

# **THE CLASSIFICATION OF SIGNIFICANT WATER RESOURCES IN THE VAAL WATER MANAGEMENT AREAS**

## **Issues and Responses Report**

*This Issues and Responses Report (IRR) captures the issues raised by stakeholders during the classification study of significant water resources in the Vaal Water Management Areas (WMAs) in order to facilitate an appropriate balance between the use of water resources and the protection thereof. This study has been commissioned by the Department of Water Affairs (DWA).*

*As part of the announcement process, an advertisement was placed in various national newspapers and a Project Steering Committee (PSC) meeting was held on 22 February 2011 in Pretoria. A second PSC meeting was held on 10 November 2011, the third PSC meeting was held on 17 May 2012 and a fourth PSC meeting took place on 4 September 2012.*

*Two stakeholder meetings took place on 23 (Pretoria) and 24 (Kimberley) July 2012 as instructed by Step 6 of the Seven-Step Water Resources Classification System process.*

*All written and oral submissions received from stakeholders have been summarised in this report.*

	COMMENTS, QUESTIONS AND ISSUES	COMMENTATOR(S)	SOURCE(S)	RESPONSE(S)
1	<i>Will water quality also play a role in the classification of water resources?</i>	<i>Ms Marina Kruger (Midvaal Water).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Pieter van Rooyen (WRP - Study Leader) said it definitely plays a role. Recent studies such as the Integrated Water Quality Management Plan Study for the Vaal River System will be integrated into this study. Water quality specialists such as Dr Patsy Scherman are also part of the study team.</i>
2	<i>Will groundwater resources be taken into consideration?</i>	<i>Ms Stephinah Mudau (Chamber of Mines).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Van Rooyen said there are three significant dolomite resources that contribute to base flows in the Vaal WMAs that will be investigated.</i>  <i>They are:</i> <ul style="list-style-type: none"> <li>• <i>Suikerbosrand in the Upper Vaal;</i></li> <li>• <i>Schoonspruit in the Middle Vaal;</i></li> <li>and</li> <li>• <i>The upper Harts River catchment in the Lower Vaal.</i></li> </ul>
3	<i>The DWA has always followed the boundaries of WMAs when doing studies. Groundwater resources, however, do not stay within WMA boundaries and overlap with neighbouring WMAs.</i>	<i>Ms Ndileka Mohapi (DWA).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Van Rooyen said the study team is aware of groundwater resources going across WMA boundaries and this will be taken into consideration during the study.</i>
4	<i>Will acid mine drainage (AMD) be investigated as part of this study?</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Van Rooyen said the consequences of AMD will be reflected in scenarios that will be developed at the end of this study. Various processes such as desalination will be investigated to see how the three Vaal WMAs could be affected.</i>
5	<i>In terms of the Task Team's recommendations to the Inter-ministerial Committee on AMD, neutralisation is recommended as the preferred option for the treatment of AMD and not desalination. This recommendation is anomalous to the recommendations of the Directorate: National Water Resource Planning of the DWA.</i>  <i>Neutralisation will exacerbate the situation within</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Seef Rademeyer (DWA) said the DWA has implemented the Integrated Water Quality Management Strategy for the Vaal River System to improve the water quality. Desalination is the preferred option. A huge effort is needed to get rid of the salts, which is a serious problem in the whole Vaal River System and not just in the mining</i>

