of communication with the Hartbeespoort Dam stakeholders are suggested in the Socio-Economic Impact Assessment (Appendix I6 of the Draft EIA Report):</p> <ul style="list-style-type: none"> ○ Notifications to dam users of periods of low water, this would provide owners time to adjust their mooring facilities prior to these periods of low water. <p>It is not envisaged to release water in huge slugs rapidly dropping water levels.</p>

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	<p>That over and above the original written inputs sent in during the previous round by all the Western shore property owners, the above — for individual property owners — be considered.</p> <p>CLIMATE CHANGE REQUIRES MITIGATION AND ADAPTATION RESPONSES ALIGNED TO THE GLOBAL CRISIS WE ARE FACING.</p> <p>NATURAL CAPITAL IMPACT AND DEPENDENCIES</p> <ul style="list-style-type: none"> The EIA does not adopt an ecosystem /biodiversity and landscape and livelihood approach It does not address risks related to ecosystem decline (chronic challenges), disruptions (acute challenges) and more long-term general ecosystem collapses. The EIA does not address a drought scenario and climate modelling. It assumes past hydrological patterns will project into the future which every scientist knows is not good science. The alternative of using this water for climate change adaptation was not addressed in this EIA. How will the project compensate for these increased security measures and associated costs? The EIA has provided no baselines. So negative impacts will never be able to be assessed and those who promoted this project will never be held accountable. How will the ecological reserve and human rights reserve be enforced. Here is the institutional framework and demonstrated capability of existing authorities to enforce this. How will the riverine and dam communities and farming community be assured they will be given first priority? <p>STAKEHOLDER ANALYSIS</p> <ul style="list-style-type: none"> There are weak minimalistic Stakeholder Engagement Plans, stakeholder management and external communications and grievance mechanisms proportional to the risks at stake. 			<p>Nemai Consulting</p> <p>DWS</p> <p>DWS</p> <p>DWS</p>	<ul style="list-style-type: none"> Safety awareness campaign prior to periods of low water to inform users with regards beach conditions; and Notifications to dam users of completion of the project to allow time for such properties to re-evaluate their security measures. <p>DWS to advise on other forms (standard / good practices) of stakeholder engagement with regards to HBP Dam water levels.</p> <p>The HPD “community” should join the other users when the RMS is formulated and participate in the annual setting of the operating rules for the Crocodile System through the System Operating Forum (No. 363).</p> <p><u>Health and Safety</u> The allocation of water on a national basis to water user sectors (energy, domestic, agriculture, etc.) is dealt with in terms of the NWA and the NWRS which when periodically revised becomes part of the legal framework. Specific reference can be made to Chapter 2 of the NWRS-2 dealing with strategic imperatives. All the reconciliation strategies to date have been based on this approach.</p> <p>An opportunity for decreasing the stress on South African water resources is to import water-intensive goods such as agricultural crops from other countries where the availability of water for irrigation is not a limiting factor.</p> <p>The water levels will fluctuate slowly enabling shoreline uses to adapt. Future extreme flooding will create a new scenario. Standing flood warning practices will be followed.</p>

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	<p>For example, the meeting at Hartbeespoort was held on a Friday afternoon when everyone was still at work and besides no one realized how much water is going to be removed from the dam and river system else the community would respond. The press has not reported on any of this. No one has made an effort to explain to the public via the media what the consequences of this project going ahead really means. People now are trying to survive many political and economic crisis. They do not have time to attend meetings of projects they do not really know much about at all. They need media coverage via radio or TV and an easy communication channels for rapid information sharing around strategic issues they can respond to.</p> <p>HEALTH AND SAFETY</p> <ul style="list-style-type: none"> • The argument in the report that it is protecting existing agricultural use rights is insufficient. Gauteng is growing exponentially by more than 500 000 people a year. They need a place for recreation. They need a place to grow more food and that means more water than just existing water rights. They need to cope with prolonged and serious droughts in Lesotho and in the North West Province and Gauteng. They need to protect some level of biodiversity. • There are water quality issues to shrinking the water levels of the dam and these are poorly addressed. • There could be significant health problems to removing the water in the dam. These are not spelt out. • Community exposure to disease is not addressed adequately. • There are emergency preparedness and response issues – these are not addressed. <p>RIVER AND DAM SCIENCE</p> <ul style="list-style-type: none"> • The science of the consequences to water quality and quantity in the dam and river system had several inaccuracies related to how alien invasive species and 			<p>Horizon Environmental Consulting</p>	<p>The fluctuating water levels present an opportunity to clean the shoreline. It becomes an operational aspect not MCWAP-2A related.</p> <p><u>River and Dam Science</u> Information used in the water quality assessment of Hartbeespoort Dam was sourced from the DWS' Water Quality databases. The water quality samples are analysed by the Department's accredited laboratory. Information on invasive alien species and algal blooms was sourced from internationally peer reviewed academic journals both locally and regionally. Anecdotal references which have not been peer reviewed have been used on only one occasion in the report, where volumes of sediment in the basin of the dam was not available from any other independent source. As stated in the Specialist Opinion, there are no specific project related mitigation measures that can be implemented because of the role of the dam as a supply reservoir, and period water level fluctuations occur naturally.</p>

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	<p>algae blooms propagate and how dependent communities have become on current flows.</p> <ul style="list-style-type: none"> The extent of smell zones was totally underplayed. The cost of managing the risk of decreased water quality in the dam and river system needs to be internalized in the cost of the project to the fossil fuel industries and not externalized and paid indirectly by those who manage water quality or who have to live near the area and whose lives, investments and livelihoods will be affected. Estates who share the same type of offering, albeit different in style and purpose, are; <p>Directly affected: -</p> <ul style="list-style-type: none"> Leloko (residential with foreshore) 500 Units K'Shane (residential with foreshore) 50 Units Lakeland (residential with foreshore) 150 Units Magaliespark — (residential and tourist with added top golfing, tourist pleasure boat rides and waterpark facilities) Caribbean Beach Estate — (residential and major golfing) <p>Indirectly affected: -</p> <ul style="list-style-type: none"> De Rust - (undeveloped state- and privately-owned land with access to fisherman camping) The Islands <p>CONCLUSION This study is promoting the establishing of a potential new environment at the cost of an existing and thriving established environment.</p>				
451.	<p>GENERAL STATEMENT</p> <ul style="list-style-type: none"> The EIA is old school and minimalistic. How EIA's were conducted in the past is no longer relevant to the times we live in now. We no longer can blindly accept the fossil fuel economy can dictate to the rest of the economy. The demise of millions of people is at stake if business as usual continues. Projects that increase the risk of water and food security have to be taken far more seriously. It is 	H. Erasmus (on behalf of the Lakeland environment committee)	Reply Form (28/10/2018) <i>Note that these comments were received</i>	Nemai Consulting	<p>In terms of the tools available to achieve Integrated Environmental Management, a distinction needs to be made between the scope and purpose of a Strategic Environmental Assessment (SEA) and an EIA.</p> <p>According to the White Paper on Environmental Management Policy for South Africa of 1998, a SEA is "a process to assess the environmental implications of a</p>

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	<p>unlikely that the majority of South Africans, will be able to afford expensive fossil fuel power stations, especially when cheaper options of renewable energy exist going forward. Most impacted will be the poor who are more vulnerable to starvation and poverty and who can least protect themselves in turbulent periods of civil strife that come with lack of access to affordable energy, water and food security.</p> <ul style="list-style-type: none"> The EIA does not address the search for a sustainable circular economy, energy transition, and green climate finance and water security for basic human and ecological needs. The EIA does not seek or support innovations towards building smart communities of the future, 'transforming the global system for sustainable growth' and 'accelerating innovation for a low carbon future'. It directly ignores and in so doing undermines the SDGs. The EIA does not investigate institutional capacity, power relations and the structure of society - whose voices are really been heard and how have certain interests played a role in shaping and creating this project to date – it is not clear who stands to lose and benefit if this project goes ahead. How are the losers represented? This is important context to make a wise decision and serve the public good rather than a few vested interests. The EIA has provided no baselines. So negative impacts will never be able to be assessed and those who promoted this project will never be held accountable. 		<i>after the review period, but were nevertheless included</i>	DWS	<p>proposed strategic decision, policy, plan, programme, piece of legislation or major plan". One of its primary objectives is to aid decision-making by considering the environment earlier on in a planning process. This should include the environmental implications of strategic decisions made through government's planning processes, such as the IRP. The SEA should also strategically assess the alternatives for meeting objectives of the particular policy, plan, programme, etc.</p> <p>An EIA is undertaken on a project level, and in the case of the MCWAP-2A, is based on the outcomes of the Feasibility Study which evaluated the various options for satisfying the objectives of the project (i.e. supply water requirements related to SIP1). Refer to Section 3 of the Draft EIA Report for an explanation of the background and motivation for the project. An EIA seeks authorisation for specific activities triggered by a proposed project in terms of the EIA Listing Notices, and thus focuses in on the actual proposed infrastructure or activities proposed. Alternatives (including the no-go option) to achieving the objectives of the project are also assessed as part of the EIA Process (refer to Section 10 of the Draft EIA Report).</p> <p>The electricity mix of the RSA is dealt with by the IRP (No. 356) via the Department of Energy.</p>
452.	<p>CLIMATE CHANGE REQUIRES MITIGATION AND ADAPTATION RESPONSES ALIGNED TO THE GLOBAL CRISIS WE ARE FACING.</p> <p>Mitigation</p> <ul style="list-style-type: none"> The alternative of closing the mines and power stations in favour of promoting a safe and affordable energy system was not considered. In just 12 years, the world is set to blow its carbon budget 	H. Erasmus (on behalf of the Lakeland environment committee)	Reply Form (30/10/2018)	DWS	<p>Refer to the response to No. 451 with regards to alternatives assessed as part of a SEA versus an EIA.</p> <p>The risk analyses that formed part of the Reconciliation Strategy are undertaken for 1 000 plausible streamflow and rainfall stochastic sequences. These sequences cater for a range of extremes, where the wettest sequence is wetter than the wettest period experienced historically and the driest sequence drier than the worst drought experienced historically. The variability of the</p>

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	<p>for keeping global warming in check, according to the IPCC Report October 2018. This EIA does not even respond to this science. It is the biggest climate story of the decade. By 2030, the world's carbon budget for keeping global warming to within 1.5 degrees Celsius will be blown—and the IPCC refer to the dire consequences for the planet that will unfold.</p> <ul style="list-style-type: none"> The report assumes making coal power fire stations and coal mining less polluting is operating in the public good. This is a weak misleading argument because it does not consider that there are other far cleaner options such as renewable energy. These are not explored in this EIA. We need to respond more urgently than ever to transition out of fossil fuels –promoting this project is about promoting fossil fuels and is therefore inexcusable from a pure humanitarian perspective. These power stations are white elephants – they are beyond the affordability of those who need power. It is totally reckless to promote them further. Closing these mines and power stations down and using the water to create sustainable jobs may just be more appropriate – a good business person knows when they have made a mistake and does not carry on pursuing a bad investment decision. The EIA should explore for example if and how the Green Climate Fund could offer concessionary funding to close the project and speedily invest in renewable energy options that provide for increased water and agricultural land security and sustainable work opportunities. <p>Adaptation - Some for all forever rather than all for some for now. (DWS motto embedded in SA Water Policy and legislation)</p> <p>The alternative of using this water for climate change adaptation was not addressed in this EIA. The EIA does not address a drought scenario and climate modelling. It assumes past hydrological patterns will project into the future which every scientist knows is not good science. Just because the</p>				<p>stochastic analysis is thus catered to a certain degree for potential changes within these extremes.</p> <p>Refer to responses to No. 450 for similar comments provided by H. Erasmus.</p> <p>Climate change considerations were addressed in No.228. The applicant reacts in terms of the Government guarantee issued to the World Bank.</p> <p>Medupi Power and Thabametsi Power Stations are included in the latest Draft IRP. Also refer to No. 356.</p>

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	<p>IRP draft includes these power stations does not constitute an argument to blindly accept that scarce water has to now be directed to these mines and power stations. The obvious use of this water in the future should go to human needs, agriculture and building a sustainable economy to help build resilience of thousands of affected people. It is unbelievable how decision makers and financiers speeded ahead of environmental due diligence concerning where these power stations and mines were going to get their water from. This is actionable. Was it foolishness or gross neglect or was it a strategy to induce a situation where they could assume by the time people woke up to having their water taken they would not dare to stop the project and hence provide the power stations with an advantage to just take the water unopposed. SA is a water scarce country and especially in the regions impacted – Lesotho, North West Province and Limpopo. If decision makers had properly considered the water issue these projects would likely never have been approved. Must people pay for this mistake by losing their water and food security and potential resilience to climate change? Should not the people who made this 'mistake' pay for this? These decision makers can't externalize water security costs onto the general public and more directly to those who depend on the river and dam system. In the interests of the greater public good the option of closing the power station and mines down needs to be considered for the sake of using the water for its best use option especially in the drought times and extreme heat times that lie ahead. The Hartbeespoort dam was built to serve agriculture and inadvertently it has promoted a whole thriving town economy based on its attractiveness – the dam has become a popular place to live and visit- and we are not talking about lodge visits. Lodge visitors and tourism centres are not the only way to measure tourism. There can be no justification to remove much needed water from that functional and successful economic system, and make the entire system extremely vulnerable to drought, fire and extreme heat and lose the investment that people placed in the economy – much of which is heavily related to the dam either directly or indirectly.</p>				

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453.	<p>EXTERNALITIES AND COMPENSATION</p> <ul style="list-style-type: none"> Should this project proceed then a sound externality assessment needs to be done. The true costs of the project must be calculated and paid directly by proponents and not tax payers- all externalities must be transparent and internalized and built into the costs of the project with compensation and offsets applying and the true costs of water in a water scarce environment must be paid in full. The capital around Hartbeespoort dam will simply leave when such a significant amount of water is removed. No one wants to live or visit or have a business next to a mud pit carrying disease, mosquitoes and that generates a ghastly stench. Property prices will crash. People will cease to invest. Support industries such as plumbers, carpenters, garden businesses, construction companies, shops, restaurants etc. who are all thriving right now will fold. At a very time when the economy needs to support jobs and thriving economies this project will result in crashing a sustainable job creation hub to direct the water to a totally unsustainable fossil fuel driven false economy in the north. This Lephalale community are generating power no one can afford at the expense of the economy of Hartbeespoort dam, its thriving economy and at the cost of agricultural land and water security for thousands of people. The true costs of this water needs to include for example: compensation for property value loss, job losses, capital flight out the area, municipal rates and taxes losses, biodiversity losses, agricultural losses. The area is not nicknamed Harteetes for nothing. The Dam is a key feature. The socio-economic study completely underestimated the link between the thriving economy and the dam. The dam stimulates and attracts those with spending money to live and their relatives to come here every weekend. There is a great sense of place here that is totally underestimated in the EIA. Gauteng has very little parks. This is one of the urban green lungs. People get married here, they get engaged here, have parties here, 	H. Erasmus (on behalf of the Lakeland environment committee)	Reply Form (30/10/2018)	DWS Nemai Consulting (socio- economic specialist)	<p><u>Externalities and Compensation</u></p> <p>Should the project receive an EA, the project will be funded off-budget for the industrial use of the water. That means that the end user (e.g. Eskom and the mines) will pay the full capital redemption and operation and maintenance cost of the industrial use portion of the project. The fiscal burden is limited to the social component of domestic water use. The legal entitlements of existing users such as agriculture and recreational water use will not be affected.</p> <p>Indirectly affected IAPs are not compensated. Compare e.g. Gautrain and national freeways. Eskom in turn may recover costs from their users through tariffs.</p> <p>Estates alongside Hartbeespoort Dam were constructed at the sole risk of the users.</p> <p><u>Economic Linkages Between the Economy and the Dam</u></p> <p>The socio-economic report addresses the relative size of the various segments of the economy in the Madibeng Local Municipality. Catering and accommodation services, which is direct tourism, comprises 0.92% (R270m, 2017 (in 2010 constant figures)) of the municipal GVA. Doubtless a portion of Wholesale and Retail Trade would also be attributable to activity directly related to tourism surrounding the dam. However, the indication is that the proportion of economic activity attributable directly to the dam itself is relatively small.</p> <p>The local economy has grown to the extent that it is strongly linked to the cities of Tshwane and Johannesburg owing to the natural advantages of the area: of sense of place; as well as location. The ongoing investment in the area is driven mainly by these factors, rather than direct waterfrontage (or linkage) to the dam. Thus the impact of fluctuating</p>

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	<p>live here, and invest in the natural beauty of the area and its biodiversity attractions and tourist sites. If you take away a large percentage of water in the dam you bleed the economy right in the jugular vein. The link between the dam as a sense of place and the economy was incredibly weakly portrayed in the EIA.</p> <ul style="list-style-type: none"> There are many poor people living in and around the dam and many of these people depend heavily on the wealthy who farm or live around the dam who either employ them and or who support them. This too needs to be costed because once the wealthier and therefore more mobile people leave then the informal sector will suffer. For example, the people of Lakeland support orphanages, drug rehabilitation centers, old age homes, small business training projects, food schemes, education for the poor and multiple biodiversity initiatives around the dam and in the biosphere reserve. Once they go, and they will when the dam becomes a stinking and shrunken body of water, then the poorest of the poor will also suffer. The municipality rate base will also suffer. Will the fossil fuel industry be forced to pay compensation to the poor because the poor certainly did not come to that meeting and are not well resourced to share in the debates and neither do many realize what the impacts of this project mean to them and even if they did they do not have the means to mobilize in the time frame and in the current manner this EIA is being driven? The EIA says it will protect all water rights of existing users. In drought years the dam drops to 50% and with climate change and drought years will be more frequent, more devastating and last longer. The resilience factors the dam currently provides will be lost – the dam will not be able to sustain both the power stations and the drought experienced by the growing farming communities. Who will give up their stake in the water? How will the ecological reserve and human rights reserve be enforced. Here is the institutional framework and demonstrated capability of existing authorities to enforce this. How will the riverine and dam communities and farming community 			DWS	<p>water levels will affect those closest to the water, but for those placed further away, the impact is likely to be muted.</p> <p>The report notes the hydrological model which states that the greatest impact will be in the winters, when tourism activity is lowest. The report notes the areas of impact, and indeed, Lakelands and others higher up in the dam basin will be most affected.</p> <p>The report also notes that property values are impacted upon by various factors, including property location, interest rates, the characteristics of the neighbourhood, the features of the property, state of the property, size of property and security considerations. Not only proximity to the water.</p> <p>The report notes that having a dam 100% full is very unusual and makes the point that the additional value ascribed to properties through this consistency has accrued to the property owner thus far, despite the fact that the owner of the dam is under no obligation to maintain high water levels. The reverse would also be true, a fall in the additional value of the property created by the more or less constant water levels, would also fall to the property owner.</p> <p>If a property has been mis-sold, under the assertion that dam levels will remain constantly high, any claims relating to such mis-selling should be addressed to the seller.</p> <p>Part 1 of Chapter 2 of the NWA deals with the National Water Resource Strategy. It requires the progressive development, by the Minister, after consultation with society at large, of a national water resource strategy. The national water resource strategy provides the framework for the protection, use, development, conservation, management and control of water</p>

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	<p>be assured they will be given first priority? If they were to be given first priority and as climate predictions come more apparent then there will be no water for this pipeline so why build the pipeline in the first place because there will be no water to draw. It will just be another costly white elephant when this country can least afford it. This increased vulnerability and risk to resilience needs to be calculated and national and provisional disaster relief funds will need to be augmented to cope with the human tragedy that will result.</p> <p>CORRUPTION The power stations finance were corrupted from the start. An institutional analysis of who has power in energy planning and landscape planning and how this power shaped decisions should be included in the EIA in order to ensure past corruption does not lead into future corruption. Measures to avoid corruption and powerful elites dominating decisions need to be spelt out in this EIA.</p>				<p>resources for the country as a whole. It also provides the framework within which water will be managed at regional or catchment level, in defined water management areas. The national water resource strategy, which must be formally reviewed from time to time, is binding on all authorities and institutions exercising powers or performing duties under this Act.</p> <p>NWRS-1 was published in 2004 and NWRS-2 in 2013 after “consultation with society at large”. Both made reference to the MCWAP and that the “return flow” would be used for the MCWAP. It follows that the EIA does not inform the allocation of water from the MCWAP-2A in this case.</p> <p>The objective of the Reconciliation Strategy is “to ensure the sufficient and reliable supply of water of appropriate quality to all existing and future users together with the best utilisation of resources in the catchment, at the lowest cost and in an environmentally sustainable manner”. The Strategy is targeted at water related issues and addresses options, interventions and actions towards achieving the above objective. It is aware of the possible development scenarios and of the impacts and risks/uncertainties associated with the various options. The Strategy is not intended to be a singular master plan with fixed sequencing and time scales, but should be both flexible and robust under changing future conditions, including e.g. climate change.</p> <p>Three Reconciliation Strategies were already prepared for the Crocodile River (West) system, in 2008, 2012 and 2015. The outcome of the latest was comprehensively shared during the public and focus group meetings during the Scoping Phase.</p> <p>The SIPs are a product of the Presidential Infrastructure Co-ordination Committee.</p>

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					<p>The Infrastructure Development Act, Act No 23 of 2014, provides for the facilitation and co-ordination of public infrastructure development which is of significant economic or social importance to the Republic; to ensure that infrastructure development in the Republic is given priority in planning, approval and implementation; to ensure that the development goals of the state are promoted through infrastructure development; to improve the management of such infrastructure during all life-cycle phases, including planning, approval, implementation and operations; and to provide for matters incidental thereto.</p> <p>The Draft National Water and Sanitation Master Plan, already approved by Cabinet, points out the priority actions required until 2030 and beyond to ensure the water security and equitable access to water and sanitation services for all in RSA. It was developed in partnership with all relevant organs of state and water sector stakeholders, to give effect to local, national, regional, continental and international water and sanitation delivery targets and commitments. It ensures integrated planning and development across the entire water value chain support the recommendations from Cabinet Lekgotla on Inter-Ministerial Task Team (IMTT) basic Services strategy: e.g. focus on misalignment where bulk infrastructure has been provided without provision made for reticulation.</p> <p><u>Corruption</u> The suggestions with regards to corruption fall outside the scope of the EIA. Nevertheless, the World Bank loans for Eskom include the World Bank's standard reporting requirements on fraud and corruption.</p>
454.	<p>NATURAL CAPITAL IMPACT AND DEPENDENCIES</p> <ul style="list-style-type: none"> The EIA does not adopt an ecosystem /biodiversity and landscape and livelihood approach – it does not address risks related to ecosystem decline (chronic challenges), 	H. Erasmus (on behalf of the Lakeland environment	Reply Form (30/10/2018)		Refer to responses to No. 450 for comments provided by H. Erasmus on "Natural Capital Impact and Dependencies".

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE BY	RESPONSE
	<p>disruptions (acute challenges) and more long-term general ecosystem collapses.</p> <ul style="list-style-type: none"> The ecological reserve of the river and dam systems impacted is not properly calculated and unlikely to be enforced due to the weak government capacity. The EIA needs to address this issue and risk in greater detail. The impact of this project on national capital is extremely high- high likelihood, high magnitude and hugely significant. The EIA does not in any way try to assess and value this natural capital. It completely undervalues it. The Natural Capital Protocol and related documents on natural capital valuation need to be applied. Natural Capital impacts need to be included in the project costs and appropriate mitigation, offsets and compensation measures internalized in the project costs and built into mitigation plans. An ecosystem and livelihood specialist need to be engaged. 	committee)		DWS	<p>Refer to responses to No. 426 and No. 469 (bullet no. 72) with regards to the Reserve. The determination and implementation of the Reserve is a matter to be dealt with in terms of the NWA.</p> <p>This comment has bearing on macro-economic issues. The risks in ecosystem decline versus the risks associated with sustainable electricity supply to RSA's users form part of the scope of a Strategic Environmental Assessment of the development of Waterberg coal reserves. The vulnerability of the national economy and thus every citizen in the country, to the sustainable supply of electricity was demonstrated in the recent years. The development of the coal reserves in the Waterberg is required for the good of the RSA. It is stressed that the decision to proceed with Medupi Power Station was already made in the previous decade.</p>
455.	<p>STAKEHOLDER ANALYSIS</p> <ul style="list-style-type: none"> There are weak minimalistic Stakeholder Engagement Plans, stakeholder management and external communications and grievance mechanisms proportional to the risks at stake. For example, the meeting at Hartees was held on a Friday afternoon when everyone was still at work and besides no one realized how much water is going to be removed from the dam and river system else the community would respond. The press has not reported on any of this. No one has made an effort to explain to the public via the media what the consequences of this project going ahead really means. People now are trying to survive many political and economic crisis. They do not have time to attend meetings of projects they do not really know much about at all. They need media coverage via radio or TV and an easy communication channels for rapid information sharing around strategic issues they can respond to. 	H. Erasmus (on behalf of the Lakeland environment committee)	Reply Form (30/10/2018)	DWS Nemai Consulting (socio-economic specialist)	<p>Refer to responses to No. 450 for comments provided by H. Erasmus on "Stakeholder Analysis".</p> <p>Should the project receive an EA, funding for MCWAP-2A will be by commercial banks, development funding institutions, bonds and commercial paper. The World Bank is not involved on the MCWAP.</p> <p>The socio-economic report covers gender issues in the context of employment and capacitation arising from the project. Although equal access to employment across gender lines is a recognised right, the application of this right is often executed without careful consideration of the factors that may frustrate this right amongst women in the workplace. In this regard women are often subjected to cultural factors within the workforce from both peers on the job and from management who may resist both employing and promoting women, often based on cultural prejudices.</p>

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	<ul style="list-style-type: none"> What banks are considering to fund this project? There is no equator principle-based safeguard assessment undertaken in this EIA process. Why are the banks who have funded Medupi so silent? The Consultants have indicated the World Bank made this a conditionality of the funding for the power stations yet the World Bank leads everyone to believe it cares for adaptation issues. Are these banks prepared to sacrifice adaptation and resilience issues of water stressed areas that will cost lives and livelihoods to reduce the impact of their unwise fossil fuel investments? They need to explain this to the public in an open and transparent manner because they have committed to safeguards that are precisely there to prevent this from happening. There is no analysis on gender issues. The entire team that presented at Hartees were all men. There is nothing in the report indicating that a meaningful gender assessment has transpired and attention has been given to promoting to gender equity issues. 				A number of mitigation measures have been provided in the report to sensitise the project staff, promote and prioritise gender inclusivity. The grievance mechanism should include procedures to specifically address gender matters.
456.	<p>HEALTH AND SAFETY</p> <ul style="list-style-type: none"> The removal of such significant quantities of water for the fossil fuel industry is dismissed in the EIA on the grounds that it comes from Lesotho and is just stored temporarily in the dam so that entitles the fossil fuel industry to have it. This is not acceptable. The water is there. A thorough assessment on its best use needs to be made. Its best use is clearly to help this country survive droughts and produce food for a growing population. There are alternatives to energy production like solar and wind. There are no alternatives to agricultural water and recreation space and it is almost impossible in these times to create another thriving economic hub in the northwest province. The argument in the report that it is protecting existing agricultural use rights is insufficient. Gauteng is growing exponentially by more than 500 000 people a year. They need a place for recreation. They need a place to grow 	H. Erasmus (on behalf of the Lakeland environment committee)	Reply Form (30/10/2018)	DWS	<p>Refer to responses to No. 450 for comments provided by H. Erasmus on "Health and Safety".</p> <p>Refer to responses to No. 450 for comments provided by H. Erasmus on "River and Dam Science".</p> <p>Refer to responses to No. 4 and to No. 259 with regards to Existing Lawful Water Use.</p> <p>The allocation of water is dealt with in terms of the NWA by the DWS as in NWRS-2, i.e. not an EIA issue. The matters raised are also considered in the 2015 Reconciliation Strategy. The Reconciliation Strategies in the RSA are regularly updated and the stakeholder groups can engage freely.</p> <p>Future irrigation may be in other catchments of the RSA, e.g. Mzimvubu. Refer to NWRS-2.</p>

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	<p>more food and that means more water than just existing water rights. They need to cope with prolonged and serious droughts in Lesotho and in the North West Province and Gauteng. They need to protect some level of biodiversity.</p> <ul style="list-style-type: none"> There are water quality issues to shrinking the water levels of the dam and these are poorly addressed. There could be significant health problems to removing the water in the dam. These are not spelt out. Community exposure to disease is not addressed adequately. There are emergency preparedness and response issues – these are not addressed. When water runs low in the river system downstream of the dam and in the dam itself there will be shortage of access to water security and food security with likely raised security issues as food prices rocket. How will the project compensate for these increased security measures and associated costs? The public are stretched to their limit. They simply can't afford to cover the expensive energy costs plus all the externality costs as well. <p>RIVER AND DAM SCIENCE</p> <ul style="list-style-type: none"> The science of the consequences to water quality and quantity in the dam and river system had several inaccuracies related to how alien invasive species and algae blooms propagate and how dependent communities have become on current flows. The extent of smell zones was totally underplayed. The cost of managing the risk of decreased water quality in the dam and river system needs to be internalized in the cost of the project to the fossil fuel industries and not externalized and paid indirectly by those who manage water quality or who have to live near the area and whose lives, investments and livelihoods will be affected. 			Nemai Consulting (socio-economic specialist)	The fluctuating water levels will not affect water security, nor food security in the Hartebeespoort area. Water Irrigation needs in terms of ELWU downstream of HBDP will remain unaffected by the project. This is an urban area with a market economy which will continue to provide access to these services.
457.	<p>INACCURACIES IN THE FUTURE USE BREAKDOWN OF THE WATER USERS</p> <ul style="list-style-type: none"> The EIA assumed that the fossil fuel industrialist's statistics on what water they required was accurate and 	H. Erasmus (on behalf of the Lakeland environment)	Reply Form (30/10/2018)	DWS	The allocation of water is dealt with i.t.o. the NWA, i.e. users require a WUL (Chapter 4 of NWA). The requirements are interrogated through that process.

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	<p>reflected this in a most superficial way summarized in a table. There was no interrogation of the requirements. No transparency of assumptions made in arriving at these statistics. There was no breakdown of exactly what each industry needed the water for. This information is critical.</p> <ul style="list-style-type: none"> In the case of drought and under the high likelihood of a scenario of water becoming unavailable what would happen to these industries and to their pollution levels? This was not covered in the EIA. Again, the question arises that the likely scenario of extreme heat and extended drought periods – why build a pipeline when we know in the near future there will be no water to extract. <p>CLOSURE RISK</p> <ul style="list-style-type: none"> Who covers the cost of this pipeline when the water runs dry and the industries declare bankruptcy. This is an important and realistic scenario that needs to be thoroughly addressed The premature and or end closure of the project needs to be addressed 	committee)			<p>The operation rules were addressed during the Scoping Phase and reported on comprehensively by P. van Rooyen (refer to copy of presentation by P. van Rooyen in Appendix Q of the Final Scoping Report).</p> <p>The water requirements of users in the MCWAP System for planning purpose were obtained from the Post Feasibility Bridging Study Report (2015).</p> <p>The 2015 Reconciliation Strategy, compiled following free participation, include the details. Refer to No. 417.</p> <p><u>Closure Risk</u> Water for strategic purposes provided at 99,5% assurance of supply, i.e. very low risk.</p> <p>The closure risk is covered by the National Treasury, also standing behind Medupi's guarantee to the World Bank and funding for MCWAP-2A.</p>
458.	<p>COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION PROJECT (PHASE 2A) – WATER TRANSFER INFRASTRUCTURE</p> <ol style="list-style-type: none"> We submit these comments on behalf of our clients Earthlife Africa NPC (“Earthlife”) and groundWork, in response to the notification of 27 September 2018 calling for written comments on the Draft Environmental Impact Report (“DEIR”) for the Mokolo and Crocodile River Water Augmentation Project, Phase 2A - Water Transfer Infrastructure (“MCWAP2A project” or “the project”). For the sake of convenience, we confirm, once again, that our clients are registered interested and affected parties (I&APs) for this particular project. We, on behalf of our clients, submitted comments on the Background Information Document (BID) (on behalf of Earthlife Africa 	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018) <i>Note that an extension to the commenting period was requested by CER and granted</i>		<ol style="list-style-type: none"> Introductory section. No response is necessary. Responses provided below to statements made in 6.1 – 6.6.

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	<p>only) and on the Scoping Report for the MCWAP2A project on 24 June 2016 and 11 April 2018 respectively.</p> <p>3. We record that, as per an agreement with you, our clients have been afforded an extra 2 days for the submission of their comments. We are, accordingly, submitting these comments by the agreed extended deadline of 31 October 2018.</p> <p>4. Our clients reiterate the objections to the Scoping Report, which objections are attached as Annexure A, for ease of reference. We record, as explained in more detail below, that the concerns highlighted in the Scoping Report comments have not been addressed in the DEIR.</p> <p>5. A review of the DEIR by freshwater ecologist Kate Snaddon is attached as Annexure B (“the Snaddon Report”), and relied on in support of these objections. We also refer to and attach an expert report by aquatic ecologist Norma Sharratt of AquaAssess (“the AquaAssess Report”), as Annexure C, which was prepared for 350.org – another registered I&AP in relation to this project.</p> <p>6. We confirm that we object to the DEIR on the following grounds – as addressed in more detail below:</p> <p>6.1. The need and desirability of the project has not been established;</p> <p>6.2. The DEIR fails to adequately assess the impacts of the project on rivers, wetlands and ecosystems or to account for the reserve as required by the National Water Act, 1998 (NWA);</p> <p>6.3. The DEIR fails to adequately assess the climate change impacts of the project;</p> <p>6.4. The DEIR fails to properly assess cumulative impacts of the project;</p> <p>6.5. The DEIR fails to assess the indirect and socio-economic impacts of proceeding with MCWAP2A; and</p> <p>6.6. The DEIR fails to accurately consider alternatives to the project, including the no-go option, or to follow the precautionary principle as required by section 2 of the National Environmental Management Act,</p>				

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE BY	RESPONSE
	1998 (NEMA).				
459.	<p>Need and desirability of the project</p> <p>7. Regulation 18 of the Environmental Impact Assessment (EIA) Regulations under NEMA (“the EIA Regulations”) requires a competent authority, in considering an application for an environmental authorisation, to have regard to the need and desirability of the undertaking of the proposed activity.</p> <p>8. Section 2 of Appendix 3 to the EIA Regulations also states that the objective of the EIA process is to “describe the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the development footprint on the approved site as contemplated in the accepted scoping report”.</p> <p>9. The need and desirability for the MCWAP2A project is based on incorrect and outdated assumptions around South Africa’s electricity demand and need for further coal-based electricity and coal mining in South Africa. These comments demonstrate that there is in fact no need for additional coal-fired power stations in South Africa – or the linked coal mines.</p> <p>10. Table 3 of the DEIR lists the various intended and proposed users for the MCWAP2A project, the large majority of users will be “DoE Future Users” listed as, inter alia, “CF3 Power Generation”, “IPP other”, “CF3 mines”, “Mpumalanga”, “Industrial” and “Export” by 2050. It is not clear exactly which power generation or IPP projects this refers to, but in any event, we submit (and these comments make clear) that there is no need for any new coal-fired power capacity in South Africa. It is clear that the water is predominantly intended for power generation and mining use – not to address the impacts of water scarcity for communities or the surrounding environment. Only a small portion of the water is intended for municipal use.</p> <p>11. The need and desirability section of the DEIR poses the following question: “[d]oes the community/area need the activity and the associated land use concerned (is it a</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	7. Nema Consulting	<p>7. Section 3 of the Draft EIA Report provides the motivation for the project. The Need and Desirability of the Project is contained in Section 8 of the Draft EIA Report.</p> <p>8. Refer to response to bullet no. 7 above.</p> <p>9. The latest (27 August 2015) Draft IRP includes Medupi and Thabametsi Power Stations. It requires a secured water supply 99,5% assurance of supply including water for FGD, for which the EIA has already been authorised on 6 September 2018 and subsequently updated. Matimba’s FGD is also to be retrofitted in terms of RSA legislation. These developments need water supply from this project.</p> <p>10. The DWS is obliged to react to SIP1 and World Bank obligations. Refer to No. 361 where SIP1 is referenced.</p> <p>As shown in bullet no. 9 above the project is required to provide water to users as listed. If it is decided through the IRP process that CF3 station will not be developed in the Waterberg it will mean that a lesser volume of water than the current projections would be required. The need for the project is nevertheless demonstrated. The MCWAP-2A cannot be delayed awaiting final IRP finalisation.</p> <p>In addition, the World Bank loan’s conditions (e.g. FGD) need to be honoured including the obligation of government to provide water to Medupi Power Station.</p> <p>11. Need for water supply (as proven by Eskom) to</p>
				9. DWS	
				10. DWS	
				11. DWS	

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	<p><i>societal priority)? This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate)” and in response, the DEIR states, “MCWAP-2A features prominently on SIP 1, which aims to unlock SA’s northern mineral belt in one of the poorest provinces (Limpopo). The assurance of water supply to the current power stations including water supply for FGD near Lephalale is not acceptable and places the country’s power supply and economic position at risk.” It further states that “[t]he timing of the project is driven by the water demands associated with the development of the Waterberg Coalfields, where the water users include power generation, coal mining to support power generation, other industrial / mining.”</i></p> <p>12. We dispute the justifications provided to establish need and desirability, in that, inter alia:</p> <p>12.1. The SIP 1 objective of unlocking the Mineral Belt is not commensurate to “need and desirability”. In other words, the mere fact that unlocking the mineral belt has been designated as a government priority (a disputed one at that), does not prove or demonstrate that the project is necessary or desirable. No evidence is provided on how the proposed coal mine and power station developments that would be enabled by MCWAP2A would benefit communities or the country as a whole – particularly when all credible research (as shown below) evidences that building new coal capacity in South Africa will cause severe negative implications for the economy, human health, the environment and the climate. These comments make clear that any alleged benefits will not materialise;</p> <p>12.2. The need to secure water supply for existing power stations including for flue gas desulphurisation (FGD) can, and must, be addressed without the need for MCWAP2A. We have always maintained – in the Scoping Report comments and in the comments on the EIR for Medupi’s FGD (attached</p>			<p>12.1 Nema Consulting</p> <p>12.1 DWS</p> <p>12.3 DWS</p>	<p>Medupi and Matimba providing about 20% of RSA’s electricity, including much needed baseload and supplying to these strategic installations from separate water resources. Also refer to Prof Winkler’s independent article that the RSA cannot make a massive move towards renewables – yet. Same sentiments were expressed during recent DoE hearing on the Draft IRP.</p> <p>12.1 The EIA for the MCWAP-2A considers the need for supplying water, based on the determined demand. It assessed the activities associated with supplying this water through the proposed MCWAP-2A. The assessment of the need and desirability for the proposed coal mine and power station developments forms part of the Environmental Assessments undertaken for these developments.</p> <p>12.1 The EIA for the MCWAP-2A cannot assess the impacts of activities associated with the aforementioned developments, as they are governed by their own Environmental Regulatory Framework.</p> <p>SIPs were approved in Infrastructure Development Act, following proper consultation. Water supply to this area will be an enabler to unlock the Mineral Belt (SIP1), i.e. not only coal.</p> <p>12.2 Refer to response to No.335 for previous comments received.</p> <p>12.3 Refer to bullets no. 9 and no. 10 above. The necessity and desirability of the project is proven by the requirement to supply water to Medupi and Thabametsi, and for emission abatement technology at Medupi and Matimba. If other expected developments are delayed or cancelled</p>

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	<p>as Annexure D) that less water-intensive FGD technology options could be utilised by Eskom, yet Eskom opted, unjustifiably, to propose the most water-intensive FGD option. In other words, Eskom's "need" for the water from MCWAP2A is self-inflicted and could (and should) have been avoided. We have previously recommended not completing the remaining units of Medupi, given that there is insufficient water and the remaining units are not needed, and we stand by this recommendation; and</p> <p>12.3. The project is not necessary or desirable in that the majority of the developments it intends to supply are not necessary or desirable, as addressed in more detail below. This is clear from: developments in relation to South Africa's electricity plan; the harmful impacts of building new coal capacity; the urgent need to decarbonise the electricity sector; and South Africa's transition away from coal.</p>				<p>it will only mean that less water will be transferred than currently anticipated, the project components will however be the same.</p> <p>Over and above FGD needs, it does not make national strategic sense to run about 20% of the electricity capacity on a single water source (Mokolo River).</p> <p>Also refer to No 460, bullet no. 22.</p> <p>Note very diverging opinions (including all modes of generation) raised during the public DoE Portfolio Committee hearing on the Draft IRP held recently in Parliament.</p>
460.	<p><i>The Integrated Resource Plan for Electricity</i></p> <p>13. The DEIR states that "due to significant/dynamic changes occurring in the national energy planning environment and their related water demand figures compared to the demand scenarios considered during the 2010 Feasibility Study, the implementation of MCWAP-2A was temporarily placed on hold." It states that one of the main contributors to this was the fact that the Department of Energy's (DoE) Integrated Resource Plan for Electricity (IRP) - a critical guiding plan for the construction of new generation capacity - had not been finalised. We point out that an updated IRP, to date, has still not been finalised with the current, woefully outdated, IRP promulgated in 2011 for 2010-2030 ("IRP 2010") still being in place. The most recent draft of an IRP update ("draft IRP 2018") was gazetted on 27 August 2018 and stakeholders were given until 26 October 2018 to submit written comments.</p> <p>14. The draft IRP 2018 states that:</p> <p>14.1. "key assumptions that have changed include</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	13 – 23. DWS	<p>13. Refer to No. 315 for response related to the IRP. The risk that the RSA default on the World Bank loan conditions, licence and water supply guarantees to Medupi is one of the biggest risk facing the country. Implementation of MCWAP-2A cannot be delayed any longer without serious repercussions for the RSA. Refer to No. 460.</p> <p>14. The Draft 2018 IRP nevertheless includes Medupi and Thabametsi Power Stations. Other developments resulting from the unlocking of the mineral belt has since surfaced, not only coal related projects. Coal is also transported from this area to Mpumalanga "keeping the lights on". The applicant also noted the role of other modes of generation, including nuclear.</p> <p>15 - 20. During the abovementioned DoE hearing the entire Draft IRP was commented on, including the manner and accuracy of the "least-cost" option.</p>

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	<p><i>electricity demand projections that did not increase as envisaged, existing Eskom plant performance that is way below the 80% availability factor, additional capacity committed to and commissioned, as well as technology costs that have declined significantly” (emphasis added);</i></p> <p>14.2. <i>“without a policy intervention, all technologies included in the promulgated IRP 2010 – 2030 where prices have not come down like in the case of PV and wind, cease to be deployed because the least-cost option only contains PV, wind and gas” (emphasis added); and</i></p> <p>14.3. <i>For the period post 2030, “adopting no annual build limits on renewables or imposing a more stringent strategy to reduce greenhouse gas emissions implies that no new coal power plants will be built in the future unless affordable cleaner forms of coal-to-power are available.”</i></p> <p>15. The draft IRP 2018 confirms firstly that the demand as projected in the IRP 2010 was heavily inflated; and secondly that the new coal-fired power capacity is not necessary and does not form part of a least-cost plan. This is also confirmed by research of the Council for Scientific and Industrial Research (CSIR) and the Energy Research Centre (ERC).</p> <p>16. The Scoping Report heavily relied on the current outdated IRP 2010, which (the draft IRP 2018 now confirms) incorrectly assumed a very high energy demand, and, accordingly, a high demand for new, unnecessary coal-fired power stations and mines – with accompanying high water demands - within the Lephalale area. We submit that the demand projections in the draft IRP 2018 are still overstated and incorrect – as submitted in comments by groundWork and by the Centre for Environmental Rights on the draft IRP 2018. Incorrect assumptions regarding electricity demand, and the reduced provision for new coal-fired power station projects in the draft IRP 2018 would, and should, have significant implications for the feasibility of the envisaged coal developments in</p>				<p>The Draft IRP will be updated but the RSA has reached the stage that the MCWAP-2A implementation cannot be delayed further without a catastrophic outcome for the State.</p> <p>21. Over and above FGD needs, it does not make national strategic sense to run about 20% of the electricity capacity on a single water source (Mokolo River). Environmental authorisation for the FGD was issued on 6 September 2018 and recently amended.</p> <p>22. The intension was already communicated in the previous millennium and included in NWRS-1, NWRS-2 and 2015 Reconciliation following free public participation. It is not in the public interest that Eskom fails, it may lead to the RSA's economic collapse. In other processes the construction of the power stations at Lephalale was already determined to be in the national interest. These decisions were already taken more than a decade ago. Due to the economic and financial implications the stated decommissioning of power stations is totally unrealistic and would be detrimental to the RSA economy.</p> <p>The dim reality is that the project is already late as the expected water delivery date is January 2025, therefore water delivery to Eskom for the FGDs at Medupi (due April 2024) will be late. The RSA is therefore at the mercy of the World Bank. There cannot be any turnaround without serious repercussions for the RSA. Pre-construction activities should continue immediately to avoid delays.</p> <p>Should power generation at Medupi be endangered by non supply of water from the MCWAP-2A the financial repercussions for the</p>

No.	COMMENT / QUERY / ISSUE	RAISED BY	SOURCE	RESPONSE BY	RESPONSE
	<p>Lephalale, which in turn, should have implications for the need and desirability of the MCWAP2A project. The DEIR therefore needed to account for this and the findings of the draft IRP 2018.</p> <p>17. The draft IRP 2018 proposes “forcing in” 1000MW of new coal capacity as a policy adjustment – this would be from the 2 preferred bidders under the Coal Baseload Independent Power Producer Procurement Programme (CBIPPPP), namely Thabametsi (which will be based in Lephalale, Limpopo) and Khanyisa (eMalahleni, Mpumalanga) (“the 2 coal IPPs”) - despite acknowledging that they do not form part of a least-cost plan. This new coal capacity in the draft IRP 2018 is disputed and the proposed coal IPPs are both facing numerous legal challenges of their required licences and authorisations.</p> <p>18. Even though the draft IRP recommends the establishment of the 2 coal IPPs, we dispute that the reasons and bases for forcing the coal capacity in – namely that the projects are already “procured” and that they will go a long way to minimising jobs – are correct. We record that a final IRP that makes provision for new coal capacity will be met with legal challenge.</p> <p>19. In any event, it is notable that the draft IRP 2018 makes provision for substantially less new coal capacity than the draft IRP that was published for comment in 2016 and what is provided for in the “current” the IRP 2010.</p> <p>20. The need for the new “committed” capacity from Medupi and Kusile in the draft IRP 2018, has also been disputed with the argument being made that this additional capacity should be reconsidered.</p> <p>21. The DEIR states that “[t]he latest IRP confirms the need for Medupi and Matimba including FGD and therefore water supply to the Lephalale area although the transfer capacity from the Crocodile River (West) may be reduced but the WTI components will not be affected, albeit smaller. It is noteworthy that the IRP does not impact on MCWAP-2A’s implementation schedule to meet Eskom’s finance and licence obligations”. We have previously recorded – in the Scoping Report comments and in</p>				<p>RSA will be immediate and dramatic. If this scenario unfolds the World Bank would be at liberty to demand repayment, i.e. \$3,75 billion, which could cripple RSA financially. Failure to implement the MCWAP-2A may consequently lead to a withdrawal of the loan, intervention by the IMF, call on Treasury guarantees (about 70% of all guarantees totalling 60% of the GDP), downgrading of Eskom and RSA by Rating Agencies, currency instability, all of which may lead to social upheaval.</p> <p>A few media quotations to stress the seriousness of the situation is copied below:</p> <ul style="list-style-type: none"> ○ “Before the RSA delegation in early 2018 departed for the annual Davos engagements the then Minister of Finance said that if Eskom is not dealt with urgently, South Africa’s whole economy could collapse and the fiscus simply does not have the funds to bail out Eskom. He added: “There would be no currency, and no economy for the country if Eskom went belly-up, adding that the crisis is extremely serious. ○ President Cyril Ramaphosa also admitted that the challenges around Eskom are huge, and said the state-owned enterprise is top of his mind. ○ Eskom’s debt due to its new build programme is hefty. Treasury has issued a R350 bn government guarantees to Eskom, of which R275 bn has already been used. ○ The International Monetary Fund already said that lenders had urged Treasury to intervene and RSA has reached the stage where we can’t be gradualist.” <p>23. The MCWAP-2A cannot be delayed any longer without serious repercussions for the RSA.</p>

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	<p>relation to the Medupi FGD environmental authorisation - that FGD for Medupi could proceed without the need for MCWAP2A, particularly if other less water-intensive technologies for FGD were to be implemented. Medupi's FGD cannot be a justifiable basis for the MCWAP2A project, when other less-water intensive options were, and are, available to Eskom. As stated above, the need for the Medupi project must also be reconsidered and questioned – as the project's (certainly the full project with all envisaged units) necessity is disputed.</p> <p>22. Medupi and Matimba, and any proposed new coal plants, including Thabametsi, should not have been allowed to proceed without there being sufficient water for these projects (without MCWAP-2A). These projects could not have presumed MCWAP-2A would proceed as a guaranteed, foregone conclusion. This would defeat the purpose of conducting an EIA for MCWAP-2A. Furthermore, the “necessity” for MCWAP-2A has been negligently created. MCWAP-2A cannot be justified solely by unnecessary coal-fired power stations that should not have been built in the first place. If those power stations cannot operate without the water from MCWAP-2A they should be decommissioned and/or not built. This would – we submit – be in the public interest.</p> <p>23. It is correct that the DEIR acknowledges the importance of the IRP in this process, particularly because MCWAP-2A is largely premised on, and is in response to, anticipated future developments in the electricity sector - mainly proposed coal-fired power stations and mines within the Lephalale area - which, we submit, are neither necessary nor desirable. But, in this regard, the DEIR should have been placed on hold until the finalisation and promulgation of an updated IRP. We also point out – as stated above - that a final IRP that makes provision for new coal capacity, is likely to be met with legal challenge.</p>				
461.	<p><i>The negative and harmful impacts of building new coal-fired power stations</i></p> <p>24. We have consistently emphasised that burning coal for electricity has devastating impacts for human health, the</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)		24 – 27 Refer to No. 302 for responses to climate change. Refer to No. 459 and 460 for response to need and desirability.