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	<p><i>the Vaal River System with its already high salt load. The Directorate: National Water Resource Planning of the DWA found that the desalination of AMD has been identified as the first option to limit the salinity of the Vaal River System.</i></p> <p><i>It was found that:</i></p> <ul style="list-style-type: none"> <li><i>• The additional salinity as a result of AMD creates water security risks.</i></li> <li><i>• In order to comply with the regulatory limit of 600 mg/l sulphates, good quality water has to be released from the Vaal Dam in order to ensure that the water below the Vaal Barrage is fit for use, that is, by means of dilution.</i></li> <li><i>• The projected demand for increased releases from the Vaal Dam of expensive Lesotho water will increase the stress upon the water supply.</i></li> <li><i>• Water supply shortages will be experienced by 2014.</i></li> <li><i>• The additional volume of water that has to be released as a result of the salinity associated with AMD will result in a considerable reduction of water supply to the Upper Vaal so much so that the total capacity of Phase 2 of the Lesotho Highlands Water Project will be cancelled.</i></li> <li><i>• It necessitates that the Tugela supplementary scheme will have to be advanced.</i></li> <li><i>• It will have significant cost implications.</i></li> <li><i>• It will result in the loss of water to the Orange River System and poorer quality water discharges from the Vaal River System to the Orange River system, with associated costs for downstream water users.</i></li> <li><i>• Desalination of AMD has been identified as the first option to limit the salinity of the Vaal River System.</i></li> <li><i>• A total of 275 million litres of mine water will have to be treated. The capital expenditure is anticipated to be R3.4 billion and the operational expenditure will be R6.78 per m3.</i></li> </ul>			<p><i>sector.</i></p>

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6	<i>Will the Modder and the Riet Rivers be part of the study?</i>	<i>Mr Willem Grobler (DWA - Free State).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Van Rooyen said these two rivers will not be studied, because the Riet-Modder catchment falls within the Upper Orange WMA. The outflows of the Riet River, which confluences with the Vaal River just upstream of the Douglas Weir will, however, be included in the study.</i>
7	<i>Why is the area that includes the Vredefort Dome, a World Heritage Site, only a secondary Integrated Unit of Analysis (IUA)?</i>	<i>Dr Jack Armour (Free State Agriculture)</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Van Rooyen said the study is being done on significant water resources and not based on other criteria. Smaller tributaries of significant water resources will not be assessed due to time and budgetary constraints.</i>  <i>However, one of the IUAs does include the Vredefort Dome.</i>
8	<i>How will the study team decide on sub-divisions and what will happen to the smaller areas in the study area.</i>	<i>Ms Mandy Driver (SANBI).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Van Rooyen said the resolution of the availability data (hydrology and detail land use information etc.) is at a large scale and that refining it is outside of the scope of work of this study. He noted that in other catchments in the country, high resolution models (data) have been established; however such studies have not been carried out for the Vaal River System. Smaller scale areas of importance will be dealt with in a qualitative manner. The team will formulate an approach for evaluating the smaller scale catchments.</i>
9	<i>The SANBI has information available in the study area that could be useful to the study team.</i>	<i>Ms Mandy Driver (SANBI).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Ms Delana Louw (Rivers for Africa) said this information will assist the study team.</i>
10	<i>Will the study area be divided into biophysical units?</i>	<i>Mr Sadimo Manamela (DWA)</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Ms Louw said previous reserve studies used resource management units, which included biophysical units. The current study will be much broader.</i>
11	<i>Will the DWA as the licensing authority that</i>	<i>Ms Mariette Liefferink</i>	<i>Meeting 1 of Project</i>	<i>Mr Pienaar Harrison (DWA) said the</i>