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	<p>environment, including South Africa's limited water resources, and the climate. These impacts also come with high external costs.</p> <p>25. In relation to the questionable necessity of building new coal-fired power stations (specifically Thabametsi and any other new coal plants in South Africa), research by the ERC on the effects of building the 2 coal IPPs, compared to a future electricity build plan that excludes them, finds that since a least-cost electricity build plan for South Africa does not include any new coal plants, in each scenario, the coal IPPs had to be forced into the model in order to compare the effects on the system. The main findings of the ERC report are that:</p> <p>25.1. The proposed Thabametsi and Khanyisa coal-fired power stations will cost South Africa an additional R19.68 billion in comparison to a least-cost energy system;</p> <p>25.2. The 2 coal IPPs are not needed to meet South Africa's medium-term electricity demand, as alternate electricity sources i.e. wind, solar PV, and flexible gas generation are more economical;</p> <p>25.3. The coal IPPs' greenhouse gas (GHG) emissions will be 205,7Mt CO₂eq over the 30 year period of the power purchase agreements, which would effectively negate the government's GHG emission mitigation plans and efforts. Even in a best-case scenario for the coal IPPs (with GHG emissions curtailed as far as possible), the 2 coal IPPs would still frustrate South Africa's commitments under the Paris Agreement, through raising the costs of mitigation technologies and requiring significant GHG emission reductions in the power and other sectors (in which such reductions are more difficult and more expensive); and</p> <p>25.4. That, in relation to Eskom and electricity supply and costs, <i>"[n]ot only are the coal IPPs not required to meet demand, and not only do they raise costs, and increase emissions, but they also result in</i></p>				

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	<p><i>increasing pressure on Eskom. Building new coal plants in a situation of low demand means reducing the output of Eskom's fleet, potentially accelerating the 'utility death spiral' in which Eskom already finds itself and putting the electricity supply industry – and thus the South African economy – at risk</i> (emphasis added), "[w]hen the coal IPPs are forced into the electricity build plan, this results in decreased use of existing coal plants (which are also cheaper than the coal IPPs), which puts raises (sic) costs overall and puts Eskom at risk" (emphasis added) and "the implications of these findings are clear. South Africa is currently facing a large surplus in generation capacity, in particular inflexible base supply capacity. Eskom is facing a financial crisis and rising electricity prices will drive consumers away from the utility. Investments that unnecessarily increase costs in the electricity sector should be avoided" (emphasis added).</p> <p>26. This makes clear that, far from being good for the economy or necessary, new coal-fired power stations are not needed and will cost South Africa money. The Minister of Energy recently confirmed this additional cost from the coal IPPs to be R23 billion.</p> <p>27. By developing new and unnecessary coal infrastructure, the risk of stranded assets is also further increased. A global report coordinated by French energy think tank The Institute for Sustainable Development and International Relations (IDDRI) and Climate Strategies, to which South Africa's ERC was a contributor, titled "Implementing Coal Transitions: Insights from case studies of major coal-consuming economies" ("Coal Transitions Report"), shows that:</p> <p>27.1. "In South Africa ... total electricity demand has been declining, resulting in surplus capacity and leading to the likely stranding of recently built coal power plants. In this context, the issue of how to</p>				

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	<p>transition from a coal-intensive to a low-carbon economy while ensuring a “just transition” is gathering attention” (emphasis added);</p> <p>27.2. “The coal transition scenarios explored by the project suggest that the best way to manage stranded assets in the coal sector is first and foremost to avoid allowing coal-sector investors to support assets likely to be stranded. Anticipation and avoidance is key. Secondly, investors should generally be required to bear losses where it was possible to sufficiently anticipate risks” (emphasis added); and</p> <p>27.3. “In some scenarios, achieving 2°C-compatible coal transitions could require creating some stranded assets, even if the above policy recommendations were followed. In the South African or Indian scenarios, an assumed high growth in metallurgical and thermal coal use in industry puts pressure on the power sector, which has to decarbonise at fast pace to remain within the carbon budget. In the South African scenario, all coal-fired power plants are phased out by 2040, resulting in a handful of units closing more than 10 years earlier than their expected financial lifetime” (emphasis added).</p>				
462.	<p><i>The urgent need to decarbonise the electricity sector</i></p> <p>28. A landmark report released on 8 October 2018 by the Intergovernmental Panel on Climate Change (IPCC) on Global Warming of 1.5 °C (“the IPCC Report”), confirms, inter alia, that:</p> <p>28.1. Human activities have already caused approximately 1.0°C of global warming above pre-industrial levels, resulting in increased natural disasters, droughts, and rising sea levels;</p> <p>28.2. The risks of allowing temperature increases to reach even 1.5 degrees Celsius are dire (the Paris Agreement currently sets the target at 2 °C).</p> <p>28.3. Limiting global warming to 1.5°C would require “rapid and far-reaching” transitions in land, energy,</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)		28 -29 Refer to No. 302 for responses to climate change.

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	<p>industry, buildings, transport, and cities; and</p> <p>28.4. Global net human-caused emissions of carbon dioxide (CO₂) must fall by about 45 percent from 2010 levels by 2030, reaching ‘net zero’ around 2050.</p> <p>29. The IPCC Report – which is addressed in more detail below – essentially further confirms that drastic GHG emission reductions are needed, and these are needed urgently, as the Report envisages a 60-80% reduction in the use of coal by 2030 and negligible use of coal by 2050.</p>				
463.	<p><i>The inevitable coal transition</i></p> <p>30. The Coal Transitions Report, referred to above, looks at coal transitions globally and in South Africa. It makes clear that a coal transition is inevitable and has been underway in South Africa and globally for some time already. In other words, it is no longer a question of “if” South Africa phases out of coal, but “when”. There will be further job losses unless government puts in place credible, well-communicated and expertly-executed plans to support workers and diversify the economy towards other labour-intensive sectors.</p> <p>31. The Coal Transitions Report highlights the benefit of taking steps now rather than later, in order for a transition to be just and inclusive: it states that “<i>early anticipation and preparation of the transition is vital to achieve the best results</i>”. Importantly, the report finds that:</p> <p>31.1. Coal transitions are affordable for energy consumers because the transition away from coal is now the least-cost option for South Africa;</p> <p>31.2. “universal electricity access – and economic growth – can be ensured in ... developing countries (i.e. South Africa and India) while also phasing down thermal coal in the power sector ... Universal electricity access to consumers can ... be provided more cheaply and reliably without coal” (emphasis added);</p> <p>31.3. Coal transitions can strengthen global climate action and deliver other social and economic objectives –</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	DWS 41 – 42. The Biodiversity Company (aquatic specialist)	<p>30 – 40 Refer to No. 302 for responses to climate change. Refer to No. 459 and 460 for response to need and desirability. The debate regarding the coal transition falls outside the scope of the EIA. It is a matter for the IRP. RSA is already committed with regards to MCWAP-2A to provide water to Medupi and stations as mentioned in No. 459 (bullets no. 9 and no. 10) above including water for emission abatement, domestic use and to unlock utilisation of other minerals.</p> <p>41-42. The aquatic ecological assessment report was written with the understanding that no water is to be transferred or discharged into the natural environment within the receiving basin (i.e. the water is to be used within a closed circuit system). Therefore, the associated risks of inter basin transfer were not addressed. The assessment of the aquatic ecosystems within the receiving basin would be redundant.</p> <p>The River Management System function is to <i>inter alia</i> to ensure the EWR of the Crocodile River (West) and downstream systems (Limpopo River) are met. Should water be directly or indirectly discharged into the Mokolo or Limpopo River additional studies would be</p>

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	<p>for example “in South Africa, diversification from coal in the power sector would help reduce the cost of supplying electricity, while limiting the risk of cross-subsidisation of the power sector by the coal export sector”;</p> <p>31.4. A “just transition for workers is not an abstract or utopian concept. Rather, it is something that can be implemented, that has been implemented and that is being implemented in some places around the world today. Examples include the Netherlands (Limburg in the 1960s), Canada (Alberta today), Germany (Ruhr in the 1960s and today), and, to some extent, Australia (CFMEU, 2017)”;</p> <p>31.5. governments should look to finance the transition, for example by establishing just transition funds into which companies pay and/or ensuring companies have adequate financial resources to pay for the transition of their labour force; and</p> <p>31.6. “Pitfalls from past transitions include a propensity to “lock-in” to the incumbent industry to block the arrival of economic diversification. This can often lead to actors trying to “hang on” to a dying industry, neglecting the future only to finally start economic diversification too late ... structural economic change still takes significant time, resources, and a process of trial and error. Beginning the process of economic diversification is therefore a matter of urgency for all coal-and fossil-fuel intensive regions that wish to survive and provide equivalent or better economic opportunities for the next generations” (emphasis added).</p> <p>32. In short, what this report makes clear is that building new coal plants, locking South Africa into expensive, unnecessary and outdated infrastructure is the worst thing that South Africa could do, including for coal workers and the unemployed. Rather than subsidise the coal industry, support should go to the workers directly; including in efforts to retrain and reskill coal workers.</p> <p>33. It is clear from the draft IRP 2018, and modelling and</p>			<p>41 – 42. Nemai Consulting (socio-economic specialist)</p> <p>43. DWS</p>	<p>required to determine the water balance and additional risks.</p> <p>The basis of the socio-economic specialist report is that the project uses return flow water that exists in the Crocodile West River Basin and transfers it to the Mokolo Basin. The specialist study adopted the stance that ELWU will be recognised and honoured in terms of the NWA. The study was also based on the premise that the River Management System, as described in the Draft EIA Report will be implemented prior to the commissioning of the proposed project.</p> <p>43. The statement is disputed in the strongest possible manner. Without MCWAP-2A the RSA economy is put at risk, refer to No. 460. The MCWAP 2A is required for Medupi including the retrofitting of emission abatement technology at the existing Matimba Power station.</p>

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	<p>research by the CSIR, IDDRI, Climate Strategies and ERC, that there is a drastic shift in the electricity needs of the country, and the best and cheapest means for meeting those needs – this has implications for proposed future developments of coal-fired power capacity. It is also evident that: a transition away from coal is inevitable and is already underway; and that climate change impacts are intensifying, as is the need to do more to drastically reduce South Africa’s GHG emissions.</p> <p>34. In our comments on the Scoping Report, we motivated for the DEIR to include scenarios where water requirements for coal-fired power stations and coal mines are reduced to cater for the possibility that these developments cannot and do not proceed. The DEIR still fails to include such scenarios. The DEIR does not anticipate that the developments may not go ahead despite there being evidence that this may be the case. As a result, it inaccurately assumes that the project is needed and desirable.</p> <p>35. We reiterate our submissions made in the Scoping Report comments that there is no need for additional coal capacity as supported by various reports and studies. Not only would the continued provision for and reliance on coal capacity increase GHG emissions and air pollution, such action would also put the country under unnecessary financial strain because new coal is no longer competitive, nor is it in the public interest.</p> <p>36. The National Development Plan (NDP) specifically envisages that <i>“by 2030, South Africa will have an energy sector that promotes:</i></p> <p><i>36.1. Economic growth and development through adequate investment in energy infrastructure. The sector should provide reliable and efficient energy service at competitive rates, while supporting economic growth through job creation.</i></p> <p><i>36.2. Social equity through expanded access to energy at affordable tariffs and through targeted, sustainable subsidies for needy households.</i></p>				

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	<p>36.3. <i>Environmental sustainability through efforts to reduce pollution and mitigate the effects of climate change” (our emphasis).</i></p> <p>37. We therefore submit that the current assumed need for the development of the Waterberg coalfields is not only in contrast to the current and likely future energy reality, but it is also not aligned with best available research or with the NDP, which calls for an energy sector: that provides reliable and efficient energy service at competitive rates, that is socially equitable - through expanding access to energy at affordable tariffs; and that is environmentally sustainable, through reducing pollution and mitigating climate change.</p> <p>38. It is not in the best interests of the country to spend significant sums of money on a project that aims to supply water to developments which are not currently required by South Africa – and which are likely, if built, to become stranded assets; nor will they be required in future.</p> <p>39. The need and desirability of the project in the DEIR is centered on these anticipated developments, but the DEIR fails to investigate and assess the actual need of the developments themselves or the likelihood of them coming to fruition. Such assessment would provide a clear indication of the extent of the need and desirability of the MCWAP2A project. However, the DEIR is very vague in its motivations for the project, mainly dwelling on the claimed future developments of coal-fired power stations and mining. With respect, this is far removed from factual reality and is also unlawful. We dispute that any need or desirability for the MCWAP2A project exists.</p> <p>40. The information above serves as sufficient evidence to show that the development of new coal-fired power stations is not of strategic importance. Particularly as South Africa currently has excess coal capacity, and the DoE acknowledges that coal-fired power is simply no longer cost-competitive and does not form part of a least-cost plan.</p> <p>41. Further, the Snaddon Report states, in relation to inter-</p>				

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	<p>basin transfers more generally that <i>“the needs (environmental, social and economic) of all basins concerned in any IBT [interbasin transfer] must be given equal weighting, and must be assessed to the same level for each basin. Such a balanced assessment is not evident in the MCWAP2A DEIR [draft environmental impact report]”</i>.</p> <p>42. Related to the above, a comprehensive international review of risks related to inter-basin transfers states that <i>“because IBTs [inter basin transfers] have enormous ecological risk, it is necessary to comprehensively analyse the inter-basin water balance relationship, coordinate the possible conflicts and environmental quality problems between regions, and strengthen the argumentation of the ecological risk of water transfer and eco-compensation measures”</i>. The Snaddon Report thus suggests that inter-basin transfers, by their very nature, require comprehensive assessments of the risks posed to all communities impacted by such transfer, and the concomitant development of compensation or mitigation measures that will effectively reduce these risks. In the case of the MCWAP-2A DEIR, it is evident that <i>“the ecological and knock-on social-economic risks have not been analysed comprehensively”</i> (emphasis added).</p> <p>43. In light of the above, we strongly dispute that the DEIR has made out a case for the need and desirability of the MCWAP-2A project, which must be taken into account by the competent authority as required by the EIA Regulations.</p>				
464.	<p>Impacts on rivers, wetlands and ecosystems and failure to account for the Reserve.</p> <p>44. The NEMA EIA Regulations, Appendix 3 section 3(j)(i), requires that <i>“an environmental impact assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include each identified potentially significant impact and risk, including... (ii) the nature, significance and consequences of the impact and</i></p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	Nemai Consulting	<p>44. Reference to EIA Regulations. No response needed.</p> <p>45. Refer to response to No. 423 with regards to the Matlabas River.</p> <p>The Baseline Aquatic and Impact Study, as well as Section 16.4 of the EIA Report, were updated to include the following recommendations: <i>The</i></p>

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	<p><i>risk; (iii) the extent and duration of the impact and risk; (iv) the probability of the impact and risk occurring; (v) the degree to which the impact and risk can be reversed; (vi) the degree to which the impact and risk may cause irreplaceable loss of resources; and (vii) the degree to which the impact and risk can be mitigated". We submit that these requirements have not been met.</i></p> <p>45. The Snaddon Report highlights that the assessment of the impacts of the project during the operational phase is inadequate. In particular, the DEIR has not adequately assessed the project's impacts on: hydrology from abstraction from the Crocodile (West) River; scouring of the pipeline into the ephemeral Matlabas River; the transfer of water into the Mokolo River catchment (via the Operational Reservoir); water quality; sediment regime and erosion; and the transfer of biota. This failure is unacceptable.</p>				<p><i>ecological status of the Matlabas River needs to be determined during the high-flow period, prior to construction. The high flow survey needs to address potential impacts of the valve scouring on water quality, erosion and sedimentation of the Matlabas. Furthermore, a study of the potential introduction of nuisance and invasive species into the Matlabas should be undertaken. This should include a diatom assessment of the Crocodile and Matlabas Rivers to determine risk during valve scouring and leaks. This will determine the requirements for crossing the watercourse (i.e. open trench), as well as for scouring (i.e. draining water from the pipeline, typically during maintenance).</i></p>
465.	<p>46. Below we address, in turn, the concerns around the impacts of the MCWAP-2A project on:</p> <p>46.1. River ecosystems;</p> <p>46.2. Wetland ecosystems;</p> <p>46.3. Aquifers; and</p> <p>46.4. The determination of the Reserve.</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)		46. Introductory section.
466.	<p>Impacts on river ecosystems</p> <p>47. The abstraction from the Crocodile (West) River catchment is a considerable concern, particularly in the context of the already high water use rates, predominantly from irrigation and mining of platinum, gold, chrome, manganese, iron ore, diamonds, dimension stone and mineral sands and the current impact of these activities on water quantity and quality in the catchment.</p> <p>48. The Baseline Aquatic and Impact Study specialist report (Appendix I1 to the DEIR) includes loss of flow and inundated areas below the abstraction point as an impact of concern during the operational phase. However, there is no indication of how this will affect the characteristics of the Crocodile (west) River downstream of the Vlieëpoort Weir. Notably, there is no River Maintenance Management Plan (RMMP) for the Crocodile (West) River. Thus, the</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	47 - 59. The Biodiversity Company (aquatic specialist)	<p>47. Refer to No. 6 for a response to the availability of water.</p> <p>48. The proposed RMS is the vehicle for the Crocodile River Management. This requires input from DWS specialists to ensure the EWR, RQOs and Reserve of the Crocodile River are met. The formation of the RMS falls outside the specialist's scope of work. However, recommendations that the system meet gazetted requirements for the Crocodile and downstream systems were made.</p> <p>49. The water from the Crocodile is proposed to remain within a closed circuit system, and no water is proposed to be discharged directly or directly into the Mokolo or Limpopo Rivers.</p>

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	<p>plans to mitigate the impacts associated with the abstraction weir are somewhat vague, and this contradicts the duty of care as set out in section 28 of NEMA.</p> <p>49. A further considerable concern of the project is the transfer of poor quality water from the donor catchment to the receiving catchments. These potential impacts are not addressed in the Baseline Aquatic and Impact Study or the DEIR. Notably, the donor Crocodile (West) River is highly impacted in terms of water quality. This is acknowledged in the DEIR, and is attributed to the following “DWA (2012a)”: <i>“The Lower Crocodile River water quality is deteriorating because of increased salts and nutrients. There are also increased levels of toxicants in the middle reaches of the river. Urbanisation, industrial diffuse sources and high agricultural return flows are the major impacting activities. Treated wastewater return flows from the Upper Vaal Water Management Area play an important role downstream where the water is used in the Crocodile West catchment area. Organic pollution from point and diffuse pollution sources is a significant contributor to the poor water quality in the Crocodile River, which is evident in the highly eutrophic Hartbeespoort Dam.”</i></p> <p>50. Notably, the Hartbeespoort Dam is hypertrophic and has frequent summer-time blooms of algae and the highly invasive Water Hyacinth (<i>Eichhornia crassipes</i>). These problems could potentially be transferred to the Matlabas and Mokolo River catchments. Hyacinth has been declared a category 1b weed in terms of the National Environmental Management: Biodiversity Act (2004) - Alien and Invasive Species Regulations (ARC) and must be controlled or eradicated where possible.</p> <p>51. According to the Snaddon Report, the scoring of the water quality impacts at a catchment scale (i.e. the extent of physico-chemical modification, and of point and non-point source toxicants in the catchment) out of a maximum of 1, indicates a range of relevant scores, including scores for Hartbeespoort Dam catchment (0.67), Vlieëpoort Weir catchment on the Crocodile (West) River (0.60), the</p>			DWS	<p>50. The water from the Crocodile is proposed to remain within a closed circuit system, and no water is proposed to be discharged directly or directly into the Mokolo or Limpopo Rivers. A high flow assessment has been recommended to determine potential nuisance species and risks to the Matlabas River.</p> <p>51. The water from the Crocodile is proposed to remain within a closed circuit system, and no water is proposed to be discharged directly or directly into the Mokolo or Limpopo Rivers. A high flow assessment has been recommended to evaluate detailed chemical analysis of both the Crocodile and Matlabas Rivers and identify potential risks to the Matlabas system during scouring or potential leaks.</p> <p>52. A high flow assessment has been recommended to evaluate detailed chemical analysis of both the Crocodile and Matlabas Rivers and identify potential risks to the Matlabas system during scouring or potential leaks.</p> <p>53 - 54. Refer to response to No. 423 with regards to the Matlabas River.</p> <p>55. A high flow assessment has been recommended.</p> <p>56. Report P RSA A000/00/8609 - Feasibility Stage: Supporting Report 10: Requirements for the Sustainable Delivery of Water provide detail on the proposed RMS. Operating Rules were communicated by P. van Rooyen during selected Scoping Phase meetings (refer to a copy of his presentation contained in Appendix Q of the Final Scoping Report).</p>

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	<p>Matlabas River catchment (0.2) and Mokolo River catchment at the dam (0.08). This highlights a marked deterioration in water quality in the donor catchment in comparison with the recipient catchments.</p> <p>52. Notably, the water quality analysis outlined in the Baseline Aquatic and Impact Study did not include an analysis of nutrients. As highlighted above, the transfer of nutrients into the receiving catchments is a major concern that was not adequately addressed in the Baseline Aquatic and Impact Study.</p> <p>53. Further, the Baseline Aquatic and Impact Study provides insufficient detail on the quantity and quality of water that would be released into the Matlabas River during valve scouring. This is likely to have a significant impact on the hydrology and water quality in this ephemeral system. Accordingly, it should have been assessed and included in the Baseline Aquatic and Impact Study.</p> <p>54. Notably, it is anticipated that the release of any quantity of poor quality water into the channel of the Matlabas River will carry risks related to, <i>inter alia</i>:</p> <p>54.1. Increasing nutrient enrichment in the catchment;</p> <p>54.2. Increased salinity in the catchment;</p> <p>54.3. Erosion at the point of discharge, and sedimentation further downstream;</p> <p>54.4. Transfer of biota; and</p> <p>54.5. Loss of species sensitive to changes in hydrological regime, water quality and habitat condition.</p> <p>These are high risks that needed to be properly assessed.</p> <p>55. In the Baseline Aquatic and Impact Study, affected river reaches in the Crocodile (West) River and Matlabas River were visited only during one, low flow season. The Snaddon report records that a project of this magnitude warrants an understanding of the wet season characteristics of the sites, and the seasonal variation.</p> <p>56. Notably, the Baseline Aquatic and Impact Study has insufficient information on the operational impacts of the project on riverine biodiversity, once again relating</p>				<p>The impacts listed assume that the RMS will be effectively implemented and that the EWR for the system be met. The objective of the RMS is to monitor and control flows. Furthermore, the MCWAP project is based on the assumption of increased flows within the Crocodile due to run-off and return flows from upstream reaches. Therefore, it is assumed flows within the Crocodile are maintained despite abstraction. The Crocodile River has experienced extreme low flows, however, the RMS should regulate base flows as a minimum requirement.</p> <p>57. The impacts listed assume that the RMS will be effectively implemented and that the EWR for the system be met. The objective of the RMS is to monitor and control flows. Furthermore, the MCWAP project is based on the assumption of increased flows within the Crocodile due to run-off and return flows from upstream reaches Vlieëpoort Abstraction Weir. Therefore, it is assumed flows within the Crocodile are maintained despite abstraction. The Crocodile River has experienced extreme low flows, however, the RMS should regulate base flows as a minimum requirement.</p> <p>A fishway has been recommended to maintain connectivity within the system.</p> <p>58. Potential nuisance species should be identified during the high flow assessment and potential mitigation measures identified. The probability of Simulid larvae becoming pests within the Matlabas would be considered low, as the larvae required prolonged periods of high flows. The Matlabas is an ephemeral system, reducing the probability of outbreaks. Scouring is to occur every 5 years, and not provide flow conditions conducive to Simulid</p>