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	<i>regulates Water User License Applications (WULA), be guided by Resource Quality Objectives (RQOs), because the Vaal WMAs resource is already overburdened. Will the classification system be used in the licensing process, because the various DWA directorates do not always work together?</i>	<i>(Federation for a Sustainable Environment).</i>	<i>Steering Committee at the DWA on 22 February 2011.</i>	<i>setting of a MC will be one of the instruments available to the DWA in the licensing process. He agreed that the DWA is striving to work in an integrated fashion.</i>
12	<i>Most pollution in the three Vaal WMAs occurs in the Upper Vaal WMA, at the top of the system which does not bode well for the downstream users. Will the setting of Management Classes (MCs) assist the DWA to enforce the 'polluter pays' principle, because the upstream polluters are destroying the economic livelihood of the people downstream.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Pienaar said the water pricing strategy of the DWA has been designed with the 'polluter pays' principle in mind. The big problem in the three Vaal WMAs is that some areas have a 60% unemployment and people, and their municipalities, are too poor for this principle to be enforced.  Ms Shane Naidoo (DWA) said the 'polluter pays' principle is based on someone exceeding the RQOs that are linked to the MC of a specific water resource. The entire Vaal catchment will be looked at to prevent the water users in the upper region taking away from users in the lower areas of the Vaal.</i>
13	<i>The DWA must go down to the level of the municipalities for the classification system to work. The South Africa Local Government Association (SALGA) can be used to communicate with municipalities in the three Vaal WMAs.  He is not interested in the ecological data and status of a water resource. He sees that as a given, because he trusts the data of the DWA. The DWA should rather try and influence the water use of municipalities and educate them as to how their use of water resources affects the rest of the Vaal River System.</i>	<i>Mr Sorrius Manele (Sedibeng District Municipality).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Pienaar said prevention is better than cure and the DWA is working with municipalities with programmes such as water conservation and water demand management to reduce water use. The DWA must, however, also allow water for economic growth.</i>
14	<i>A structure will be needed to manage the different MCs and to ensure people comply with the set classes.</i>	<i>Mr Sorrius Manele (Sedibeng District Municipality).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Ms Naidoo indicated that a management plan will be developed that supports the achievement or maintenance of the management class</i>

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				<i>which is intended to come into effect once it has been set by the Minister. The MC can be reviewed within an appropriate review period.</i>
15	<i>There are absent municipalities who should have attended this meeting. Voluntary structures such as this PSC should actually be made compulsory by the National Water Act.</i>	<i>Mr Sorrius Manele (Sedibeng District Municipality).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Pienaar said the National Water Act is currently being reviewed and maybe the review team should be looking at the role of a compulsory PSC in all DWA projects and studies.</i>
16	<i>The classification of water resources is very complex and it remains largely untested, because it is very new in South Africa. The business sector wants to see a robust and defensible classification system.</i>	<i>Mr Martin Ginster (Sasol).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Pienaar said the DWA will try and simplify the classification process in future.</i>
17	<i>He welcomed this study. He said a clear distinction must be made between the role of the PSC, which guides the process – and that of a stakeholder representing a specific sector. He said there is a need for a formal stakeholder process and something like the Issues and Responses Report can then be used as a register of comments to assist the process.</i>	<i>Mr Martin Ginster (Sasol).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>The role of the PSC was presented at the first PSC meeting and the Issues and Response Register is being captured on as an ongoing process.</i>
18	<i>Do we understand the long-term implications (20 to 30 years from now) of the classification process? A specific class will determine what will happen in future with a specific water resource. How easy will it be to change the MC of a water resource? The classification process should be dynamic and not be bound by a set of MCs.</i>	<i>Mr Marc de Fontaine (Rand Water).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Pienaar said the DWA will continually be looking at improving the classification process. The review period of 60 days as critical for stakeholders to voice their concerns regarding a specific decision made by the Minister.</i>
19	<i>How will pollution be dealt with in a specific MC?</i>	<i>Ms Stephinah Mudau (Chamber of Mines).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Pienaar explained the management plan for a specific water resource will have guidelines to prevent pollution.</i>
20	<i>How often will a MC be reviewed.</i>	<i>Ms Mandy Driver (SANBI).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Ms Naidoo said it will be written into the management plan for a specific MC and should be reviewed every four to five years.</i>
21	<i>Will a MC also need an environmental impact assessment (EIA)?</i>	<i>Mr Sorrius Manele (Sedibeng District Municipality).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>No, but any future development will, as per environmental legislation, need an</i>