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	<p>to changes in hydrology, water quality, sediment regime and the transfer of biota.</p> <p>57. In relation to the lower Crocodile River, the River Health Programme (2005) highlights the following: <i>“According to the RHP (2005), only hardy fish species are present in the lower Crocodile River, which can be ascribed to the loss of habitat and connectivity of the river. The Fish Assemblage Integrity was thus found to be poor. The Macro-invertebrate Integrity was also categorised as poor, with reduced water quality and diminished flows leading to dry sections and isolated pools. This reduction in suitable habitat has a severe impact on invertebrate diversity. Also the Instream Habitat Integrity was identified as poor due to extensive irrigation and multiple abstraction points along this reach of river which has a severe impact on river functioning”</i> (emphasis added).</p> <p>Thus, the river is already under severe stress, which is clearly having an impact on the biota. This highlights that the further abstraction of water, which will have a direct impact on habitat and connectivity, will lead to further deterioration of the aquatic communities inhabiting the river and surrounds.</p> <p>58. Further, the transfer of biota, in particular of pest species, is of concern in the consideration of inter-basin transfers. In an assessment of the Orange River Project (transfer from the Orange River to the Great Fish River), the most pronounced shift in the biota in the recipient river reach was the shift to dominance by the pest blackfly species <i>Simulium chatteri</i>, to the detriment of the original benign populations of <i>Simulium adersi</i> and <i>S. nigrifera</i>. <i>Simulium chatteri</i> now causes severe damage to livestock in the lower reaches of the river: the feeding activities of swarms of adult females cause stock damage and disturbance during spring months. All of the shifts in the invertebrate fauna in the recipient catchment could directly be attributed to the changes in flow regime caused by the</p>				<p>outbreaks. However, the potential for algae species becoming a nuisance within the Matlabas need to be monitored and managed after scouring events.</p> <p>59. Recommended for the high flow assessment.</p> <p>60 - 61. Refer to response to No. 420 with regards to a sediment study at the Vlieëpoort Abstraction Weir by a fluvial-geomorphologist.</p> <p>62. Provision is made in the EMPr to manage impacts from instream works, such as siltation.</p>

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	<p>transfer, particularly the loss of flow variability, and the shift from a seasonal to a perennial river. This has led to an increase in the total area of available erosional habitats, which are favoured, in particular, by simuliid larvae.</p> <p>59. The extensive and frequent blooms of algae and Water Hyacinth in the Hartebeespoort Dam raise the concern of these species being transferred into the recipient catchments. This impact was not assessed as part of the Baseline Aquatic and Impact Study.</p> <p>60. Further, the Baseline Aquatic and Impact Study has major gaps in addressing geomorphology, sediment and erosion. According to the DEIR up to 4% of the sediment load that is in suspension in water abstracted from the Crocodile (West) River will be removed from the water, with 2% returned from the desilting works. However, as highlighted in the Snaddon Report: <i>“There is no information on how this silt will be returned to the river, and when. There is also a lack of consideration of how this shift in sediment regime will impact the downstream reaches of the Crocodile (West) River, over the short- and long-term. For instance, a reduction in sediment load may lead to downstream erosion, as the river seeks to regain its natural load. This will impact on the condition and availability of riverine habitat for the biota”.</i></p> <p>61. In relation to the above-mentioned potential impacts, the only mitigation measure provided outlined in the Baseline Aquatic and Impact Study and the DEIR is that “Riverine sediment management must occur in a manner which replicates natural sediment movements”. This is highly vague and insufficient.</p> <p>62. Finally, the location of borrow pit SS1 within the watercourse will also have a significant local and downstream impact on sediment transport. Removal of sand from this site will release sand into the water and lead to sedimentation of habitat downstream.</p>				
467.	<p>Impact on wetland ecosystems</p> <p>63. A significant concern with regards to impacts of</p>	N. Löser (Centre for	Letter (31/10/2018)		63-69. Refer to responses in No. 433.

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	<p>MCWAP2A on wetlands relates to the inundation of wetland habitat above the Vlieëpoort Weir. The Wetland Impact Assessment specialist report (Appendix I5 to the DEIR) identified floodplain areas (including oxbow lakes) upstream of the weir. The report states that the area of inundation will not extend into these riparian and floodplain areas and that <i>“abstracting water at the Vlieëpoort Weir will likely cause fluctuating river levels”</i> but that the impact <i>“is unlikely to be significant”</i> and the <i>“riparian zone may increase in size because of the raised water level.”</i></p> <p>64. However, according to the AquaAssess Report, the functional importance of these floodplain wetlands and riparian areas are not clear and are not discussed in the Wetland Impact Assessment. Thus, the impact of inundation and associated fluctuations in water levels is unclear although fluctuating water levels are likely to impact on riparian zones and floodplains, <i>“at least at certain times of the year”</i>.</p> <p>65. The Wetland Impact Assessment states that several kilometres of river will be inundated. Although there is assurance in the report that <i>“very little of the stream bank will be flooded”</i> and <i>“the loss of habitat will be confined to the river itself”</i>, the Snaddon Report states that this seems unlikely. The Baseline Aquatic and Impact Study states that there will be silt deposition on the floodplain of the Crocodile (West) River and the establishment of wetland plants. This implies that there will be a shift in the type of wetland habitat occurring above the weir, with an increase in sedimentation. This is in direct contradiction to the statement that there will be no loss or alteration of wetland habitat above the weir.</p> <p>66. The Wetland Impact Assessment identifies several pans along the pipeline routes. However, no detailed information has been provided on the wetland vegetation or fauna found within these pans, and photographs have not been provided for all pans.</p> <p>67. According to the Wetland Impact Assessment <i>“the construction of the pipeline through the depressions pose low risk and will only influence the habitat for the duration</i></p>	Environmental Rights NPC)			

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	<p><i>of construction. However, it is possible to move the pipe alignment to miss the pans altogether.</i>" The AquaAssess Report highlights that these findings contradict the findings of the Terrestrial Fauna and Flora Specialist Report which mentions that <i>"habitat for threatened species(including Storks and African Bullfrogs) exists within certain pans"</i> (emphasis added). Further, threatened species were also recorded within the floodplain wetland and riparian areas associated with the Crocodile River upstream and downstream of the Vlieëpoort Weir. The potential impacts on habitats and threatened species must be properly assessed.</p> <p>68. Further limitations and unacceptable omissions of the DEIR and Wetland Impact Assessment include:</p> <p>68.1. The lack of a riparian vegetation assessment;</p> <p>68.2. No discussion on the effect of reduced flows downstream of the weir on adjacent riparian and floodplain areas;</p> <p>68.3. Although the hydrology (wetland soils) and wetland vegetation is described in the specialist report, there is no mention of impact on other species that may depend on these ecosystems;</p> <p>68.4. The loss of wetland areas has not been quantified;</p> <p>68.5. The presence or absence of National Freshwater Ecosystem Priority Area (NFEPA) wetlands was not discussed;</p> <p>68.6. The absence of wet-season fauna and flora assessment of pans to determine the presence of threatened plant and animal species; and</p> <p>68.7. The study does not include functional assessments of the wetlands affected by the proposed activities using, for example, the WET-EcoServices tool.</p> <p>69. These issues must all be addressed and properly assessed as part of the EIA for the project.</p>				
468.	<p>Impacts on aquifers</p> <p>70. There is not sufficient information on the aquifers that will be intersected by the Pipeline Trench. Section 13.6.1 of the DEIR states that: <i>"Groundwater may further be impacted by the project</i></p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	Nemai Consulting & TCTA	70-71. Aquifers will be identified as part of the geotechnical investigations to be undertaken during the design phase, if the Environmental Authorisation is issued. During the optimisation of the pipeline route during the design phase, the

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	<p><i>as follows: Possible influence to groundwater flow as a result of trenching during construction. Confirmation is required whether aquifers will be intersected by the pipeline trench.”</i></p> <p>71. It was possible to determine the aquifers that would be intersected by the pipeline trench and this should have been specified, and comprehensively assessed, in the DEIR.</p>				<p>route can be shifted within the 100 m corridor that was assessed during the EIA to avoid sensitive features (such as aquifers), if found to be technically feasible. State-of-the-art (e.g. encasing pipe in concrete) will be implemented to protect groundwater during excavations.</p>
469.	<p>Determination of the Reserve</p> <p>72. The Constitution provides a fundamental right of access to sufficient water. One of the ways in which this right is given effect, is through the NWA, which provides for the determination of a “Reserve” for any major water resource.71 The definition of a “Reserve” in the NWA,72 which includes the need to “<i>satisfy basic human needs</i>” and “<i>to protect aquatic ecosystems in order to secure ecologically sustainable development and use of the relevant water resource</i>”, demonstrates the importance of the Reserve determination, especially in South Africa’s now very apparent context of water scarcity. Furthermore, the Reserve “<i>refers to both the quantity and quality of the water in the resource ...</i>”</p> <p>73. The determination of the Reserve is a legal obligation provided for under the NWA; however, the Minister has not progressively given effect to this requirement as a number of water resources remain undetermined. A report on the state of the environment published by the Department of Environmental Affairs said that “<i>as water availability decreases, it is likely that economic activities may take preference over the ecological reserve resulting in a further deterioration of river systems and the ecological services provided by those river systems.</i>”</p> <p>74. The DEIR and the Department of Water and Sanitation (DWS) generally acknowledge the importance of, and need for, the Reserve. This is demonstrated by the DWS’s “Information Analysis report: Mokolo and Matlabas Catchments: Limpopo WMA”, which states that “<i>currently, water availability and water use are in balance. However, within the provisions of the National Water Act as</i></p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	72. Nemaï Consulting	<p>72. Refer to response to No. 41 and No. 80 with regards to the Reserve.</p> <p>Section 16.3 of the Draft EIA Report states that water-related concerns are addressed by ensuring that the scheme makes provision for the Ecological Reserve and ELWU (in accordance with the NWA), as well as by maintaining a positive water balance in future and reconciling growing water requirements and availability. This is to be achieved through inter alia the implementation of the River Management System and Operational Rules for the scheme.</p> <p>73. See response to bullet no. 72 above.</p> <p>74. The statement refers to the Mokolo catchment, which forms part of MCWAP-1 (already commissioned) and the Reserve is catered for.</p> <p>75. Refer to response to No. 41 and No. 80 with regards to the Reserve.</p> <p>76. See response to bullet no. 74 above.</p> <p>77. A meeting was held with DEA in April 2018 to discuss the outcomes of the Scoping Phase. During this meeting it was noted that there are key matters associated with MCWAP-2A that are related to and mentioned in the NWA, such as ELWU (allocation of water) and the Reserve. DEA</p>
				74. DWS	
				77. Nemaï Consulting	

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	<p><i>stipulated in the National Water Resources Strategy, there is a need to meet the water requirements of the Reserve (Basic Human Needs and Ecological) in terms of water quantity and quality. Taking these requirements into account there is insufficient water to maintain the current balance. Added to this, it is anticipated that water demand will increase with new developments in the Mokolo Catchment, such as new or expanded mining activities and new power stations</i>" (emphasis added).</p> <p>75. It is expected that a project as enormous and resource-intensive as MCWAP2A, in recognition of the importance of the Reserve, would adequately make provision for the allocation of water to the Reserve. However the DEIR - as did the Scoping Report - simply states that <i>"the Operating Rules for both the Mokolo and the Crocodile River (West) systems need to be developed by DWS in a separate process and must take cognisance of this and ensure that Existing Lawful Use is giving effect to as stipulated by the NWA. Similarly, it is a legal requirement that provision is made for meeting the requirements of the Reserve, as catered for in the NWA."</i></p> <p>76. The DEIR describes the Reserve study for the Mokolo (West) in 2012, but gives no indication of the Reserve determination of the Mokolo Catchment. It further states that <i>"[a]n Integrated Water Use Licence Application (IWULA) will be submitted separately to the DWS Limpopo Regional Office. The following requirements of the NWA will be catered for: Provision for the Reserve requirements of the Crocodile River (West) ..."</i></p> <p>77. The DEIR frames the aspect of the Reserve as something that need not be dealt with comprehensively within the EIA process, but regards it as falling solely within the water use licence (WUL) authorisation process. This severely understates the importance – and legal obligation – of catering for the Reserve, which is a critical consideration for purposes of this EIA. It would also defeat the purpose of conducting this EIA, as the Reserve is pivotal in determining whether or not there will be sufficient water for</p>			77. DWS	<p>indicated that it is not a legal requirement to run the IWULA and EIA Processes in parallel. The DEA also stated that an Environmental Authorisation under the NEMA does not absolve the applicant in terms of other Environmental Legislation, such as the NWA. The DEA further mentioned that an Environmental Authorisation may include a condition which states that authorisation is required in terms of the NWA prior to the commissioning of a project.</p> <p>This is in any case a normal requirement of the NWA.</p> <p>78. See response to bullet no. 77 above.</p>

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	<p>the project to operate and/or the extent to which this project would impact on the Reserve. This a relevant consideration that must be taken into account, in this EIA, in terms of NEMA.</p> <p>78. Any decision in relation to MCWAP2A's environmental authorisation would need to take full account of the Reserve. Failure to do so places unacceptable uncertainty on the fulfilment of the obligation for the determination of the Reserve, and also on how the implementation of this obligation will impact the project. To leave this for determination in the WUL process is unjustifiable and a fatal omission.</p>				
470.	<p>Failure to assess climate change impacts</p> <p>79. We note that the DEIR fails to conduct an adequate comprehensive climate change impact assessment (CCIA) for the MCWAP2A project, despite our comments on the Scoping Report confirming that this was necessary and an essential component of the EIA for the project.</p> <p>80. The Scoping Report comments state that the EIA for MCWAP2A must complete a comprehensive CCIA, which includes the following elements:</p> <p>80.1. An assessment of the potential threats to the system water yield from climate change;</p> <p>80.2. a discussion of how the project might aggravate potential climate change impacts in the area;</p> <p>80.3. An assessment of how climate change might impact on the project; and</p> <p>80.4. An assessment of GHGs that would result from the project, including indirect and full life-cycle emissions, cumulative emissions, climate health impacts and the environmental and social cost of the GHG emissions.</p> <p>81. The DEIR does not adequately address any of these components of a CCIA.</p> <p>82. In the Scoping Report comments we highlighted that a CCIA for the project must study the effects of climate change on river flows throughout all the rivers in the MCWAP2A system, and that, in line with the judgment in Earthlife Africa Johannesburg v the Minister of</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	80. Nema Consulting	<p>79-80. Refer to No. 40 and No. 302 for responses to climate change.</p> <p>The GHG that will be emitted during the construction phase is assessed in Section 13.3 of the Draft EIA Report and the EMPr includes measures to control and minimize GHG emissions.</p> <p>As a positive impact, MCWAP-2A will supplement the FGD water demand from Medupi Power Station. The FGD technology is used to reduce the sulphur dioxide emissions from the facility. This is also a condition in Eskom's World Bank loan</p> <p>81. See response to bullet no. 80 above.</p> <p>82-100. Refer to No. 40 and No. 302 for responses to climate change.</p>

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	<p>Environmental Affairs & Others (“the Thabametsi case”), the EIA process must also ensure that a thorough climate change impact assessment is conducted, which analyses the indirect and cumulative climate change impacts from the growth in coal mines, coal-fired power stations, and other industry that would be enabled by MCWAP2A. Such an assessment is critical because these developments would exacerbate South Africa’s extreme vulnerability to the impacts of climate change.</p> <p>83. The Thabametsi case confirmed that s24O of NEMA must certainly be interpreted as requiring an assessment of climate change impacts, as climate change would fall within the definition of “any pollution, environmental impacts or environmental degradation likely to be caused if the application is approved or refused”, which must be taken into account by a decision-maker in considering an application for environmental authorisation. This is also in line with the provisions of the Constitution, particularly the s24 right to an environment that is not harmful to health or wellbeing and the right to have the environment protected for the benefit of present and future generations.</p> <p>84. In relation to climate change impacts, the DEIR appears to simply assess the anticipated GHG emissions from the project itself, predominantly construction and only very briefly touches on the project’s resilience to climate change impacts from extreme weather. The DEIR leaves the assessment of climate change impacts on water availability (relating to reduced rainfall etc) for determination “as part of the overall River Management System”. It states, <i>inter alia</i>:</p> <p><i>“Due to the small surface area of the inundation area behind the abstraction weir, in terms of global climate change factors, no noticeable impact on the climate of the region is anticipated. Infrastructure will be designed to be sufficiently robust to withstand severe rainfall events. Other factors that will affect the flow in the river at the weir such as rainfall, evaporation from the river water surface, evapo-transpiration from the riverine vegetation, tributary</i></p>				

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	<p><i>and diffuse inflows and diffuse seepage outflows from the river, will be considered as part of the overall River Management System. The EMPr includes measures to control and minimize greenhouse gas (GHG) emissions by optimizing the utilisation of construction resources”</i></p> <p><i>“Studies conducted where various global climate models were used to estimate the likely implication on water availability (yield) of system showed widely varying results and found that either increases or decreases will occur in water availability as a result of Climate Change. Due to these observations it has been acknowledge (sic) that Climate Change adds another layer of uncertainty to water resource assessment and planning.</i></p> <p><i>“The water balance was considered as part of the technical studies and derived from sophisticated risk analysis simulation techniques. These methods simulate the complete Crocodile River System on a monthly time step, which accounts for the observed characteristics of rainfall and runoff. The risk analyses are conducted for 1 000 plausible streamflow and rainfall stochastic sequences. These sequences cater for a range of extremes, where the wettest sequence is wetter than the wettest period experienced historically and the driest sequence drier than the worst drought experienced historically. The variability of the stochastic analysis is thus catered to a certain degree for potential changes within these extremes.”</i></p> <p>85. In relation to the indirect impacts for climate change – in other words, the impacts of the project for South Africa’s mitigation of GHG emissions and climate resilience and adaptation - the DEIR provides, among other things, the following:</p> <p><i>“The water from MCWAP-2A will enable future development associated with the Waterberg Coalfields. Potentially significant cumulative impacts include</i></p>				

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	<p><i>climate change impacts associated with coal-fired power stations, coal mines and other related industries. It is noted that the climate change impacts associated with these water users need to be assessed as part of the respective environmental assessments conducted for each of these developments, as they are the sources of the impacts” (emphasis added).</i></p> <p><i>“The GHG that will be emitted during the construction phase is assessed in Section 13.3 and the EMPr includes measures to control and minimize GHG emissions by optimising the utilisation of construction resources. It is noted that the climate change impacts associated with the power stations, coal mines and other intended water users need to be assessed as part of the respective environmental assessments conducted for each of these developments, as they are the sources of the impacts” (emphasis added)</i></p> <p>86. The DEIR fails to:</p> <p>86.1. Adequately assess the potential climate impacts (including cumulative impacts) of the project on the surrounding area including wetlands and for water availability in the affected area – in other words there is no expertly researched report on how the MCWAP2A project could exacerbate the impacts of climate change for the impacted water resources and consequently communities, ecosystems and the environment more generally;</p> <p>86.2. Assess comprehensively how climate change might impact on the MCWAP2A project itself – the assessment of whether there will in fact be sufficient water for MCWAP2A to operate optimally, as climate change progresses, needs to form part of this EIA;</p> <p>86.3. Adequately assess the indirect climate change impacts of the project (see paragraphs 112 to 114 below); and</p> <p>86.4. Quantify or attribute a cost to the GHG emissions</p>				

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	<p>that would emanate directly and indirectly (from mines and power stations that would be enabled) as a result of the MCWAP2A project.</p> <p>87. The AquaAssess Report states that <i>“the predicted impacts related to climate change have not been considered in the assessment of impacts. The primary direct drivers of the degradation and loss of inland aquatic ecosystems include infrastructure development, land transformation, water abstraction, eutrophication and pollution, overharvesting and overexploitation, and the introduction of invasive alien species. All of these threats will be exacerbated in the future by the predicted shifts in climate. This means that large-scale water abstraction and transfer projects must take into account the probable shifts in climatic and land-use drivers in the near and distant future. This has not been taken into account in the MCWAP2A, due to an inadequate examination of the cumulative impacts of the project.”</i></p> <p>88. The Snaddon Report states further that: <i>“[t]he cumulative impacts that are of concern, in the context of climate change are:</i></p> <ul style="list-style-type: none"> <i>• Loss of longitudinal connectivity within the rivers where weirs will be built – this will impact on the movement of flora and fauna, the hydrological regime, and sediment regime, all of which can be expected to shift in response to climate change. For instance, some aquatic species are expected to move to more suitable habitats, but this will be hindered by weirs and other instream infrastructure;</i> <i>• Increased variability in hydrological regimes – river discharges are expected to increase in the north-eastern parts of South Africa, but also increase in variability (Dallas and Rivers-Moore, 2014). This will drive aquatic ecosystems away from their natural discharge regimes, and an increase in channel instability, with consequent impacts on erosion, sedimentation, habitat availability and quality, and biodiversity;</i> 				

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	<ul style="list-style-type: none"> • <i>Ecosystems that have been made vulnerable by land-use impacts (e.g. pollution, alterations to flow (either increased or decreased)) are closer to thresholds of change, and so are more vulnerable to climate change impacts and less resilient. Projected over-abstraction and regulation of water resources (ground- and surface water) in South Africa will interact with climatic changes, further reducing flows and impacting on aquatic species (Dallas et al., 2017)."</i> <p>89. The above are all vital considerations that must be taken into account by the competent authorities before any decision to authorise the MCWAP2A project can be made, as these would all have direct impacts on the feasibility, the severity of the impacts and need and desirability of the project. These considerations are directly relevant for this aspect (water transfer infrastructure) of the project and cannot be left to future assessments or to the individual EIAs of specific coal mine or power station projects (although they must be assessed individually at project level as well, as confirmed by the Thabametsi case).</p> <p>90. We note the responses to some of the issues that were raised in our clients' comments on the Scoping Report in the Public Participation report that forms part of the DEIR. In relation to our submission that a CCIA needed to be conducted, the response was that we should refer to the GHG Emissions Report. The GHG Emissions Study (Appendix I9 to the DEIR) however, appears to be the only specialist report assessment of climate change impacts for the MCWAP2A project, as part of the EIA. The GHG Emissions Study concludes that <i>"the expected GHG emissions from the new MCWAP-2A and the fluctuating water levels in Hartbeespoort Dam are considered small. The construction emissions will cease once the project is complete and the Hartbeespoort Dam will remain a net GHG emitter."</i> The fact that the GHG Emissions Study concludes that emissions would cease after construction confirms that there was a failure to assess the project's</p>				

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	<p>indirect and cumulative emissions. The report has totally disregarded emissions as a result of coal-fired power stations and mines that would be enabled by the MCWAP2A project. We consider this a fatal flaw considering the high volumes of GHG emissions emitted by coal-fired power stations in South Africa and globally.</p> <p>91. We have maintained – in our comments on the BID and Scoping Report (and the Thabametsi case makes clear) - that a mere quantification of GHG emissions is not sufficient to constitute a CCIA and a detailed assessment of the full climate impacts of the water transfer infrastructure is required. The Thabametsi case also confirms that assessment of climate change impacts and mitigation measures <i>“will best be accomplished by means of a professionally researched climate change impact report”</i> and that such an assessment must look at the <i>“project’s full life-cycle emissions ... the activities associated with the project – mining and coal transportation, and the project’s resilience”</i> among other things.</p> <p>92. Although we acknowledge that there has been some assessment of the GHG emissions associated with the project, as stated above a much more detailed assessment including an assessment of: cumulative and indirect impacts; the project and the surrounding communities’ and environment’s resilience to climate impacts; and the costs of the climate impacts needs to be conducted. The EIR must address this.</p> <p>93. We have referred above to the severe threats posed by climate change, as highlighted in the IPCC Report, and the IPCC Report’s confirmation that decarbonisation of the electricity sector is urgently required (see paragraph 28 above). We point that, in relation to just the proposed Thabametsi power station – if it is to go ahead - according to its own CCIA and the ERC Report referred to above, Thabametsi will be one of the most GHG emission-intensive coal plants in South Africa (and higher than the world average), 60% more so than Eskom’s Medupi and Kusile coal plants – as a result of, inter alia,</p>				