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		<i>Municipality).</i>	<i>the DWA on 22 February 2011.</i>	<i>EIA. Mr Pienaar said Government must be careful of a cumbersome decision-making process and the classification process will be done without the need to follow it up with an EIA. The various processes should become more streamlined and one process should inform another.</i>
22	<i>We have formulated scenarios that could be of use to the study team.</i>	<i>Dr Armour (Free State Agriculture).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>That information will be used incorporated in the process.</i>
23	<i>What is the DWA is currently doing in the Upper Vaal WMA, because no study has yet been done to see if there is enough water in that area.</i>	<i>Mr Jan Potgieter (Department of Agriculture, Forestry and Fisheries).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<p><i>Mr Rademeyer said the DWA has an integrated water resource strategy in place for the whole Vaal River System with a Steering Committee to oversee it. This strategy is currently being implemented and will provide answers to many questions regarding water use in the Vaal River System.</i></p> <p><i>There has been an irrigation strategy since the 1970's for the Upper Vaal WMA. A cap was placed on irrigation water use for industry and urban areas are increasing and supported by expensive transfers. A large quantity of water is, however, being used unlawfully for irrigation. In order to ensure enough water for lawful users, the unlawful use has to be removed and it is vital that 15% of water in the urban area has to be saved through water conservation and water demand management.</i></p> <p><i>Ms Mohapi said due to this unlawful use, some of the water users downstream are not receiving the water they are entitled to. There is not an abundance of water in the three Vaal</i></p>

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				WMAs.
24	<i>A verification and validation process is being undertaken to determine the exact water use in the Vaal River System. It has already been finalised in the Upper Vaal WMA and it proved that some irrigation farmers are using water unlawfully. The study is currently focusing on the Middle and Lower Vaal WMAs.</i>	<i>Mr Seef Rademeyer (DWA).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>The information will be needed at the correct milestone/s within the classification process.</i>
25	<i>Is AMD seen as a resource or a liability with regards to South Africa's water resources?</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Rademeyer said it is seen as a resource in all planning scenarios of the DWA. The dilution of the water in the Vaal River is not seen as a long-term solution by the DWA who is looking at a water re-use strategy that is much more sustainable.</i>
26	<i>Who will carry the cost of cleaning up the AMD and will the 'polluter pays' principle be used.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Rademeyer said a governmental committee has done a submission to the Cabinet with recommendations regarding AMD.</i>
27	<i>Non-Governmental Organisations (NGOs) make significant financial sacrifices to attend meetings such as this PSC, because no compensation is paid out for time, travel or accommodation.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 1 of Project Steering Committee at the DWA on 22 February 2011.</i>	<i>Mr Pienaar thanked the NGOs for their contributions and said their inputs are valued by the DWA.</i>
28	<i>How are Management Classes (MCs) going to be determined? How will the water use authorisation process be incorporated? Will new and future developments be taken into account?</i>	<i>Ms Stephinah Mudau, Chamber of Mines.</i>	<i>Meeting between the DWA and the Chamber of Mines on 7 April 2011.</i>	<i>A Water Quality Strategy is in place and the MCs will inform that strategy. Source Directed Controls (SDC) will inform users of how to dispose of discharges and what the standards or conditions of these discharges will be. Future development will be taken into account, because a MC cannot be reviewed constantly. It will be reviewed every 4 to 5 years.</i>
29	<i>Will a MC take into account what was previously decided regarding water resources as the control scheme at the Witbank Dam?</i>	<i>Mr Lucas Nengovhela, Optimum Coal.</i>	<i>Meeting between the DWA and the Chamber of Mines on 7 April 2011.</i>	<i>Yes, this is a key aspect which will be taken into account.</i>
30	<i>When is the project ending? Will efforts from other Departments such as the Mineral Resources be incorporated in the classification process? What is</i>	<i>Mr Cecil Khoza, Harmony Gold.</i>	<i>Meeting between the DWA and the Chamber of Mines on</i>	<i>The project will end late in 2012. The Department will review a MC after 4 to 5 years. In the National Water</i>