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	<p>the fluidised bed combustion technology it proposes to use. These GHG emissions cannot be substantially mitigated. If the MCWAP2A project is to enable new and extremely emission-intensive coal projects such as Thabametsi, these climate impacts need to be considered.</p> <p>94. IPCC Report emphasises the following climate change impacts to southern Africa: <i>“At 1.5°C, a robust signal of precipitation reduction is found over the Limpopo basin and smaller areas of the Zambezi basin, in Zambia, as well as in parts of Western Cape, in South Africa, while an increase is projected over central and western South Africa as well as in southern Namibia (Section 3.3.4)”</i> (emphasis added)</p> <p>95. The IPCC Report also includes Southern Africa as one the “hot spots of change” when comparing a global warming of 1.5°C and 2° C. It states: <i>“The southern African region is projected to be a climate change hot spot in terms of both hot extremes (Figures 3.5 and 3.6) and drying (Figure 3.12). Indeed, temperatures have been rising in the subtropical regions of southern Africa at approximately twice the global rate over the last five decades (Engelbrecht et al., 2015). Associated elevated warming of the regional land-based hot extremes has occurred (Section 3.3; Seneviratne et al., 2016). Increases in the number of hot nights as well as longer and more frequent heat waves are projected even if the global temperature increase is constrained to 1.5°C (high confidence), with further increase at 2°C of global warming and beyond (high confidence) (Weber et al., 2018) ... Moreover, the region is likely to become generally drier with reduced water availability under low mitigation (Niang et al., 2014; Engelbrecht et al., 2015; Karl et al., 2015; James et al., 2017), with this particular risk also prominent under 2°C of global warming and even 1.5°C of warming (Gerten et al., 2013). Risks are significantly reduced, however, under 1.5°C of global warming (Schleussner et al., 2016b). There are consistent and statistically significant projected</i></p>				

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	<p><i>increases in risks of increased meteorological drought in southern Africa at 2°C vs 1.5°C of warming (medium confidence). Despite the general rainfall reductions projected for southern Africa, daily rainfall intensities are expected to increase over much of the region (medium confidence), and increasingly so with further amounts of global warming. There is medium confidence that livestock in southern Africa will experience increased water stress under both 1.5°C and 2°C of global warming, with negative economic consequences (e.g., Boone et al., 2017). The region is also projected to experience reduced maize, sorghum and cocoa cropping area suitability as well as yield losses under 1.5°C of warming, with further decreases towards 2°C of warming (World Bank, 2013). Generally, there is high confidence that vulnerability to decreases in water and food availability is reduced at 1.5°C versus 2°C for southern Africa (Betts et al., 2018), whilst at 2°C these are expected to be higher (Lehner et al., 2017; Betts et al., 2018; Byers et al., 2018; Rosenzweig et al., 2018) (high confidence)” (emphasis added).</i></p> <p>96. South Africa’s own Climate Change Response White Paper states that: <i>“Even under emission scenarios that are more conservative than current international emission trends, it has been predicted that by mid-century the South African coast will warm by around 1 to 2°C and the interior by around 2 to 3°C. By 2100, warming is projected to reach around 3 to 4°C along the coast, and 6 to 7°C in the interior. With such temperature increases, life as we know it will change completely: parts of the country will be much drier and increased evaporation will ensure an overall decrease in water availability. This will significantly affect human health, agriculture, other water-intensive economic sectors such as the mining and electricity-generation sectors as well as the environment in general. Increased occurrence and severity of veld and forest fires; extreme weather events; and floods and</i></p>				

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	<p><i>droughts will also have significant impacts” (emphasis added).</i></p> <p>97. Evidently the impacts of climate change are severe and will continue to be more acutely felt in South Africa, particularly by vulnerable sectors of society.</p> <p>98. The Snaddon Report also states that “[t]he southern African sub-continent has been identified as one of world’s water-related vulnerability ‘hotspots’, where the impacts of climate change on freshwater resources will be a threat to sustainable development in the years to come (Kundzewicz et al., 2007). The primary direct drivers of the degradation and loss of inland aquatic ecosystems include infrastructure development, land transformation, water abstraction, eutrophication and pollution, overharvesting and overexploitation, and the introduction of invasive alien species. All of these threats will be exacerbated in the future by the predicted shifts in climate. This means that large-scale water abstraction and transfer projects must take into account the probable shifts in climatic and land-use drivers in the near and distant future. This has not been taken into account in the MCWAP2A, due to an inadequate examination of the cumulative impacts of the project” (emphasis added).</p> <p>99. Instead of considering regional water constraints, Table 3 of the DEIR shows that the Project is based on growing water requirements for coal-fired power plants (and coal mines that supply such plants) in a continuously increasing fashion from 2020 to 2050 (and presumably beyond).</p> <p>100. The section 2 NEMA principles, which require, inter alia, a “risk-averse and cautious approach, which takes into account the limits of current knowledge about the consequences of decisions and actions”, and the NEMA section 28 duty of care to prevent such pollution or degradation from occurring, continuing or recurring, would require that serious consideration be given to the severe impacts of climate change and the need to avoid any activities that would contribute to and aggravate these</p>				

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	impacts, particularly the development of unnecessary new mines and power stations.				
471.	<p>The failure to properly assess cumulative impacts of the project</p> <p>101. The NEMA EIA Regulations, Appendix 3 section 3(j)(i), requires that “an environmental impact assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include each identified potentially significant impact and risk, including (i) cumulative impacts...”.</p> <p>102. The AquaAssess Report highlights the DEIR’s failure to consider the cumulative impacts of the project, stating: “The impacts due to sand-mining at borrow pit SS1 (removal of sediment from the river bed) are considered in isolation. Removal of sand from the riverbed is likely to result in increased flows and increased erosion as subsurface alluvial flows are reduced. In addition, water quality is likely to decline due to increased turbidity. These impacts, together with reduced flows from the weir (due to abstraction) and the removal of an additional 2% of sediment via the desilting works, are likely to result in modifications, in the long term, to instream and riparian habitat downstream of the weir. While it is understood that the sediment load is currently elevated due to erosion upstream, if sediment yield is reduced by approximately 2% per annum, the cumulative impact to habitats 50-100 years from now, remains uncertain. The manner of returning the sediment to the Crocodile River from the desilting works also needs to be included in the impact assessment and management recommendations.”</p> <p>103. There are further likely cumulative impacts associated with return flows in the Mokolo Catchment. The AquaAssess Report highlights that deterioration of surface and ground water quality in the Mokolo, Lephalele and Limpopo River catchments is likely; due to runoff and releases from new mining developments near Lephalele, which will be</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	102. Nema Consulting	<p>101. Introductory comment.</p> <p>102. Section 13.8.5 of the Draft EIA Report assesses the impacts related to sediment regime. The mitigation measures proposed include:</p> <ul style="list-style-type: none"> ○ Return sediment during floods and flush at the end of the same floods back to river. Flushing is not allowed during low flow conditions in the river. ○ Monitoring of the sediment levels in the Crocodile River (West) before and after flushing, as necessary, to determine impacts. ○ Periodic monitoring of chemical characteristics of sediment to confirm storage requirements and that scouring is acceptable. <p>The following reports pertaining to sediment management are provided in Appendix J of the Draft EIA Report:</p> <ol style="list-style-type: none"> 1. Interim Sediment Quality Report; and 2. The MCWAP Technical Information: Summary of proposed sediment management in the Crocodile River at the Vlieëpoort Abstraction Weir. <p>Refer to response to No. 420 with regards to a sediment study at the Vlieëpoort Abstraction Weir by a fluvial-geomorphologist.</p> <p>103. The maximum re-use of the water will be promoted for the users that receive water from the MCWAP-2A. The water will thus not be discharged.</p> <p>104. Operational impacts of abstraction and flow regulation were addressed in table 31 on page</p>
				103. DWS	
				104. The Biodiversity	

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	<p>supplied with water by the MCWAP2A project. These cumulative impacts were not sufficiently considered.</p> <p>104. Further, the impacts associated with the development (including weir and pipelines) were considered in isolation and the operational impacts (abstraction and flow regulation) were largely excluded.</p> <p>105. As mentioned above, the Snaddon Report also records that the cumulative impacts of the project have not been adequately considered, particularly in the context of climate change.</p> <p>106. Clearly the cumulative impacts of the MCWAP2A project have not been adequately assessed, as required by NEMA.</p>			Company (aquatic specialist)	<p>53 of the aquatic report and were deemed moderate.</p> <p>105. Refer to No. 40 and No. 302 for responses to climate change.</p> <p>106. See responses to above bullets.</p>
472.	<p>The failure to assess the indirect and socio-economic impacts of proceeding with MCWAP2A</p> <p>107. With reference to the indirect impacts of the MCWAP2A project, the comments on the Scoping Report pointed out that the assessment of potentially significant environmental issues did not address indirect threats, such as the impacts from the growth in coal mining, power plants, and industry enabled by MCWAP2A. The DEIR needed to assess indirect threats from the project to air quality, land/soil, water resources, and associated human health, and the socio-economic environment. It has not done so.</p> <p>108. By way of an example, the projected industrial growth that would occur in the Waterberg-Bojanala Priority Area (WBPA) should be assessed: this air pollution priority area was designated by the Minister of Environmental Affairs in 2012 because of concerns regarding non-compliance with National Ambient Air Quality Standards (NAAQS). The EIA must assess the effect of this growth on the WBPA and its prospects of meeting its aim of ensuring compliance with NAAQS – where NAAQS, in certain areas, are already not being complied with.100 It is worth pointing out that, more than 11 and 10 years since the declarations of the Vaal Triangle and Highveld Priority Areas, respectively, there is regular non-compliance with the NAAQS - with attendant health impacts and violations of constitutional rights -</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	107. Nema Consulting	<p>107. The impacts from the growth in coal mining, power plants, and industry (such as air quality, land/soil, water resources, and associated human health, and the socio-economic environment) need to be assessed as part of the respective Environmental Assessments undertaken for each of these developments, as they are the sources of the impacts. Any conditions and mitigation measures to address impacts associated with these developments will need to be imposed on and implemented by the respective project proponents.</p> <p>Refer to response to No. 459 and 460 with regards to the impacts from the proposed coal mine and power station developments.</p> <p>108. See response to bullet no. 80 above.</p> <p>109. See response to bullet no. 80 above.</p> <p>The socio-economic report considered the impacts of the project itself. It was not within the study's mandate to investigate the consequent industrial growth that this pipeline would enable.</p>
				109. Nema Consulting (socio-economic specialist)	

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	<p>largely as a result of industrial emissions. There is no reason to assume that the WBPA will not face the same fate if the extensive planned developments proceed.</p> <p>109. Importantly, it is evident from the Socio-Economic Impact Assessment (“SEA”) (Appendix I6 to the DEIR) that the project fails to identify, describe, and evaluate numerous project-related costs (social costs) that would be borne not by its owners, operators, and customers but by society as a whole.</p> <p>110. This failure to describe all the project’s potential social costs leaves decision-makers and the public unable to ascertain the extent of the social costs of MCWAP2A and whether these costs would, in fact, exceed any anticipated benefits (as we submit they would). The SEA should have described these social costs, in monetary terms where applicable, or if this is not possible due to lack of information, the SEA should describe these social costs as thoroughly as possible in non-monetary terms. This would allow decision-makers and the public to properly assess the economic value of the project.</p> <p>111. As highlighted above, the DEIR acknowledges that the project would have direct impacts on water quality and quantity, aquatic habitats, and the species dependent on the habitat. Changes in the supply of water downstream can substantially reduce the value of goods and services derived from the adjacent riparian areas, wetlands, pans, and drylands. These reductions can occur through impacts on crops, livestock, wildlife, and birds. These impacts would reduce the ability of ecosystems to continue generating ecosystem services.</p> <p>112. Notably – and as stated above - the DEIR does not consider the social costs resulting from GHG emissions attributed to the MCWAP2A project.</p> <p>113. The MCWAP2A project may result in harm not only by direct impacts and damages, but also by increasing the risk of negative impacts occurring in the future. As addressed above, the IPCC Report highlights that unless meaningful actions are taken to reduce GHG emissions, climate change likely will impose many different types of</p>				<p>110. See response to bullet no. 80 above.</p> <p>See response to bullet no. 109 above.</p> <p>111. Impact assessed as part of the EIA and related specialist studies.</p> <p>112-113. Refer to No. 40 and No. 302 for responses to climate change.</p> <p>114. Refer to response to No. 459 and 460 with regards to the need for the proposed project.</p>

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	<p>costs on residents, business, and communities in sub-Saharan Africa. These risks impose costs on South Africans. For example, business may incur costs and realise lower profits by investing in risk-reduction measures, such as moving away from low-lying areas at-risk of flooding from extreme precipitation events or sea-level rise.</p> <p>114. Additional risks are embedded in the project, itself, and in the activities dependent on it, as the case for building the MCWAP2A project stems largely from plans to expand production of coal-fired electricity and coal mines. However, if the demand for electricity does not materialise or if the power stations are stranded early as a result of high costs or carbon constraints – which as stated above, is a strong possibility - South Africa's economy - and the well-being of its people, businesses, communities, and future generations - will be worse off as a result of the MCWAP2A project.</p>				
473.	<p>Incorrect application or consideration of alternatives to the project, including the no-go option</p> <p>115. S24(4)(b)(i) NEMA states that an EIA must include an <i>“investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity”</i>.</p> <p>116. The disillusioned anticipation of the coal-fired stations and the mines in the Lephalale area can further be seen in the DEIR's approach to the no-go option, which provides as follows: <i>“The “no go option” needs to be considered in light of the motivation as well as the need and desirability of MCWP-2A (see Section 8). The “no-go option” (i.e. should MCWAP-2A WTI not proceed) will have the following implications:</i></p> <ul style="list-style-type: none"> ❖ <i>Underutilisation of the Waterberg coal reserves;</i> ❖ <i>The development of new power stations is of high strategic importance with tight timeframes. Without a suitable source of water, the new power stations</i> 	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	117. Nema Consulting 118. DWS	<p>115. Introductory comment.</p> <p>116. Refer to response to No. 459 and 460 with regards to the need for the proposed project.</p> <p>117. Section 13.22 of the Draft EIA Report states the following with regards to the no-go option: <i>In contrast, should the proposed MCWAP-2A WTI not go ahead, any potentially significant environmental issues associated with the project would be irrelevant and the status quo of the local receiving environment would not be affected by the project-related activities. The objectives of the project would, however, not be met. The immediate significant impact would relate to the risks of not meeting Medupi Power Station's water requirements for FGD and the associated loan agreements with the World Bank and African Development Bank.</i></p> <p>118. The MCWAP-2A is needed to meet FGD deadline but in addition supply from independent water resources are of strategic importance.</p>

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	<p><i>will not be possible, with potential future energy shortages;</i></p> <ul style="list-style-type: none"> ❖ <i>The absence of water will suppress development, with associated macro-economic implications on a national scale; and</i> ❖ <i>Without MCWAP-2A Eskom will not be able to implement the Flue-Gas Desulphurisation (FGD) technology at the Medupi Power Station to reduce sulphur emissions, which will violate the related condition in Eskom's World Bank loan with devastating economic impacts on the RSA economy".</i> <p>117. The alleged "no go assessment" is skewed and gives no consideration to the water, wetland, ecosystem, climate or socio-economic impacts (and benefits) of the project not going ahead.</p> <p>118. It is also not correct that Medupi would not be able to implement FGD without MCWAP2A. As stated above, this is not the case and is disputed. In any event, Eskom cannot depend on the implementation of an un-authorised inter-basin transfer scheme, with international implications, to ensure its compliance with its own legal obligations. Eskom must comply with the law but the manner in which it does so should not bring about further negative and harmful impacts for the country. Eskom's alleged need for the water from MCWAP2A is self-inflicted and it could, and should, look to other means to ensure compliance with its legal obligations.</p>				
474.	<p>Conclusion</p> <p>119. In light of the above, we recommend that DEIR be significantly reworked and amended to address the above concerns – particularly to properly assess and address: need and desirability; alternatives to the project including the no-go option and the climate impacts of the project.</p> <p>120. We recommend that the EIA process for MCWAP2A be placed on hold pending the promulgation of an updated IRP (as this is directly relevant to the question of the project's need and desirability), and pending the</p>	N. Löser (Centre for Environmental Rights NPC)	Letter (31/10/2018)	120. DWS	<p>119. Refer to the following responses:</p> <ul style="list-style-type: none"> ○ No. 459 and 460 with regards to the need and urgency for the proposed project; ○ No. 451 with regards to alternatives assessed as part of a SEA versus an EIA; and ○ No. 473 with regards to the no-go option. <p>120. Refer to the responses to No. 325 and No. 459 and 460 with regards to the IRP and urgency of the MCWAP-2A.</p> <p>121. Refer to the following responses:</p>

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	<p>finalisation of any legal disputes of that IRP.</p> <p>121. In any event, we submit that based on the lack of need and desirability for the project and the likely significant and irreversible impacts of the project, particularly for climate change and water, and in accordance with the precautionary principle, that the environmental authorisation should be refused.</p>				<ul style="list-style-type: none"> ○ No. 459 and 460 with regards to the need for the proposed project; ○ No. 302 for responses to climate change; and ○ No. 459, 460 and 472 with regards to the impacts from the proposed coal mine and power station developments.
475.	<p>Our concern/feedback on the MCWAP-2A project (phase 2A). We know we cannot stop progress and we also will not be able to stop this program and we therefor need to work together so that this project will be a win/win situation for all the shareholders. As previously said, we are concerned about the availability of water as from seven years from now. On the 5th of October 2018, the level of the Hartbeespoort Dam were 82.5 %. According to our calculations, the inflow (return-flow) for the period 1 April to 31 October 2018 (non-rainy months) were at least 42 million m³. In spite of the inflow, the dam still dropped to 82.5 % since the end of the rainy season when it was full. As far as I know, a part of the resent drop in Harties is because of water that has been released to Vaalkop Dam for Magalies Water. If we assume that the average monthly transfer to Lephalale by 2030 will be 8 million m³, the dam level will drop at least another 25 % during the dry winter months. We do expect that by the end of October each year, the dam level will be close to 50 % which are of great concern due to the risk of water availability to Medupi and Irrigation at the same times. As we previously said, our concern is that with the bleak future of water availability in Gauteng, the return-flow at that time might not be available anymore as the municipalities most probably are going to re-use the return-flow.</p> <p>Our other concern is the management of the Roodekopjes/Vaalkop Dam augmentation canal. This canal should be refurbished before the transfer to Medupi starts so that this canal can become fully operational. No water should be transferred to Vaalkop Dam during the non-rainy season. The release to Vaalkop should also be managed in a much more efficient way. During the rainy season, while Harties is</p>	Hartbeespoort Irrigation Board	Letter (01/11/2018)	DWS	<p>By 29 October 2018 the dam level raised to 88,5% at the start of the rainy season. Refer to No. 4.</p> <p>Refer to No. 345 with regards to the maintenance of the Roodekopjes / Vaalkop Dam canal.</p> <p>It will be operated as a system and a decision on the sources to be tapped will be part of the River Management System.</p>

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	<p>overflowing and when the level of Vaalkop drops below 75 %, there is enough time to transfer plenty of water to Vaalkop Dam and the canal between Roodekopjes Dam and Vaalkop Dam should be kept open at all times.</p> <p>Something else that is not clear to us is which sources are going to be responsible for the Medupi allocation for example will all the water come from Hartbeespoort Dam or will all the dams in the area contribute to the release?</p>				
476.	<p>The overall area of KQ RE/51 is only approximately 506 ha. A borrow pit on the property will negatively affect the viability of the farm and this is unacceptable. The impact from the use of the access roads can also affect the farming. Expensive game occurs on the farm. The impact from dynamite blasting can affect my borehole. It is recommended that the borehole is tested before and after.</p>	C. Maritz	Reply Form 02/11/2018	Nemai Consulting	<p>The impacts of the borrow pits will be assessed in the EIA Phase, as part of the separate process that is being undertaken for this component of the project. There will also be further engagement with the affected landowners.</p> <p>Provision will be made in the EMPr to address impacts associated with access, wildlife and blasting (amongst others).</p>
477.	<p>Please find attached route as discussed with the land owners. Please give feedback on our proposal and cc the land owners in correspondence. The yellow line indicates route.</p>	B. Enslin	Email (12/11/2018)	<p>Nemai Consulting</p> <p>MCC</p>	<p>The suggested deviation of the pipeline alignment along the Central Route, between the Farms Buffelsvley, Karoobult, Zondagskuil and Leeuwbosch was assessed. The Central Route, as presented in the Draft EIA Report, remains the BPEO at this stage. Adequate mitigation measures to be implemented based on the EMPr, as well as the outcomes of the land acquisition process. A meeting was held with B. Enslin on 26 November 2018 to provide feedback with regards to the proposed route deviation. The technical aspects below were considered in the appraisal of the new proposed route.</p> <p>The following technical findings apply to the suggested route deviation:</p> <ul style="list-style-type: none"> • The route profile is technically feasible with a continuous uphill grade (based on Google Earth Data). • The proposed alternative route from where it deviates from the current route is 18.5km in length to the Break Pressure Reservoir, compared to the

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					<p>current route length of 13km. The proposed alternative will thus require an additional 5.5km of rising main pipeline. (The total rising main length is increased from 29km to 34.5km).</p> <ul style="list-style-type: none"> • This represents an increase in length of the rising main pipeline of 19%. • Impact on capital cost is an additional 14% increase on the Rising Main cost and 7.5% on pump station cost. • Impact on energy costs due to additional friction losses is approximately 16%. • The Feasibility Study considered the route with the least impacts, considering a variety of factors. • A key determinant in the routing of the pipeline in this area is the location of the Break Pressure Reservoir (BPR). The proposed route deviation follows Route Alternative B, which was discarded during the Feasibility Study, based on considerations related to the suitable location for the BPR. • The new longer rising main and hydraulic grade line will impact on the pump station design (efficiencies in the pump station have a significant cost implication). • The area has pockets of dolomite, and additional geotechnical investigations (including test pitting, core drilling and geophysical studies) would need to be undertaken to assess the new route in detail. • The current pipeline route aims to stay well clear the neighbouring Thaba Tholo's fences/operations (due to particular bio security issues). The new route runs close to the aforementioned property for a longer length.