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	<i>the goal of the classification?</i>		<i>7 April 2011.</i>	<i>Resources Strategy there will be a reference to other strategies. The objectives of other Departments need to talk to the DWA objectives, especially from a biodiversity point of view.</i>
31	<i>Wetlands and Pans – What will happen to water use licences applied for before classification?</i>	<i>Ms Carol Dixon, Anglo American.</i>	<i>Meeting between the DWA and the Chamber of Mines on 7 April 2011.</i>	<i>The Reserve requirements are looked at for the area applied for in order to protect the Reserve. So, ecological requirements will be met, but cumulated impacts will be looked at by the MC.</i>
32	<i>There should be a balance between protection of the environment and socio-economic elements. What will happen to companies without a water use license?</i>	<i>Ms Melani Naidoo-Vermaak, Harmony Gold.</i>	<i>Meeting between the DWA and the Chamber of Mines on 7 April 2011.</i>	<i>There will be a phased process to clear up the backlog of license applications.</i>
33	<i>What do you do when stakeholders disagree on the specific MC for a water resource?</i>	<i>Mr Reginald Mabalane, Chamber of Mines.</i>	<i>Meeting between the DWA and the Chamber of Mines on 7 April 2011.</i>	<i>The best option is to make stakeholders understand the process and the implications of each class.</i>
34	<i>Is there an opportunity for the Chamber of Mines to understand the baseline of the study?</i>	<i>Mr Gavin Anderson, De Beers.</i>	<i>Meeting between the DWA and the Chamber of Mines on 7 April 2011.</i>	<i>The Inception Report will be in place for public use to understand the baseline of the study.</i>
35	<i>Which water quality data are you going to use in this classification project?</i>	<i>Mr Simon Mporetji, Rand Water</i>	<i>Waterval Forum meeting in Secunda on 19 May 2011.</i>	<i>The recently completed Reserve study had a water quality component that will be used as well as a wide variety of studies already completed on the three Vaal WMAs.</i>
36	<i>When was the project started?</i>	<i>Ms Nicole Houghton, Harmony EGM.</i>	<i>Waterval Forum meeting in Secunda on 19 May 2011.</i>	<i>The project started in October 2010.</i>
37	<i>When is the next PSC meeting?</i>	<i>Ms Jackie Jay, Water Resource Planning, DWA.</i>	<i>Waterval Forum meeting in Secunda on 19 May 2011.</i>	<i>The next PSC meeting will be around October 2011.</i>
38	<i>Where will we get classification information?</i>	<i>Mr Jaco Linde, Sasol, Synfuels.</i>	<i>Waterval Forum meeting in Secunda on 19 May 2011.</i>	<i>Classification information is available on the DWA website – <a href="http://www.dwa.gov.za">www.dwa.gov.za</a></i>

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39	<i>Who decided the proposed IUAs at the Upper Harts, Middle Harts, Lower Harts and Dry Harts rivers without consulting the farmers?</i>	<i>Mr Piet Theron Farmer's Union.</i>	<i>Schoon/Koekemoer-spruit CMF meeting on 27 June 2011.</i>	<i>The IUAs were decided by team of specialists guided by the WRCS guideline wherein the current socio-economic status of the catchment is described.</i>
40	<i>When was the first newspaper advert published regarding this project?</i>	<i>Mr Andrew Barker, Development consultant.</i>	<i>Klip River (Upper Vaal WMA) Forum meeting, ERWAT offices on 02 August 2011.</i>	<i>During March 2011.</i>
41	<i>Why are we hearing about classification for the first time now and why was it not discussed before?</i>	<i>Mr Andrew Barker, Development consultant.</i>	<i>Klip River (Upper Vaal WMA) Forum meeting, ERWAT offices on 02 August 2011.</i>	<i>It was announced at the last Forum meeting that the DWA: Classification Directorate will make a presentation on 2 August 2011. A presentation was also done at the Watervaal Forum on the 19 May 2011.</i>
42	<i>How are we expected to participate, as a forum or on a personal capacity?</i>	<i>Mr Andrew Barker, Development consultant.</i>	<i>Klip River (Upper Vaal WMA) Forum meeting, ERWAT offices on 02 August 2011.</i>	<i>Both approaches would be welcomed.</i>
43	<i>In my area the newspaper adverts do not reach all the intended stakeholders efficiently. How about Forum website and e-mails.</i>	<i>Mr Andrew Barker, Development consultant.</i>	<i>Klip River (Upper Vaal WMA) Forum meeting, ERWAT offices on 02 August 2011.</i>	<i>Forum representatives who are in the database and those attending meetings will receive email invitations.</i>
44	<i>Who are the stakeholders in this project? Is it only municipalities?</i>	<i>Mr Oscar Sabelo, Emfuleni Local Municipality.</i>	<i>Stakeholder Consultation Workshop on 16 August 2011 in Vryburg.</i>	<i>No, the Project Steering Committee is comprised of stakeholders from National, provincial, local government, community based organization, NGOs and private sectors</i>
45	<i>Which process was followed to identify</i>	<i>Mr Oscar Sabelo, Emfuleni Local</i>	<i>Stakeholder Consultation Workshop on 16</i>	<i>The stakeholders were identified by DWA in collaboration with PSP and stakeholders within study area. The</i>

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	stakeholders?	Municipality.	August 2011 in Vryburg.	project was announced in local paper wherein Interested and Affected parties were invited to register their contacts.
46	When is the project ending?	Mr Daster Wiseman Sibiya, Rand Water.	Stakeholder Consultation Workshop on 16 August 2011 in Vryburg.	September 2012
47	What is going to happen after the project is complete?	Mr Daxter Nhubunga, Rand Water.	Stakeholder Consultation Workshop on 16 August 2011 in Vryburg.	The Management Class will be binding in all institutions when excising power under National Water Act. There will be monitoring programme in place, for example, there is another project after classification project, which will set Resource Quality Objectives in particular catchment/WMA. The project will inform the determination of the allocatable portion of a water resource for use.
48	When this project ends in September 2012, what are you going to do about previous and/or current projects in a particular Water Management Area?	Mr John Fourie, Ezulwini Mine.	Stakeholder Consultation Workshop on 16 August 2011 in Vryburg.	The department is not going to redo any project happened in the absence of classification regulations. For example, before promulgation of regulations determination of Reserve was preliminary but after the regulation Reserve will be superseded by classification processes. As mentioned during presentation, classification process is not running in isolation it falls within the broader IWRM process.
49	At what stage of the project will you allow new stakeholders?	Mr Abe Abrahams, DWA.	Stakeholder Consultation Workshop on 16 August 2011 in	We update our stakeholder database regularly and if there are stakeholder who are interested in the project; I can send them registration form.

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			Vryburg.	
50	<i>The Molopo river is dry throughout the year, how are you going to implement a classification?</i>	<i>Mr V Maurice, DAFF</i>	<i>Stakeholder Consultation Workshop on 16 August 2011 in Vryburg.</i>	<i>The Issue was raised in one of our meeting and the response was that even if the river is not flowing, it is still a water course, which fulfils other functions.</i>
51	<i>Civil society must be given the opportunity to collaborate in the study and be part of the process from the beginning. Civil society must also have access to all information from a very early stage in the process and not simply shown the final result. Ms Liefferink referred to the Water Research Commission guidelines for participation in Integrated Water Resource Management and pointed out that the classification process ought to be more than a consultative process. It is intended to be at the level of collaboration. Stakeholders need access to the financial and predictive models and the information that were used to populate them. The setting of the water quality requirements for the Vaal River (including the Olifants River) is going to have impacts on the receiving environment, economy of the catchment and human activity for decades to come. This access includes the sources of the information and key assumptions, the reliability of the information, degree of confidence in the assumptions and information, time frames used as well as discount rates, inflation costs, depreciation costs, sensitivity analysis and details of the different scenarios.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Ms Naidoo said this meeting is the very first step in discussing the various scenarios. No decision has yet been taken and all will have an opportunity to contribute. The reason why we have this meeting today is to consult with stakeholders.</i>
52	<i>Is the DWA currently releasing water from Sterkfontein to Vaal Dam?</i>	<i>Mr Martin Ginster (Sasol)</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Mr Pieter van Rooyen said his presentation shows the maximum release scenario for the Vaal River System (VRS) to ensure that water is not lost in the Tugela. The VRS has not been in a situation like this for five years.</i>