4.2 Legal Letter - Makoppa Agriculture & Crocodile River (West) Irrigation Board

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478.	<p>1. We act on behalf of Makoppa Agriculture, an association of irrigation farmers with 65 members who do irrigation out of the Crocodile River, of which the membership extends from Thabazimbi up to Rooibokkraal, as well as the Crocodile River West Irrigation Board consisting of several farmers that belongs to an irrigation scheme and that extends from Koedoeskop up to Thabazimbi.</p> <p>2. We have instructions to direct this letter to you in the light of your letter dated 16 October 2018, in which you informed Makoppa Agriculture that you do not see your way open to suspend the project for 12 months, but allowed an extension of time until 15 November 2018 to comment on the environmental impact assessment consisting of approximately 400 pages in which approximately 8 experts' impact reports are contained.</p> <p>3. It is our instructions that you were verbally requested at a meeting on 3 October 2018 to grant Makoppa Agriculture an extension to allow our client an opportunity to appoint his own experts for a complete environmental and impact assessment study reports due to the shortcomings and inadequate information that your expert reports contain. We will deal below with the shortcomings and inadequate information that has not been dealt with.</p> <p>4. It is our instructions that you have not yet responded to the letter from the Crocodile River West Irrigation Board of 18 October 2018, in which they also requested that the project be suspended for 12 months to also allow them the opportunity to complete their own impact studies.</p> <p>5. Without going into detail about the process and the time frame in which you dealt with and completed your reports and application for the project, it is our instructions that this project has already started in 2008 to 2010, where</p>	T.J. le Roux	Letter (12/11/2018)	<p>DWS</p> <p>Nemai Consulting & DWS</p>	<p>Your letters referenced TJ LE ROUX/nt/TH0765 dated 12 November 2018 and 4 December 2018 refer. We have scrutinized our records, but unfortunately, we could not detect the alleged letter from the Crocodile River-West Irrigation Board dated 18 October 2018 that you are referring to.</p> <p>This response has been drafted with inputs from the Department of Water and Sanitation [DWS] (as the “applicant”) and Nemai Consulting [Nemai] (as the independent “Environmental Assessment Practitioner”). This letter has not been drafted as a detailed response to each and every point you have raised, but rather aims to address the key issues you raised, neither has this letter been drafted to elaborate on the inaccuracies mentioned in your letters.</p> <p>We have noted that you act on behalf of Makoppa Agriculture (previously differently named) and the Crocodile River–West Irrigation Board. It should be added that the DWS has communicated over many years with your clients and they have been involved in the entire Environmental Impact Assessment (EIA) process from the onset, even before it was halted temporarily. Your clients participated in the processes to formulate the Reconciliation Strategies (2008, 2012 and 2015) for the Crocodile River (West) system. These strategies are important tools in the management of the water resource of this system (and provides input into the configuration of the proposed MCWAP-2A), the latest (2015) being the “Continuation of the Reconciliation Strategy of the Crocodile West Water Supply System (Phase 2)”.</p> <p>1. The EIA process followed to date has been conducted in accordance with the prescripts of the EIA Regulations of 2014 (as amended), promulgated</p>

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	<p>after it has stopped and the project was suddenly restarted during 2015. It is our instructions that you advised Makoppa Agricultural and Koedekop Irrigation Board orally during the meeting on 2 October 2018 that you submitted the application for approval of the project to the Department of Environmental Affairs and that you expected a result by no later than 20 February 2019.</p> <p>6. What is immediately noteworthy is that you, knowing about both of our clients' objections to the proposed project, did not think it proper to inform them of your intended submission of the application to the Department of Environmental Affairs. You are aware of various disputes and objections that exist and despite these disputes and objections you continued without notice to our clients to submit your application.</p> <p>6.7. It is our instructions that you have been running this project for at least 10 (ten) years and that you had adequate time to complete your reports and impact studies. It is noteworthy that you have been busy with this project for more than 10 years, but that the experts' impact studies are dated amongst June and July 2018.</p> <p>7.8. In previous correspondence from our clients, they set out the disadvantage that not only our clients, but also the local businesses, schools, churches, communities and workers will suffer if the project continues in its current format. It is our instructions that the one important aspect that is not addressed in any one of your experts' reports is the job losses that will be suffered if the project continues and in this regard we refer you specifically to the labourers and/or workers on the irrigation farms that are absolutely dependent on, among other things, the water from the Crocodile River.</p> <p>8.9. It is our instructions that you act unlawfully to refuse our client's request to suspend the project for 12 months to give our clients the opportunity to instruct their own experts to complete such impact studies. This office had a</p>			<p>DWS</p> <p>DWS</p>	<p>in terms of the National Environmental Management Act, (Act No. 107 of 1998 (NEMA)). There has also been continued engagement with the Department of Environmental Affairs (DEA) and the other mandated authorities to ensure that their requirements are satisfied. It is noted that over-and-above the regulated public participation requirements, there have been broader engagements with the irrigators (amongst others). Several Focus Group Meetings were amongst others held with your clients demonstrating the goodwill of the applicant. Your claim regarding the submission of the application, "despite being aware of the objection of your clients to the MCWAP-2A", unfortunately indicates your incorrect interpretation of the EIA process. It afforded your clients an opportunity of a longer period for comments and for clarification on any matter unclear to your clients.</p> <p>2. As you raised the recommended locality of the proposed Vlieëpoort Abstraction Weir as an issue, the DWS can confirm that several alternative options were considered and evaluated as highlighted in the Draft EIA Report. Based on the engineering (geotechnical, hydrological, geo-morphology, etc.), financial and environmental considerations, the DWS is satisfied that the proposed locality of the Vlieëpoort Abstraction Weir is not only fit for its intended purpose, but it is also the only viable option. Furthermore, this site is not suitable for the construction of a large dam due to unfavourable founding conditions. This information was communicated on various occasions with the Interested and Affected Parties (I&APs).</p> <p>3. The proposed MCWAP-2A builds on standing policies formulated in the National Water Resources Strategy (NWRS) published in accordance with Chapter 2 of the National Water Act, (Act No. 36 of 1998) (NWA). The latest edition was published in 2013 and is available on the DWS Website at the</p>

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	<p>consultation on 7 November 2018 with an environmentalist, Mr Pieter de Lange and he pointed out to us that within time that you gave our clients, it was impossible to compile and finalise a proper and comprehensive impact assessment report with particular reference to the objections and disputes that our clients identified with regard to the project. It is unacceptable for this office that you have been investigating, researching and preparing your impact studies and finalising your reports since 2008, but you expect our clients to do it within one (1) month to be ready for comments on 15 November 2018.</p> <p>9. It is our instructions that our clients do not accept the contents and recommendations of the following impact studies:</p> <p>9.1 The Aquatic Impact Assessment; 9.2 The Terrestrial Ecological Impact Assessment; 9.3 The Heritage Impact Assessment; 9.4 The Agricultural Impact Assessment; 9.5 The Socio-Economic Assessment; 9.6 The Game Impact Assessment; 9.7 The Hartbeespoort Dam Specialist-opinion.</p> <p>9.10. Without going into detail about the shortcomings and the inadequate information that are contained in your impact studies, we point out to you that within the short time that was made available to our clients, it has emerged that the following aspects are nowhere mentioned or dealt with in any of your impact studies:</p> <p>10.1 It is our instructions that you have only identified the members of Makoppa Agriculture as recently as January 2018 as an affected group and party. If you keep in mind that a decision was already taken in 2008 to set up and build the weir at Vlieepoort (of which none of Makoppa Agriculture's members have been notified), you are aware that the erection of the weir will have a very large effect and impact on each and every farmer doing irrigation</p>			<p>DWS</p> <p>DWS</p>	<p>following link: http://www.dwa.gov.za/nwrs/NWRS2013.aspx. It also utilises the investigations that were undertaken for the Reconciliation Strategy, the latest formulated in 2015. The agricultural sector participated freely, including your clients. In the consideration of the water resources required for the needs of the MCWAP-2A to transfer water from the Crocodile River (West), the possible benefits of creating additional storage (raising of existing dams or building a new dam on the Crocodile River) was considered and found not feasible. It was found that the utilisation of return flows, without impacting negatively on the "Existing Lawful Water Use" (ELWU) of users, including your clients, was the only viable option for water transfer via the proposed MCWAP-2A, as stated above.</p> <p>4. It is reconfirmed that the ELWU of your clients will be honoured in accordance with the NWA. This stance was communicated to all stakeholders, including your clients, since the inception of all processes related to the proposed MCWAP-2A and it remains valid. Should any person(s) require more water, or storage, such person(s) is at liberty to apply for the relevant Water Use Licence(s) in accordance with the NWA. Contrary to the DWS` view of water availability your clients expressed a view that water can be made available economically through creating additional storage. They also expressed the desire to undertake their own studies to determine the extent of possible benefits of additional storage to them. This can be pursued in a separate process, independent and private (storage) from the current EIA process for the proposed MCWAP-2A, by considering the feasibility of an independent scheme. This process can be initiated by applying to the DWS for a Water Use Licence(s).</p> <p>5. It has been explained to all stakeholders that following possible Environmental Authorisation by</p>

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	<p>downstream of the premises where the weir will be erected. Your impact studies mainly provide for this and are concentrated around the premises where the weir will be erected, as well as the premises and surroundings over which the pipeline will be installed. None of your impact studies provide for interviews with the affected farmers below the area where the weir will be laid. Not one of your impact studies provide for that interviews were conducted with the affected farmers downstream of the area where the weir will be build, no visits has been undertaken to the premises, no samples were taken there, no proper measurements were taken at measuring weirs, the socio-economic impact especially on workers, the communities, schools and churches were not provided for.</p> <p>10.2 It appears that the only alternative to which attention has been given is apparently the Faure Wall on Makoppa. It is our instructions that further alternatives have not been considered in as far as Rooibokraal, especially seen in light of that it can cause and astronomical cost saving of the pipeline costs, since it will be about 50 km shorter than the proposal in your application.</p> <p>10.3 In the Environmental Impact Assessment Report that was received on 27 September 2018, only the transfer water from the Vaal River system are claimed for the MCWAP-2 project, but nowhere it is recommended or confirmed that additional imported water will be transferred, if the transfer water is to be reduced due to re-use or for any other reason;</p> <p>10.4 You also failed to adequately and/or effectively pay attention to the alternative option by instead of erecting a weir, to build a storage dam equivalent to a possible capacity of Roodekoppies Dam. It is our instructions that already during the late eighties, early nineties, surveys have been done to build a further dam in the Crocodile River, and this is still an achievable and feasible option if examined properly and completely. As you should be</p>			<p>Nemai Consulting</p> <p>DWS</p>	<p>DEA, there is a formal process available whereby appeals may be lodged with the DEA by any person/party. Your request to further postpone this EIA can thus unfortunately not be accepted. All the information available regarding the considerations and investigations have been communicated extensively and made available to all stakeholders. Your clients also have the protection of an option to appeal any possible outcome of the EIA.</p> <p>6. The specialist studies that have a bearing on the potential impacts of the proposed project on the water resource and associated water users adopted the stance that ELWU will be recognised and honoured, in terms of the NWA. In addition, these studies were based on the premise that MCWAP-2A will only utilise the return flow, and that the River Management System, as described in the Draft EIA Report will be implemented prior to the commissioning of the proposed project.</p> <p>Any failure to respond to all the issues raised in your letters shall not be construed as an admission thereof nor preclude us from responding thereto in future as may be deemed appropriate. Our rights in this regard remain strictly reserved.</p>

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	<p>aware, the Koedoeskop area was an unsuccessful irrigation area until the Roodekoppies Dam was built where after proper water management could take place for the benefit of the entire community, irrigation farmers and workers. It is our instructions that an option that should be given proper attention is to build a further storage dam that can be properly managed and can lead to the survival and supply of water for irrigation farmers, not only to prevent unemployment but also for food security. We specifically point out that none of your impact studies at all deal with the impacts that the building of the weir will have on the existence and survival of the irrigation farmers below the place where the weir will be erected, as well as unemployment and accompanying food security.</p> <p>10.5 It is our instructions that the aforementioned proposal will also mean that sufficient water can be stored over longer periods in order to adequately meet the irrigation emergency as well as to supply the industrial need at Lephale.</p> <p>10.11. You should also keep in mind that due to the short time frame which has been made available to our clients, because you only handed over your Environmental Impact Report to our clients on 2 October 2018, our clients did not have sufficient time to consult with any specialist with regard to any of your reports and our clients reserve their rights to identify and deal with any further shortcomings and inadequate information as well as to deal with and point out any alternative options.</p> <p>11.12. In light of the above, we hereby finally demand from you to suspend the process and the finalisation of your application for 12 months to give our clients the opportunity to appoint their own experts and to deal with the inadequate information and failure of your reports to contain complete information.</p>				

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	<p>12.13. Should you fail to postpone your process for 12 months, our clients will have no choice but to approach the Supreme Court for an appropriate order and an appropriate cost order will be requested against you and the Department of Water Affairs.</p> <p>13.14. It is further our instructions that the decision to erect the weir at Vlieepoort was apparently already taken in 2008, but that members of Makoppa Agriculture only noted the decision in your writing during April 2018 as a response to Makoppa Agricultural's letter of 22 February 2018. With the decision taken by the Department of Water Affairs, Makoppa Agriculture's members, either above or below the premises where the weir is to be built, were not known at the stage when the decision was taken. Not only did the Department of Water Affairs take a decision that infringes the rights to knowledge of members of Makoppa Agriculture before the decision was taken, but the Department's decision also violated various rights in contravention of the Constitution. We point out to you that the decision, without limiting the rights of any of our clients, has a very large effect on the right of survival of the members of Makoppa Agriculture as well as the right to participate in the economic traffic and our clients reserve their rights to seek appropriate legal assistance accordingly.</p> <p>15. We are waiting to hear from you urgently.</p>				

MINUTES OF THE FOCUS GROUP MEETINGS (EIA PHASE)

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479.	B. Enslin asked whether the reports can be downloaded.	B. Enslin	Focus Group Meeting –	Nemai Consulting	D. Henning explained that copies of the two reports, Draft EIA Report (Water transfer Infrastructure) and the Draft Scoping Report (Borrow Pits) including the appendices,

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			Mooivallei Landowners (03/10/2018)		can be accessed on the Nemai Consulting's website, and an entire MCWAP project webpage of the Department of Water and Sanitation (DWS)
480.	W. de Clercq pointed out that the road in the Mooivallei area is registered as a servitude road. He added that post construction the road must be driveable by all types of vehicles, not just 4X4s.	W. de Clercq	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	Nemai Consulting DWS	D. Henning explained that the process they must follow is to determine the condition of the road before construction and to ensure that the road is suitable for construction, and if it is not suitable then that road will have to be upgraded before construction can take place. After using the road, the road must be left in a proper condition so that the state, municipality or landowners can say that they are satisfied with the condition of the road. J. Kroon added that the Department will need a right-of-way servitude during the construction and operational phases from the main road to the weir.
481.	Mentioned that in the beginning it was suggested that all the old spoil heaps from the mine should be used to rebuild the road and make it driveable again. He also explained that at the abstraction works, a large part of the land would have to be used as a servitude, in order to store the material from the mine. The access road is a priority, and must always be accessible so that it can be used by both the landowners, and the contractor.	K. Hermann	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	<i>Nemai Consulting</i>	<i>Provision is made in the EMPr for maintaining access control.</i>
482.	His concern is that in the agricultural areas where there is currently irrigation, there will now be a 25 m servitude with a permanent road as part of access between the weir and the desilting works. They will therefore not be able to plant anything in that section because it will be a permanent loss of soil.	K. Hermann	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	DWS	R. Botha explained that the Department would also need regular access to the pump station. J. Kroon added that permanent access between the weir and desilting works will be required.
483.	B. Enslin asked about the Environmental Impact Assessment Process for the proposed power line project, and whether their program is in line with the MCWAP program.	B. Enslin	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	Nemai Consulting	D. Henning explained that Eskom would have to apply for it and it would run a separate basic assessment process that is much shorter than the current process that MCWAP runs. They still have to start with that process.

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484.	G. Bauer pointed out that it is the first time he is seeing the construction camps on the maps. G. Bauer then asked if the accommodation would be required at the weir and at the desilting works.	G. Bauer	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	Nemai Consulting DWS TCTA	D. Henning explained that the final positions are only finalized by the contractor and will be negotiated with the landowners, but the pre-requisites of the EIA Process prescribes that potential construction camps are indicated and should also be assessed as part of the EIA phase. J. Kroon added that only security staff of the Department would require accommodation on site, it will be the same as it was with MCWAP Phase 1. J. Kroon stated that accommodation will only be required for security personnel at the pumping station area. A. Nelwamondo explained that the camps would only be offices and temporary laydown areas for construction material, no accommodation will be in the construction camps.
485.	K. Hermann said that he assumes that the weir, pump stations and desilting works would be highly protected by security.	K. Hermann	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	DWS TCTA	J. Kroon explained that further in the process, the South African Police Service will have to assess the security risk of the project, and will then provide a classification of the status of security that will be required for the project. A. Nelwamondo explained that with Phase 1 they have currently have an agreement with the landowner that if there is a visitor at the gate, the visitor must declare who they are visiting and it will then have to be confirmed with that person who will then have to give the permission of access. At Phase 1 there are currently 18 security personnel on site, and they are accommodated at the pumping station. The reason is that a rapid security response is needed and also because the pumping station is far away from the nearest town.
486.	K. Hermann added that there must definitely be a fence at Mooivallei area, where monitoring must take place because the use of the road will ultimately start escalating in the future. K. Hermann said that there has to be a gate at the main road in order to help facilitate the monitoring. All construction roads in the Mooivallei area must be upgraded and in a good condition at all times.	K. Hermann	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	Nemai Consulting / TCTA	D. Henning and A. Nelwamondo explained that it is very rare that the road will be used so often during the operational phase and under normal circumstances they will not patrol every hour or on a daily basis.
487.	G. Bauer pointed out that the area where the entire pumping station is positioned for the moment is frequent floods, and the area has been flooded twice in the last four years. The water	G. Bauer	Focus Group Meeting –	TCTA	A. Nelwamondo stated that it is noted and explained that this will be part of the design engineers' task to review during the optimisation.

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	is about 1½ to 2 m deep when it floods there.		Mooivallei Landowners (03/10/2018)		
488.	J. Kroon asked whether the landowners pump water from the river and boreholes, whether they have an existing legal water use and what is the quality of the water?	J. Kroon	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	W. de Clercq	W. de Clercq said that they make use of both the river and boreholes, and Portions 8 and 9 uses the water from the river, and Portion 7 makes use of boreholes.
489.	G. Bauer said he was surprised when he saw that the river was classified as a Class C because he knows that the Thabazimbi sewerage works were pumping raw sewage into the river at times, approximately a kilometre upstream from the weir's proposed position.	G. Bauer	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	Nemai Consulting	D. Henning explained that the specialist did not only look at water quality, but he also looked at the aquatic invertebrates, fish and riparian vegetation to come to that classification.
490.	W. De Clercq asked if the roads would be sprayed during construction to control the dust.	W. de Clercq	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	Nemai Consulting	D. Henning explained as part of the environmental management program, there is a section that gives specific mitigation measures for the management of dust during construction. There are also methods, other than water, to control dust, for example the use of polymers, and the dust is also monitored during construction by the use of dust buckets, where the quantities of dust are compared to the prescribed air quality standards.
491.	M. Hermann asked how long will the construction period in the Mooivallei area be.	K. Hermann	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	Nemai Consulting	D. Henning said the plan is that after environmental authorisation is granted, to begin construction at the last quarter of 2019. Prior to this, the tender design must take place and land acquisition process must be completed. The construction period depends on the contractor, so it's difficult to say at this stage how long it will be for each farm.
492.	K. Hermann said the construction would certainly be carried out by a few contractors.	K. Hermann	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	TCTA	A. Nelwamondo explained that there would be one or two principal contractors, and under the contractor there will be sub-contractors.
493.	K. Hermann said they (TCTA) would have to work together with Eskom because a part of the pipeline route would affect	K. Hermann	Focus Group	Nemai Consulting	<i>Provision is made in the EMP for the management of Existing Services and Infrastructure.</i>

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	the power line that provides power to the owners in the Mooivallei area. His understanding is that the power line is then temporarily shifted and the owners will still be supplied with power during the construction period in the area.		Meeting – Mooivallei Landowners (03/10/2018)		
494.	K. Hermann stated that after environmental authorization has been issued, much will happen before construction can begin, and will anyone explain the final route to the affected landowners? K. Hermann explained that his entire house is directly affected by the planned pipeline servitude, which also has a major impact on his land, so the meetings need to take place rather sooner than later so that he can start planning ahead.	K. Hermann	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	TCTA	A. Nelwamondo explained that after environmental authorisation is granted, the team must do an asset and infrastructure assessment to see what will be affected by the construction servitude and within the 100 m corridor. Individual meetings will also be held with all directly affected landowners.
495.	G. Bauer stated that people have been saying that what they all should be concerned about is that when the weir is constructed, the borehole water levels below the weir will decrease and eventually dry up. He added that his gut feel is that the weir will actually increase the recharge of the underground water.	G. Bauer	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	Nemai Consulting	D. Henning stated that the principle conveyed during all the meetings is that the existing lawful water users should not be affected. The weir also makes provision for water to flow over the weir, as well as a gauging facility which will measure the flow over the weir. The intention is not to be an impoundment, it is to assist with abstraction to provide sufficient pumping head.
496.	W. de Clercq asked how deep the pipeline will be, because his concern is whether his borehole will be affected. W. de Clercq also stated that the blasting can also have an impact on the borehole.	W. de Clercq	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	Nemai Consulting DWS	D. Henning stated that if something had to happen to the borehole during construction, there is a mechanism in place that they should look in to any concern raised, and if it is linked to the construction, then there is an obligation to fix that concern, and an investigation has to be done and depending on the concern raised, it will find its way to the community liaison officer, and then it goes to the project team or can be elevated all the way up to the contract manager. D. Henning stated that if blasting has to be done, if there is a risk to property or infrastructure, or a bat cave, then there is the possibility to do controlled blasting in order to mitigate the risks to existing infrastructure. J. Kroon also added that he suspects that before construction begins, TCTA might instruct someone to conduct a baseline study on the boreholes and their yield.
497.	K. Hermann also mentioned that he had previously lost a borehole due to a mine that was operated on the property adjacent to his farm, and when he informed the mine of his	K. Hermann	Focus Group Meeting –	Nemai Consulting	D. Henning explained that during the implementation of the project, an independent person is involved and that the process and the program they follow is there to

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	issue, they did nothing about it and how was he expected to go up against the mine as an individual. His concern is what protection do landowners have to avoid such an issue from happening.		Mooivallei Landowners (03/10/2018)		protect the landowner. The environmental impact study is also there to ensure that a protocol is in place.
498.	W. de Clercq asked whether there is anything that protects landowners when an issue has been raised and is busy being negotiated, that it does not take 10 to 15 years to reach a conclusion or is resolved, because the Department can carry the legal costs but landowners cannot.	W. de Clercq	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	Nemai Consulting	D. Henning explained that a certain target is given to the project team and contractor to resolve the issue. Firstly, there is the recognition of the concern raised, which is given within 24 hours, and then the concern is categorised and depending on the category, a target date is given to the contractor in order to provide not just feedback, but also an answer to resolve the issue.
499.	B. Enslin stated that Eskom has an option document when they acquire a servitude, and in the document there are certain conditions, so every landowner in the negotiation process can write specific conditions for their property in this document, does TCTA have such a document?	B. Enslin	Focus Group Meeting – Mooivallei Landowners (03/10/2018)	TCTA	A. Nelwamondo stated that they currently do not have such a document, but conditions are considered when one-on-one consultations are held with landowners during the negotiation process, and an agreement is made that contains the certain conditions of TCTA and the landowners.

MINUTES OF THE PUBLIC & AUTHORITIES MEETINGS (EIA PHASE)

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500.	F. Botha stated that he was unable to see the duration of the drought periods on the slide which showed the levels of the Hartbeespoort Dam, specifically troughs where it indicated the periods prior to the last 10 years where the level went down to 60%. He also added that he didn't see a projection of what the levels of the dam will be in the future.	F. Botha	Public Meeting – Hartbeespoort (09/10/2018)	DWS	F. Vogel stated that the three distinct drought periods showed in the presentation were during the years 1971, 1984 and 1992. He also added that the stochastic projections of what the dam levels may be in the future will be provided in the slides to follow.
501.	F. Botha stated that M. Howard referred to 'Algae', and asked whether that includes Cyanobacteria (blue-green algae). F. Botha added that it is very significant that it drops to 15 m where the algae can still survive.	F. Botha	Public Meeting – Hartbeespoort (09/10/2018)	M. Howard	M. Howard stated that it is correct and that all primary producers were included. M. Howard stated that what outcompetes the microcystis to everything else is the fact that it has gas vacuoles in it which allows it to come to the top, and therefore it outcompetes the blue-green algae. He added that that's where the problem lies is at the moment you can get rid of the shift from the cyanobacteria out, then the green algae can float up and down, and that is the biggest problem with the dam is

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					that it is currently dominated by cyanobacteria.
502.	G. Law indicated the study considered the impact of a 2 m drop, and he asked what the impact of a 6 m drop is.	G. Law	Public Meeting – Hartbeespoort (09/10/2018)	M. Howard	M. Howard stated that the dam is not stratified in winter and therefore if it had to drop to 6 m with the implementation of MCWAP, there would be no change. There is no thermocline in winter, but in spring when the thermocline starts developing, it will be similar to what happened from 2004 to 2009. This means that there will be no change to the stratification pattern with the implementation of MCWAP.
503.	P. Venter asked what the effect would be on the thermocline if there is more hyacinth on the dam. He noted that presently there is 150-200 hectares in the past two years. P. Venter added that it is normally the case, however, for the Hartbeespoort Dam it is different and since they have stopped harvesting, the hyacinth has actually increased during the winter months. He indicated that the hyacinth creates its own micro-climate. He further noted that the hyacinth in the Hartbeespoort Dam stays for extended periods.	P. Venter	Public Meeting – Hartbeespoort (09/10/2018)		M. Howard stated that his study didn't look at that aspect, but research has been done and shows that it can act as a cover and the roots of the hyacinth absorbs oxygen, it therefore becomes oxygen limited underneath the hyacinth cover and lower oxygen level at the top and lower solar penetration. He indicated that you then get a period where it is mixed for longer and the thermocline is broken down for a longer period of time due to this matt of hyacinth, which typically occurs towards the end of summer. However, in the winter the hyacinth starts to die off and it is then in senescence and doesn't grow.
504.	F. Botha stated that there is a good example of the impact of hyacinth and he referred to a slide in the presentation. He pointed out that there is no spike even during the summer period and that is because the chlorophyll-a level is low due to the phytoremediation of hyacinth, which have cleared the dam with a secchi disk depth showing 2 m and more.	F. Botha	Public Meeting – Hartbeespoort (09/10/2018)		<i>Statement. No response required.</i>
505.	M. Burger stated that he also has an earth dam and it is good for the dam level to drop and lower in volume, and in the shallow areas they dry and then die. He added that for Hartbeespoort Dam they can use the dry periods to clean out the dam's sediment. The dam's capacity can increase if you remove the sediment currently in the bottom of the dam.	M. Burger	Public Meeting – Hartbeespoort (09/10/2018)		<i>Statement. No response required.</i>
506.	F. Botha stated that he would like to add to the comment made about the 'muddy planes'. He noted that the drop in level will create about 800 hectares of muddy planes and in spring it becomes the area of cultivation of hyacinth seeds that germinate in the mud. What happens is there are millions of small hyacinth plants in the mud and when the dam then	F. Botha	Public Meeting – Hartbeespoort (09/10/2018)		<i>Statement. No response required.</i>

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	starts to increase in water level, all the hyacinth enters the dam and the hyacinth then starts to grow at a tremendous rate. Even when the hyacinth is brown, they remove a lot of nutrients and multiply vegetatively and form daughter plants and don't need photosynthesis to grow.				
507.	G. Law stated that if the dam level even drops 5 m by his estate, it creates a security problem because a footpath is created right around about 80% of the dam, which impacts on 90% of the estates. He indicated that this is a security impact that hasn't been taken seriously enough in the study, which only focuses on the state land. He also added that the other flaw of the project is that a drought season has not been taken into consideration, and between 1997 and 2007 there have been no drought so does that mean that it goes down from 67% to 10% in a drought season? He asked what happens when no rain comes in one year, which hasn't been presented. He asked if the dam is going to get to a point where you can't even pump water out of the dam and then the local community won't even be able to get water. He indicated that with regards to the socio-economic impact, it was stated that the value of property goes up when there's water and goes down when there isn't water, and the landowner benefits from that. However, the municipality actually benefits from it because he pays rates and taxes on the value of his land, so if the properties around the dam are devalued then you will ultimately devalue an already bankrupt municipality, which will have a huge impact on the employment. He also stated that he disagrees that tourism is only 0,9%, as it is impossible and there has been no consideration of how many cars actually drive to the area around the dam every weekend. Development and tourism has grown in the last 7 years. Another impact will be on the restaurants around the dam, or activities associated with the dam like people who come to look at the dam and not necessarily use it. If there is a mud pit, it will affect the restaurants as no one will go there because of the smell. The other biggest employment line is the low income employees who work at these restaurants and hotels and BnB's around the dam. Estates around the dam are reliant on water supply	G. Law	Public Meeting – Hartbeespoort (09/10/2018)	DWS	<p>F. Vogel stated the drought forecasts are based on the full spectrum of high and low flows. He noted that they look at the hydrology from 1910 and all the droughts in the history where they determine the basis, and it is on that basis which the predictions are made. In our country we have become very aware of droughts, and this area is very fortunate in the last 20 years we did not have serious droughts.</p> <p><i>Refer to response to No. 434 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on security.</i></p>

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	from boreholes, and when the water drops the water table drops as well. He asked if an impact study was done to see what the effect will be on estates losing their water. Half the harbours will have no water and there will be no access to the dam. The reality is that for 6 months there will be no recreational or tourism activities around the dam and coupled with water restrictions, it will shut down golf courses around the dam and places like Magalies park. He stated that the Socio-Economic Impact Assessment did not have enough detail.				
508.	G. Law asked if the project gets going and the water is supplied to the end users, what happens if there is a drought. He asked if the end user will get less water or will the farmers and residents of Hartbeespoort Dam come second because the water is needed for Medupi.	G. Law	Public Meeting – Hartbeespoort (09/10/2018)	DWS	F. Vogel stated that there is a national policy for all the catchments in South Africa, which allocates priority in terms of who can be restricted (i.e. categories). The restrictions are that gardening and farming are cut back first, and then other users and some industries. When restrictions are in place, it means that everyone will be restricted but with different levels. He also added that in J. Kroon's presentation reference was made to an 'operating forum' that gets involved with annual decision making. During periods of droughts there is a mechanism to inform users.
509.	Judy stated that she was shocked that the team was more representing Medupi and Matimba than the social and environmental issues. She asked if anyone had read the latest IPCC report and if you had you wouldn't be promoting this project. Gauteng is rapidly growing at half a million people that all have to be fed and we are running out of water and pursuing a fossil fuel economy. She added that she lives by the dam and has a grandchild and not sure how we will be able to afford food for him without water. She stated that they cannot afford this water to go to Medupi, and in this time and day we must let the past mistakes stay in the past and not perpetuate the cost we are all going to pay for the past mistakes. We must stop the madness now and we need to use water where it is most needed, for people and for agriculture. She indicated that the report does not include the option to go for renewable energy instead and just cutting our losses, which is the prime fatal flaw in this entire exercise. In the technical study we didn't see who we are giving up the		Public Meeting – Hartbeespoort (09/10/2018)		F. Vogel stated that the fossil fuel power and renewable energy debate has already been dealt with in the Environmental Authorisation of Medupi. He noted that this debate is regarding the best way to provide water to that system. Anyone here or in the country will not disagree with you regarding the importance of water, and food for people, but people also need power and many other things. The Hartbeespoort Irrigation Board in the Crocodile River catchment uses approximately 80 million cubic meters per annum, and the Crocodile River (West) Irrigation Board uses approximately 120 million cubic meters per annum, which totals 200 million cubic meters per annum that is already being allocated to farming practices and food production. The water transferred to Lephalale may reach approximately 70 million cubic meters per annum, and because of the arguments you have mentioned it may be less due to the pressure of not using fossil fuels. The water is not just

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	<p>livelihoods of our people for, who is benefiting from this. Is it Medupi? We have all read the newspapers and we know who are behind Medupi and all the coal industries, and we know what's happening with the social situation. We are further feeding these industries with our resources. There is no alternative to water, however there are plenty alternatives to energy, and nowhere in the report is it saying this. No climate scenarios and no preparation for droughts were made, which is coming our way. The last point is the on the Hartbeespoort economy. If you look at Hartbeespoort Dam, it's called "Harties" because the heart of the economy is that dam. If you mess with that your 1,7 growth rate will be finished because we are all going to go. You are feeding a fossil fuel economy that is unsustainable and completely off the track with climate change, and you are saying that 'we are growing the economy'. You are taking away an economy that is actually working and where thousands of people are making a livelihood, and robbing them of something that's working and trying to make something that is not going to work, work.</p>				<p>for Medupi, but for the whole of Lephalale, as it is a very dry area. J. Kroon also mentioned that the current draft IRP is in the 60-day public review period, and the way to influence that decision is not through this project, but rather through the IRP review period.</p> <p>D. Henning also added that the water that is targeted to transfer emanates from the Vaal catchment, and is the return water from the wastewater treatment works. The drive for the project is the Flu-Gas Desulphurization (FGD) technology, which is to enhance the emissions in terms of sulphur content.</p> <p><i>Refer to the following responses:</i></p> <ul style="list-style-type: none"> ○ No. 459 and 460 with regards to the need and urgency for the proposed project; ○ No. 451 with regards to alternatives assessed as part of a SEA versus an EIA; and ○ No. 473 with regards to the no-go option.
510.	<p>P. Hollick stated that he stays in Westlake Estate and has concerns with regards to the water table and level around the dam, and has yet to hear what the effect will be of the water level on the boreholes. He stated that most of the estates all run off boreholes and if the levels are going to go down due to this project that this will impact on the residents. F. Botha added that he has done a study together with TUT students on the water quality of the borehole water in the area (Schoemansville, Ifafi, and Meerhof) and could not find a link between the dam and the borehole water. This is because the boreholes are fed by an aquifer, which is not linked to the dam. However, he can't say how it is on the western side, a test can be done to see if the borehole water contains phosphates, which is a clear indicator if the borehole is linked to the dam. They also have a specialist by the dam in Meerhof, who has done his PHD on the underground water system in the area. D. Henning will engage with the mentioned specialist further.</p>	P. Hollick	Public Meeting – Hartbeespoort (09/10/2018)		<p><i>Refer to the response to No. 411 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on boreholes.</i></p>
511.	<p>G. Havenann stated that with regards to risk mitigation, which might or might not have been included in the documentation,</p>	G. Havenann	Public Meeting –	Nemai Consulting	<p>C. Chidley stated that the economic data can be relied on and it is based on 2017 data. If you look at tourism</p>

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	the question that the whole economic development of an area depends on the resource it surrounds. Here it is a state-owned resource, which is water. If you have an economy that has been developed around it and you start killing the economy by withdrawing the water, then surely they can take the issue to the constitutional court. There will be economic impacts because the economy is built around the water resource and not anything else and that is where the development comes from. If you kill that area you kill the development. He added that you need to take into consideration that you will find all the landowners around the dam will start going to the constitutional court because the businesses and economy is being killed.		Hartbeespoort (09/10/2018)		data in the Madibeng Municipality, it shows approximately R500 million value for accommodation and catering in 2017. The point that tourism is obscured is correct, because there is a certain amount of retail made that occurs from day tourism. The impact is robust and won't be killed, it will possibly reduce. The economy is mixed and isn't just focussed on the dam, but also on Tshwane and Johannesburg, and on mining and manufacturing and a lot of people that stay here don't all have waterfront properties. It's not only focussed on the perimeter of the dam.
512.	P. Venter stated that there was a previous socio-economic study done which looked specifically on the property prices of the Hartbeespoort Dam in totality, and the turnover of property prices which is an economy in itself. If you consider the impact of the dam on property prices, such as the impacts caused by the hyacinth on the dam, people don't even come to play golf on the golf courses. The broader economy should be looked at because it drops when the prices of the local investments drop. Many developments are ready to start, however, it is the national economy that keeps them down, but many agents want to know when the hyacinth will be cleared. The growing economy around Hartbeespoort is property related and a broader look is needed. We need to be sensitive to the investors around the dam.	P. Venter	Public Meeting – Hartbeespoort (09/10/2018)		<i>Refer to response to No. 434 with regards to the influence of Hartbeespoort Dam's fluctuating water levels on property value.</i>
513.	M. Foletji asked what the total size of the affected land in the Mooivallei area where the desilting works and pump station is situated.	M. Foletji (DAFF)	Authorities Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning stated that the total footprint is approximately 640 X 440m, which is situated on Portions 1 and 2 of the Farm Mooivallei.
514.	M. Foletji asked whether there is an alternative site for the desilting works and whether the site cannot be moved further down the route.	M. Foletji (DAFF)	Authorities Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning explained that as part of the technical investigations the engineers considered two alternative sites, which included the current proposed site and another site closer to the abstraction weir. He noted that the site closer to the weir was not chosen due to geotechnical constraints associated with dolomitic conditions. D. Henning stated that a write up on the project infrastructure is provided in the draft EIA Report.

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				DWS	J. Kroon stated that this will have a greater cost on pumping, as it will be further away from the weir.
515.	M. Foletji asked whether the pipeline will be fenced off.	M. Foletji (DAFF)	Authorities Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning stated that the construction servitude will be fenced off, and during operational phase the intention is to drop the fence in order for land use to continue in the permanent servitude, with certain restrictions.
516.	M. Foletji asked whether cultivation can still happen within the servitude.	M. Foletji (DAFF)	Authorities Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning stated that it is possible, however in the Mooivallei area it will be different as the servitude will be used for access between the weir and the desilting works during the operational phase. He noted that in this instance cultivation will not be possible. He indicated that cultivation is permitted on most of DWS' pipelines after construction.
517.	M. Foletji stated that before closure of the borrow pits occurs, the Department of Agriculture, Forestry and Fisheries (DAFF) must be consulted by the Department of Mineral Rights (DMR) in order to conduct an inspection on whether the agricultural land can still be used post rehabilitation.	M. Foletji (DAFF)	Authorities Meeting – Thabazimbi (10/10/2018)	Nemai Consulting TCTA	D. Henning stated that the borrow pits mainly affect grazing and fallow land, and no cultivation is affected. D. Henning also stated that this process will give the landowner confidence that the closure process will be done properly. A. Nelwamondo added that for all the borrow pits, the closure plans are submitted to DMR and this department then distributes the plans to the relevant authorities. These authorities then attend the final closure inspection. On MCWAP Phase 1 inspection was done by DAFF and DWS, who provided their independent comments and reports to DMR. If satisfied, DMR provides a closure certificate. A. Nelwamondo stated that with regards to the borrow pits, many landowners request that as part of closure, space must be kept open as a watering hole for their animals, or for storage during the dry period. Depending on the volumes, the landowner might require a Water Use Licence Application. However, DMR requires that the land be rehabilitated to a similar state than what existed before. Engagement is thus undertaken with authorities and the landowners.

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518.	M. Foletji stated that he does not normally have issues with linear infrastructure as the impacts are minimal and most are of national importance, unlike mining.	M. Foletji (DAFF)	Authorities Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	<i>Statement. No response required.</i>
519.	M. Foletji requested that the information about the proposed mining project be forwarded to him.	M. Foletji (DAFF)	Authorities Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning stated that recently it came to their attention that there is a proposed mine just outside Thabazimbi, which affects many of the farms where the proposed MCWAP-2A footprint occurs. D. Henning added that no formal engagement or application for water has been received from this proposed mine.
520.	R. Botha asked whether there are any water uses associated with the pipeline.	R. Botha (DWS: North-West)	Authorities Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning stated that the water uses to be included in the Integrated Water Use Licence Application for the project are Section 21(b), (c), (i) and (f). He indicated that all wetlands, pans and riparian areas have been delineated. He noted that the end users will apply independently for the Section 21(a) Water Use Licences.
521.	M. Foletji asked what the size is of the off-take pipeline to the landowners.	M. Foletji (DAFF)	Authorities Meeting – Thabazimbi (10/10/2018)	DWS	D. Henning mentioned that the MCWAP-2A project makes provision for off-takes, but only for stock/game watering which will be metered. He noted that there will be restrictions to the usage and it can't be used for irrigation. J. Kroon stated that the off-take pipeline for stock or game is a 19 mm pipe with a valve, and will be metered and the person will have to formally apply for it and will have to pay a water tariff.
522.	M. Foletji asked what is the depth of the borrow pits.	M. Foletji (DAFF)	Authorities Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning stated that the depths and sizes vary. He mentioned that the proposed dimensions of all 23 borrow pits are outlined in the Draft Scoping Report, and locality maps are also provided.
523.	G. Bauer stated that as previously mentioned during the meetings in the Scoping Phase, there is approximately 200 hectares of natural habitat on the remainder portion and portion 10 of the farm Mooivallei 342. Currently the free-ranging game is situated North-East of the pipeline route and the animals' use the Crocodile River as a water source, which	G. Bauer	Public Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning stated that in this section the pipeline fragments the property and therefore blocks off the corridor which the animals use to access water. The principal is that access will have to be maintained and will have to be taken into account when planning the construction, and it can also even be included as a

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	will be hindered during the construction period, therefore either temporary access to the river or water provision will be required and have to be maintained for that section of the pipeline during construction.				condition of the environmental authorisation, and will be incorporated in the conditions of the EMP to be implemented during construction.
524.	B. Enslin stated that the wildlife specialist made the recommendation that a 12 month prior notification be given to the landowners who will have to shift their breeding camps on the farms. His recommendation is that more than 12 months be given due to the difficulty of shifting camps on farms.	B. Enslin	Public Meeting – Thabazimbi (10/10/2018)	Nemai Consulting TCTA	D. Henning stated that best practice is to provide landowners a minimum of 12 months, which TCTA would have to consider. A. Nelwamondo stated that 12 months notification can be given to the landowners during TCTAs commencement of land acquisition and procurement of the contractor.
525.	B. Enslin asked whether adjacent properties that have camps against the fence that will be directly affected by the construction servitude, will also be notified and compensated by TCTA in order to shift the camps before construction commences.	B. Enslin	Public Meeting – Thabazimbi (10/10/2018)	TCTA	A. Thebe stated that it will have to be considered and assessed by TCTA during the construction period, as and when it is acquired.
526.	C. Vos stated that if the pipeline is constructed on the servitude road next to his farm, it doesn't matter which side the pipeline is constructed, the wildlife on his farm will still be affected by the construction servitude, and will TCTA be able to ensure that there will be no problems. C. Vos added that what is said and what actually happens on the ground, is not the same and he has experienced this before.	C. Vos	Public Meeting – Thabazimbi (10/10/2018)	TCTA	A. Thebe stated that if there is sufficient evidence, a claim may be submitted. A. Nelwamondo stated that the notification will be to all direct and adjacent affected landowners.
527.	A. Botha stated that it was mentioned in the presentation that the dust on site during construction period will be managed by either the use of water, or chemical suppression. She asked what kind of chemicals will be used during construction.	A. Botha	Public Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning explained that they won't use any chemicals that may cause pollution. The norm is to use a water tanker that sprays the roads to manage dust, however the access to water is going to be minimal along the route, therefore alternative methods might be required, such as the use of polymers which bind to the dust particles. There will also be on-site monitoring for air quality, where dust buckets will be used to measure against the standards which are prescribed in legislation and the Environmental Management Programme (EMPr).
528.	M. Schrenk stated that he requires the locality maps of the gauging weirs upstream of the Vlieëpoort weir (i.e. Paul Hugo, Sand River and Bierspruit weir). He also requested an electronic copy of the reports as the hardcopy is too big to	M. Schrenk	Public Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning stated that the locality maps and a link to the website in order to access the electronic version of the draft reports, will be provided.

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530.	Stated that she lives by the Sand River, by the gauging weir. Her concern is that she uses the access road at the back of her plot, which crosses the Sand River, to get the other side of her property with her cattle, and asked how she will be able to access the other side of her property during the construction period.	H. Richardson	Public Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning stated that provisions have been made in the EMP, to ensure that landowners will have access to their property at all times. Animals will also need access to get to water sources, so during the time when TCTA start negotiating for the servitude as part of the land acquisition process, conditions will be set for the servitude and will also include the specific conditions for every property
531.	Stated that with regards to the concern about the impact of the construction servitude on the adjacent property, he suggested that farms with breeding camps situated 150 m from the construction servitude, should also be given the 12 month notice, in order to plan and make arrangements.	G. Bauer	Public Meeting – Thabazimbi (10/10/2018)		<i>Notification to be provided during the pre-construction phase.</i>
532.	R. Holtzhausen stated that the EIA was easy to download, however he had difficulties with the large appendices, which will need to be split. He stated that it was mentioned in the EIA, that there will be two pipes, and then a possible third pipeline in the future, is it a mistake or will that actually happen. He also asked whether the road the pipeline follows, which is used for access by the surrounding farms, will become part of the 40 m construction servitude, or will an additional road be built next to the existing one.	R. Holtzhausen	Public Meeting – Thabazimbi (10/10/2018)	DWS	J. Kroon explained that with regards to the pipeline section between the abstraction works and the low-lift pump station, the rising main will not run 24/7 and will be switched off at times. When switched off, sediment can accumulate in the pipe and therefore a second pipe will be placed parallel to the rising main, which will be used to remove the silt in the rising main. The possible third pipe only becomes applicable when the development in Lephalale increases in the future, and a decision is made to increase the size of the scheme.
533.	J. Coetzee stated that where the break pressure reservoir is planned to be in the corner of his property, currently has dolomites all over.	J. Coetzee	Public Meeting – Thabazimbi (10/10/2018)	Nemai Consulting F. Vogel	D. Henning stated that geotechnical studies were conducted. F. Vogel stated that areas that contain dolomites are not good foundations and if dolomites are on site, then an alternative position might be required.
534.	H. Pieters stated that when you enter Thabazimbi, you will see there is a floodline by the road, which was the water level when the area flooded before weirs were introduced. What potential flood risk is caused when the weir is constructed, how will you ensure the safety of the surrounding landowners,	H. Pieters	Public Meeting – Thabazimbi (10/10/2018)	DWS	J. Kroon explained that the Vlieëpoort weir has a central section, and then the pump station and abstraction works is situated on the right. The central section of the weir will allow the water to overflow downstream, and takes the 1:100 year floodline into account.

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	and how far upstream will the water be pushed.			Nemai Consulting	D. Henning explained that the weir is not being built to serve as an impoundment, but does increase the supply level upstream to a certain extent. The engineers ran models to determine what full supply level before and after the implementation of the weir. When the full supply level was determined, it was screened to see what possible impacts it will have to existing infrastructure upstream, where two possible impacts were identified mainly a railway crossing and the low level bridge upstream used by Kumba. There has been engagement with Kumba as there is a possibility that the low level bridge may become flooded.
535.	B. Enslin stated that there will be situations along the route where the 12 month notification period will be too short, as the landowner will have to look for a new position to relocate the breeding camp and then move the wildlife, and he will have to also build new camps. He added that the EA will only be granted in February 2019, and only then will they be able to look at what is on the farms. He recommended that the provision is made for the specific farms that will require more time and those provisions must be included as part of the construction plan for the contractor.	B. Enslin	Public Meeting – Thabazimbi (10/10/2018)		<i>To be considered during the pre-construction phase.</i>
536.	M. van Zyl asked B. Orban whether landowners will be compensated for the additional feed that they will have to purchase due to the breeding camp having to be made smaller.	M. van Zyl	Public Meeting – Thabazimbi (10/10/2018)	Nabro (Wildlife Specialist)	B. Orban stated that for the short term, a claim can be made. In the wildlife impact assessment report, it specifically states that the landowner will have to look at what the carrying capacity of the camps are and whether it will be able to support the wildlife within the camp. Decisions will have to be made to see what is optimal for the management of the farm, and if there is no other option, and in the short term you have to provide additional feed, then a substantiated claim can be made.

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537.	A. Botha asked about the concerns of safety and fire during the construction period, will the police be involved, what process will be implemented.		Public Meeting – Thabazimbi (10/10/2018)	Nemai Consulting TCTA	D. Henning stated that the EMPr has many provisions and mitigation measures in order to mitigate impacts such as security and fires during the construction and operation phases. D. Henning also added that if the EA is granted, the conditions stipulated in the EMPr and EIA becomes a legal obligation, which has to be followed during the construction and operational phases. The compliance is then monitored by the environmental manager, environmental officer, an independent ECO and CLO. A. Nelwamondo stated that in terms of to security, the whole construction servitude will be fenced off with controlled access to the servitude at all times, which will be managed by the contractor to the satisfaction of the engineer. With regards to the concern of fire, there will have to be a fire management plan before construction begins, which will contain precautionary measures and a protocol to be followed on site, including fire prevention machinery. As part of the health and safety plan for the project, one of the conditions is that the contractor also becomes part of the local fire services. There won't be people looking for employment at the construction servitude, but will occur at the designated labour desks are situated at the towns.
538.	H. Pieters requested for a copy of the minutes of all the meetings held during the EIA phase.	H. Pieters	Public Meeting – Thabazimbi (10/10/2018)	Nemai Consulting	D. Henning explained that once they are finalised, the presentations will be appended to the minutes of the meetings, and will be sent through to the IAP.
539.	P. du Plessis stated that the conditions of the roads are very important and how will they be dealt with during the construction and operational phase.	P. du Plessis	Public Meeting – Lephalale (11/10/2018)	Nemai Consulting	D. Henning indicated that before construction commences, a baseline study will have to be carried out on all roads to determine the current status of the roads. Some roads won't be acceptable for use during construction and will have to be upgraded. It is planned to use only the construction servitude for access, however, public roads will have to be utilised in order to get to certain points along the pipeline. The requirements of the roads' authorities will need to be satisfied. Specific mitigation measures that deal with the use of roads are also included in the Environmental

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					Management Programme (EMPr), which is appended to the Final EIA Report. The EMPr is a living document, which will be implemented during the pre-construction, construction and operational phase of the project.
540.	B. Enslin asked whether the current positioning of the construction camps can be shifted on the affected farms.	B. Enslin	Public Meeting – Lephalale (11/10/2018)	Nemai Consulting	D. Henning stated that the contractor will have to make a decision with regards to the final location and positioning of the laydown areas and construction camps. Final arrangements will have to be discussed and arranged with the affected landowners. The EIA provided indicative locations of the camp sites. No provision is made for accommodating labourers at the camps, only for security personnel.
541.	B. Enslin also asked where the accommodation camps will be for the staff.	B. Enslin	Public Meeting – Lephalale (11/10/2018)	Nemai Consulting	D. Henning stated that in the case of MCWAP Phase 1 accommodation was found in the surrounding towns or areas were leased from private landowners who offered accommodation. TCTA has requirements for the accommodation camps and laydown areas.
542.	A. Macheke stated that public participation is very important and everyone in Lephalale needs to know what is happening. He also added that many strikes occur due to poor consultation. As a member of the Environmental Justice Forum his concern is on the environmental side of this project. He has already seen the impact from Medupi and Matimba, and this new project will allow more coal-plants and mines in the future to come to our area. He expressed his concern for future generations. Marapong currently suffers from water shortages in the area, and yet the mines have a constant supply of water. He requested that the community must be more involved in projects that are currently happening in the areas, and the local municipality must be involved in the public participation.	A. Macheke	Public Meeting – Lephalale (11/10/2018)	Nemai Consulting	D. Henning stated that the current database of Interested and Affected Parties for the EIA also includes NGO's and environmental interest groups who have specific environmental concerns, such as climate change and water. In terms of consultation, the project team attempted to schedule a meeting in Marapong to engage with that community, however, no venue was available. This can be discussed further with you after the meeting to see what options exist. A notice was placed in Marapong and a copy of the Draft EIA Report was also placed at the public library in Marapong. D. Henning noted that this project is regarded as enabling infrastructure, which allows other developments that require water to take place in the Lephalale area. A meeting was held with the Department of Environmental Affairs (DEA) during which the project's potential cumulative impacts in relation to the water users' impacts on climate change was discussed. DEA indicated that the obligation is on the emitter to conduct the climate change study, as this is the source of the impact.

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				TCTA	<p>D. Henning thanked A. Macheke for his participation and also requested that if he has his own database for the Marapong community, to please share it with the project team to include it in the overall database for the project.</p> <p>A. Nelwamondo added that with regards to water usage, each user, such as the mines and municipalities, have different allocations for water usage and licences. If more water is required for the municipality, then they will have to apply for an increase in their water allocation. MCWAP-2A will ultimately double the water availability for Lephale.</p>
543.	<p>F. Nkosi stated that Medupi and Exxaro are using more water, but the community is using less water. She noted that in Lephale there is a sewage blockage every day and she asked why sewage can't be used in order to save water. She stated that the sewage water must be re-used, and then water will be available for the municipality to provide to the local communities. The Constitution says that we have a right to water. It was not long ago that in Onverwacht there was a water shortage and alternative plans had to be made. The project states that by implementing the MCWAP-2A it will increase access to water in Lephale to communities, however, the people in Marapong currently do not have any water and yet Medupi is running. If the communities had a pipeline from Zeeland Water Treatment Plant to Onverwacht and Marapong, then there will be access to water and the communities will benefit. All the new mines and power stations have access to all the water.</p>	F. Nkosi	Public Meeting – Lephale (11/10/2018)	<p>Nemai Consulting</p> <p>DWS</p>	<p>D. Henning indicated that the matters raised pertain to water supply to local communities, which is a function of the municipality. He noted that the project team is not necessarily best placed to respond. He indicated that one of the water users identified by MCWAP-2A is the Lephale Local Municipality. He noted that re-use is considered throughout the country.</p> <p>J. Kroon added that MCWAP-2A intends to supply water to different areas. He noted that the quality of water from this proposed scheme is not suitable for human consumption. MCWAP-2A will free up water from the Mokolo system, which can then be used for domestic purposes</p> <p>R. Gillmer also explained that the municipality has plans in the future with Exxaro and mines in order to improve water supply in Lephale. The community must liaise with the municipality in order to get feedback on future plans with regards to water supply to communities.</p>
544.	<p>E. Greyling thanked the project team for the detailed presentations. She indicated that the problem is that everyone has heard the same and seen the same promises and talks. She added that she hears what is being said, and this project will have a huge negative socio-economic impact for the area of Steenbokpan. Even the people who previously got work from the projects, did not benefit from it and you will</p>	E. Greyling	Public Meeting – Lephale (11/10/2018)	Nemai Consulting	<p>D. Henning acknowledged the concerns raised, based on adverse impacts experienced by the community. He noted that the impacts that can potentially be caused by the proposed project were identified by the project team and mitigation measures were proposed to address these impacts. He further mentioned that there is recourse if the conditions of an Environmental</p>

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	see it at the next meeting in Steenbokpan. Eskom is using the FGD, however, what we need to understand is that they had an alternative and plans which could use a lot less water. The water that will be provided to the community from the Mokolo Dam will be at the same tariff as the water from MCWAP, and therefore the community is awaiting huge water price hikes. The community lives with the knowledge that the DEA is not here to defend our environment or our affairs. We all live here and we have all seen it happen. This project is a very well prepared horror story.			DWS	Authorisation are not adhered to. J. Kroon mentioned that the government sponsors the social use component of the water supply for domestic purposes and it will be different to the tariff of the commercial users.
545.	B. Enslin stated that with regards to the “artificial water”, the Johannesburg Mayor made a statement that R380 billion will be set aside in order to improve infrastructure in Johannesburg, as approximately 75% of infrastructure is old and failing. He asked if this had been taken into account for MCWAP-2A.	B. Enslin	Public Meeting – Lephale (11/10/2018)	DWS	R. Gillmer stated that the water in Johannesburg comes from the Vaal River system, and that their water losses are 30% due to old infrastructure. He noted that the thumb suck rule is that 60% of water used will come out as grey water, and fixing the infrastructure will not influence the flow to the works. He also mentioned that the returns flows in Lephale will not be able to supply water to Lephale.
546.	L. Sole stated that his focus was on environmental matters. He indicated that the management of waste and sanitation at construction camps should be of highest priority. He further noted that truck drivers bringing in heavy loads, who cannot drive back and end up staying close by, can cause impacts such as HIV/AIDS. He also mentioned that borrow pits needed to be rehabilitated after construction.	L. Sole	Public Meeting – Lephale (11/10/2018)	TCTA	A. Nelwamondo indicated that in the case of MCWAP Phase 1, where they had at most 800 workers on site, 700 were local labourers who resided in the existing residential areas. The skilled and semi-skilled labourers stayed in existing towns or camps provided by farmers. Every week the camp sites were inspected and problems needed to be rectified immediately. The municipality also asked for a list of all labour camps for MCWAP Phase 1 and also undertook inspections, and there were never any issues. The transport of heavy loads will be scheduled to allow sufficient time for the return trip. The contractor has to ensure that the suppliers stick to their schedules. For the borrow pits, there are currently 23 identified sites and during the construction and mining phase, activities will abide by

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					the EMPr approved by the Department of Mineral Resources (DMR). Once mining has been completed a closure plan will be compiled and submitted to DMR for authorisation. Landowners will also be consulted. Once the closure plan is approved, the rehabilitation and reinstatement can start and once it is done the site will be inspected by the authorities and the landowner. With regards to sourcing of labour for the borrow pits, the maximum employment will be approximately only 5, who will be required for the operation of the borrow pits and handling of machinery.
547.	F. Nkosi stated that Lephalale has experienced an influx of many people. He indicated that there is no skills development taking place as part of the projects in Lephalale. He emphasised that there needs to be a transfer of skills.	F. Nkosi	Public Meeting – Lephalale (11/10/2018)	TCTA	A. Nelwamondo stated that during the implementation of MCWAP Phase 1 and Medupi, many opportunities were created for local labourers. There was a lot of training, for example MCWAP Phase 1 trained 400 local labourers and it is believed that those skills are still available in the area. When it comes to employment, all job seekers can register at the labour desk with their certain skill sets. The problem arises when importing skilled workers from outside of the local area, it is the last resort only when the skills can't be sourced locally. It is not a definite that semi-skilled or skilled labour will be sourced from Gauteng. The priority for this project is to source locally. T. Shale added that the specifications for the contractors will provide instructions on the sourcing of local labour.
548.	A. Macheke stated that the municipality should have assigned a ward councillor or municipal committee to assist with the participation of the project in Lephalale, and to introduce the project to the community. He noted that consultation with the communities is always a challenge.	A. Macheke	Public Meeting – Lephalale (11/10/2018)	Nemai Consulting	D. Henning noted that as a minimum, the public participation process needs to adhere to the requirements stipulated in the EIA Regulations. In the case of municipalities, representatives from the various municipal units were included in the database and consulted with during the course of the EIA. Copies of the Scoping and EIA Reports were also provided to the municipality. Dedicated authorities meetings were also held with officials from national, provincial and local government. The councillors from Thabazimbi and Lephalale were also identified from the Wards affected by the project.

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				TCTA	A. Nelwamondo added that the Lephalale Development Forum are given updates on the project to also inform local stakeholders in the area.
549.	F. Nkosi stated that the project must do all it can to preserve indigenous trees for future generations.	F. Nkosi	Public Meeting – Lephalale (11/10/2018)	Nemai Consulting	D. Henning indicated that mitigation measures related to the safeguarding of flora are provided in the EMPr.
550.	L. Sole stated that opportunities needed to be created for local businesses to benefit from the project.	L. Sole	Public Meeting – Lephalale (11/10/2018)		<i>Provision is made in the EMPr for such matters.</i>
551.	B. Enslin requested the details of the landowners from the database that are affected by the Best Practicable Environmental Option (BPEO), as well as a copy of the maps of the final preferred route.	B. Enslin	Public Meeting – Lephalale (11/10/2018)	Nemai Consulting	Information provided.
552.	A question was asked about what the current allocation of water is for Medupi and for the town of Lephalale that will be supplied from MCWAP-2A.	Meeting Attendee 1	Public Meeting – Steenbokpan (11/10/2018)	TCTA	A. Nelwamondo stated that currently MCWAP-2A will provide Lephalale with 7 million m ³ /annum, whereas the allocation for Medupi will be approximately 23 million m ³ /annum.
553.	The concern was raised that in the presentation, climate change and the drought that the Eastern Cape and Cape Town have been experiencing was mentioned, therefore South Africa must prioritise water. South Africa signed the Paris Agreement in order to ensure that the country will reduce its air emissions, especially coal-fired plants. We need to ask ourselves is this water for industry or for the country, and does this project support polluters by providing industries with water and ultimately neglecting food production by taking the farmers' water?	Meeting Attendee 2	Public Meeting – Steenbokpan (11/10/2018)	TCTA	A. Nelwamondo explained that Medupi will be one of the first power stations that will implement the Flu-Gas Desulphurisation process, which was granted Environmental Authorisation on 6 September 2018, and the FGD technology is designed in order for Medupi to lower emissions.
554.	An attendee raised the concern that with regards to the promises of local employment that was presented earlier, they should not just be empty promises, but actually needs to happen.	Meeting Attendee 2	Public Meeting – Steenbokpan (11/10/2018)	TCTA	A. Nelwamondo stated that they will require approximately 500 local labourers, which will have to be split between Thabazimbi and Lephalale due to the project area falling within both municipalities. Skills will also be transferred to the local community during the construction phase, in order to provide skills that can be used even when the project is complete.
555.	Another attendee raised a concern with regards to jobs, stating that according to the maps in the presentation,	Meeting Attendee 3	Public Meeting –	TCTA	A. Nelwamondo stated that the training and skill transfer will be planned and provided by the contractor, and

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	majority of the project occurs within the Lephalale local municipality, and therefore the majority of the local jobs should be given to the communities of Lephalale, it will be impossible for someone to travel from Lephalale all the way to work in Thabazimbi, and vice versa. It was added that with regards to the transfer of skills from the project, it has to be done properly so that the local people can benefit, and instead of only providing skills during construction, they must start transferring skills before the recruitment of local labour starts for the project.		Steenbokpan (11/10/2018)		TCTA will manage the contractor to ensure that skills are transferred to the local community. Skills can't be transferred now as the contractor still needs to be appointed, which will be during procurement which is only after environmental authorisation is granted and the final design phase is complete.
556.	It was asked whether the project team will come back on 29 October 2018. An attendee added that the municipality must be present at these meetings in order to ensure that commitments made with regards to local employment are kept.	Meeting Attendee 3	Public Meeting – Steenbokpan (11/10/2018)	Nemai Consulting	D. Henning stated that the 29 October 2018 is the last day of the public review period of the Draft EIA Report (Water Transfer Infrastructure) and Draft Scoping Report (Borrow Pits) and will be the last day to provide comments. Hardcopies of the draft reports are available in the front of the Thusong Centre at reception to provide comments. If Environmental Authorisation is issued, and after the EIA process, other processes will start like the implementation of the project, there will be labour desks to assist with local employment and a community liaison officer (CLO). D. Henning stated as part of the EIA process, there has to be engagement with the local municipalities that have jurisdiction in the project area. Therefore for this project, the Thabazimbi and Lephalale local municipalities were engaged with from the start of the project. With regards to the employment process of local labour, there is a protocol and municipal processes that must be followed by the contractor and in the implementation phase.
557.	J. Motlogelo stated that he was concerned about the pipeline route traversing the farms, because they stay on farms and have graves of their families on the farm. Previous projects affected their graves and the area was cleared and graded without their consent. Were heritage resources taken into account by the project?	J. Motlogelo	Public Meeting – Steenbokpan (11/10/2018)	Nemai Consulting	D. Henning stated that as part of the EIA phase, specialist studies were conducted along the pipeline route in order to assess any sensitive environmental features that could possibly be impacted by the project infrastructure. There was a heritage impact assessment, where the specialist reviewed all possible heritage resources on-site (graves, structures etc.). All graves are protected, and if any heritage resources have to be moved, there is a specific process prescribed by legislation that will have to be followed. Mitigation

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					measures are also provided in the specialists report in order to mitigate the impact on heritage resources that could occur on site, and if relocation is necessary, then a process is provided in order to relocate the graves. Before construction commences, a walk-down survey will commence within the planned construction servitude, in order to identify and demarcate all heritage resources, existing structures and sensitive environmental features (fauna/flora/wetlands/pans) that will have to be protected during the construction period.
558.	An attendee stated that their ward councillor is N. Pienaar, and when we start with the implementation of MWAP-2A, the ward committee should be the first point of contact in order to ensure construction goes ahead smoothly with no issues.	Meeting Attendee 4	Public Meeting – Steenbokpan (11/10/2018)	Nemai Consulting	D. Henning stated when we identified councillors and ward committee members, engagement is made with the office of the speaker of the local municipalities.
559.	An attendee had the concern that the local community is still informal, there is no development in this area, and the many projects just come and go without improving the lives of the community. There are no secondary schools or crèches in the community. It was recommended that the CSI of the MCWAP-2A should be different from the past projects and needs to be in the community.	Meeting Attendee 2	Public Meeting – Steenbokpan (11/10/2018)		<i>Not a direct project responsibility.</i>
560.	P. Mogwai asked about the CLO.	P. Mogwai	Public Meeting – Steenbokpan (11/10/2018)	TCTA	A. Nelwamondo explained that the CLO will be part of the construction phase, and will be local who will work closely with ward committee members during construction to assist with engagement with the local communities with addressing concerns and issues.
561.	J. Motsheqa stated that approximately 2 km from the Thusong Centre, there is an old facility which was used as a school but is no longer in use. There is a possibility of using that facility in Steenbokpan as a training centre for the local labourers of Steenbokpan during the construction period.	J. Motsheqa	Public Meeting – Steenbokpan (11/10/2018)		<i>To be considered further during the pre-construction phase.</i>
562.	J. Moatshe asked that more information on the project needs to be accessible to the community.	J. Moatshe	Public Meeting – Steenbokpan (11/10/2018)	TCTA	A. Nelwamondo stated that a copy of the Draft EIA and Draft Scoping Report has been made available to the community and is situated at the reception area of the Lesedi Thusong Centre.
563.	The concern was raised that landowners affected by the pipeline are not present at the meeting in Steenbokpan, and whether another meeting will be held with them.	Meeting Attendee 4	Public Meeting – Steenbokpan	Nemai Consulting	D. Henning stated that a number of meetings were held with the landowners, and landowners were present at the public meetings held in Thabazimbi and in Lephalale.

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			(11/10/2018)		As part of the EIA process, it is an obligation to have engagement and meetings with the directly and adjacently affected landowners, which has been done.

ANNEXURE 1

MCWAP-2A - TCTA POLICY AND LAND ACQUISITION PROCESS

MOKOLO AND CROCODILE RIVER (WEST) WATER AUGMENTATION
PROJECT (PHASE 2A) (MCWAP-2A)
TCTA POLICY AND LAND ACQUISITION PROCESS

1. INTRODUCTION

- 1.1 TCTA is a major public entity listed in Schedule 2 of the PFMA and a water management institution in terms of the National Water Act 36 of 1998 (“ the NW Act”), operating in the water sector inter alia, in the funding/co-funding and implementing of bulk raw water infrastructure development projects on behalf of the Department of Water and Sanitation, as directed by the Minister of Water and Sanitation from time to time, and subject to environmental authorisation by the Department of Environmental Affairs.
- 1.2 The NW Act empowers the Minister in terms of section 109 and section 64(1), read with sub-sections 64(2), 64(3), 64(4) and 128, to acquire and register land rights required to implement government waterworks. When the abovementioned directive is issued the Minister also delegate such powers to TCTA.
- 1.3 TCTA’s Project Charter contains the Land Acquisition Strategy as part of the overall Environmental Strategy. The strategy hinges on two guiding principles, namely:
- 1.3.1 consultation and information sharing with directly impacted landowners; and
 - 1.3.2 adherence to the prevailing legal framework for acquisition and administrative justice, most importantly the Promotion of Administrative Justice Act 3 of 2000 (“PAJA”), the Expropriation Act 63 of 1975(“ the Expropriation Act”) , the NW Act and Section 25 of the Constitution of the Republic of South Africa, Act 108 of 1996 (“the Constitution”).
- 1.4 TCTA’s approach to land acquisition is therefore to avoid, where possible, the impact on the livelihood of ordinary citizens and where it is unavoidable, the focus turns to mitigating the negative impact on the affected parties, in line with TCTA`s broad principles namely: awareness; care and respect; Integrity; continual improvement and pro-activeness as well as the above prevailing South Africans regulatory framework.
- 1.5 The rights in land to be acquired for the project (MCWAP-2A) are ownership of land (where permanent large aboveground structures will be constructed such as Vlieëpoort Abstraction Weir, pumping stations and balancing dams) and servitudes (both permanent servitudes, mainly for the conveyance system, and temporary servitudes for construction purposes).

- 1.6 The listed activities below are proceeding after an informal consultation with the affected landowners, tenants, persons or organisations with land user rights and any affected third parties has taken place.

The TCTA Land Acquisition (LA) process is defined in three phases as set out below following environmental authorisation.

2. PRE-CONSTRUCTION PHASE

The pre-construction phase is categorised by four sub-phases.

2.1 Preparatory sub-phase

The listed activities below are proceeding after an informal consultation with the affected landowners as set out in item 1.6 above:

- This sub-phase begins wherein information is obtained to inform the LA strategy and implementation plan to pursue thereof. During the pre-construction phase, all information necessary to execute the acquisition of the properties will be obtained. The information required will include obtaining an outline of the scheme in cadastral format to identify the properties affected, copies of all deeds of transfer, existing servitudes and other information from the Deeds Office and the names and addresses of the impacted landowners. Furthermore, the names of third parties with registered rights over the properties (such as bondholders, lessees/tenants) and the applicable local authorities will be gathered. All this information must be accurate, as it will be vital for the ensuing process; and
- During this sub-phase, the appointment of a valuer will be finalised. A site visit will be arranged for such valuer to get orientated and be able to understand the social environment and context within which the acquisition process need to be executed.

2.2 Valuation sub-phase

During this sub-phase valuation of the affected properties in terms of the principles set out in the Expropriation Act, read together with section 25 of the Constitution, will proceed.

The valuation sub-phase will to a certain extent, overlap with the first (preparatory) and third (consultation) sub-phases. The valuation process will be seen as a valuable opportunity to have meaningful consultations with each affected landowner, not only to attach a monetary value to the impact of the project on the affected property, but also to develop an understanding and provide TCTA with feedback regarding landowners' responses and assertiveness. It will also provide an opportunity to identify discrepancies

in the information provided and be an important opportunity to verify the accuracy of the data.

The valuer will then undertake the valuation in accordance with the prevailing applicable legislation. The legal consideration applied thereon for expropriation is in terms of Section 12(2) of the Expropriation Act and Section 25 of the Constitution.

Once the valuation work is complete, the valuer submit the valuation reports to TCTA for review and consideration. The aforesaid process will have to be completed before the expropriation can take place because it is the intention to make compensation offers to landowners together with the expropriation notices (“expropriation with an offer”).

2.3 Consultative Sub-Phase

This sub-phase is categorized by the following steps:

- Formal consultation will follow in the form of serving PAJA notices to the affected landowners. The notice will contain a clear statement that the TCTA intends to expropriate the property (or the land rights) for purposes of the project and the landowners will be given adequate notice in order to have a reasonable opportunity to make representations to TCTA in that regard. This process will take place immediately after the valuer has commence his/her work. Whereon PAJA notices will be prepared and served to the affected landowners for the making of representations within reasonable time (14 calendar days). This will enable the landowners to make more meaningful representations, should they consider it desirable. TCTA will consider such representations from affected landowners and will then take a final decision whether or not to expropriate.
- In the case of communal land the procedure will be to secure a Land Rights Holders Resolution (LRHR) meeting(s) with the affected communities as required by the Interim Protection of Informal Land Rights Act, 31 of 1996 (IPILRA) to have their consensus in securing land/land rights. It must be note that the State remains the owner of the land and the community enjoys the rights to such land. Therefore, it is imperative to have a government official to observe proceedings thereto.

2.4 Expropriation Sub-Phase

- Upon conclusion of the above consultation sub-phase, i.e. issuing of the PAJA or IPILRA notice, as the case may be, after the decision has been taken to proceed with expropriation;

- The affected landowners will be served with an Expropriation Notice in terms of Section 7 of the Expropriation Act. In the expropriation notice the landowner will be notified of the expropriation, the area affected (shown on an attached diagram) and any necessary additional information. The notice will also contain an offer of compensation based on the abovementioned valuations. The landowner will not be compelled to accept the compensation offer and the notice will advise him/her that he/she may institute a claim for a higher compensation should they wish to do so; and
- In the case of communal land the procedure will be first for the community to reduce to writing a resolution whereupon give effect to TCTA to construct infrastructure subject to the individual affected land user's signing individual. Following the above resolution, TCTA shall endeavor to enter into an agreement with the State to give effect to transfer and registration of land / land rights since the State is the owner of the land.

3. CONSTRUCTION PHASE

This phase basically deals with the management of any related financial loss claims lodged by the affected parties, notification of the Deeds Office in accordance with the Deeds Registry Act about the expropriation having taken place and lastly the notification of the Municipality regarding same, to enable TCTA to start paying for the rates and taxes as ownership of land/land rights changed hand from the date of expropriation as alluded in Section 8(1) of the Expropriation Act.

4. POST-CONSTRUCTION PHASE

Surveying and registration of land and land rights will continue after completion of construction, the as-built infrastructure will be surveyed and thereafter same will be given to the land surveyor to undertake a cadastral survey whereon the Surveyor-General diagrams will be framed and submitted for approval at the Office of the Surveyor-General. Lastly, all permanently acquired land and land rights will be registered at the Deeds Office in favour of Trans-Caledon Tunnel Authority thereafter same be ceded to the National Government of the Republic of South Africa.