	<b>COMMENTS, QUESTIONS AND ISSUES</b>	<b>COMMENTATOR(S)</b>	<b>SOURCE(S)</b>	<b>RESPONSE(S)</b>
53	<i>Mr Ginster commented that the Liebenbergsvlei is under constant pressure due to the Lesotho Highlands Water Project (LHWP) transfers.</i>	<i>Mr Martin Ginster (Sasol)</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Liebenbergsvlei is already considered as part of the significant water resource network, and will be assessed as such.</i>
54	<i>Does the water sent from the Sterkfontein Dam to Bloemhof Dam go via the Vaal Dam as well?</i>	<i>Mr Jan Potgieter (Department of Agriculture, Forestry and Fisheries).</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Ms Susan Swart (Study Team) said there is no other route and water releases impact on the whole main stem of the Vaal River downstream of Vaal Dam.</i>
55	<i>There is a large geographical gap between Ecological Water Requirement (EWR) site 4 and 5. Is it not possible to add more EWR sites?</i>	<i>Mr Martin Ginster (Sasol)</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Mr Pieter van Rooyen said there are also desktop nodes in such areas to assist the study.</i>
56	<i>Is the Taung Dam part of the study and can something be done to the flooding in that area.</i>	<i>Mr Benedict Itholeng (Gauteng Department of Agriculture and Rural Development)</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Mr Pieter van Rooyen said it forms part of the study, but this study does not address flooding, because it is a short-term event. The Taung Dam cannot control the flooding, but people developing below the flood line are also part of the problem.</i>
57	<i>Does the study look at wetlands as well, because the VRS is losing many wetlands to development?</i>	<i>Mr Benedict Itholeng (Gauteng Department of Agriculture and Rural Development)</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Mr Pieter van Rooyen said all water resources are being investigated, including wetlands. A holistic approach is followed. So far, the study has picked up that some water resources have been severely impacted such as the Mooi River tributary.</i>
58	<i>Does the socio-economic study look at the cost benefit analysis during the lifetime of the operations or activity or does it look at the lifetime of the impacts. Negative externalities (i.e. deflected costs that are imposed on stakeholders other than the company itself) associated with mining, e.g. are often delayed, and accumulate for decades after mineral extraction. By the time environmental and socioeconomic consequences become noticeable, the mines have typically closed or become insolvent and thus cannot be compelled anymore to contribute to remediation, either financially or through other actions.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Mr Dawie Mullins (Study Team) said he agrees that the lifetime of impacts must be included in the cost benefit analysis, because in most case externalities are ignored. The study has, as far as what was possible, included externalities. It is, however, sometimes difficult to do that. Economic studies cannot just look at the financial side of projects.</i>

	<b>COMMENTS, QUESTIONS AND ISSUES</b>	<b>COMMENTATOR(S)</b>	<b>SOURCE(S)</b>	<b>RESPONSE(S)</b>
59	<i>The economic figure for the irrigation sector is very low, because the Vaal River System has the biggest irrigation area in the country.</i>	<i>Mr Jan Potgieter (Department of Agriculture, Forestry and Fisheries).</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Mr Mullins said it does seem very low, but he is prepared to discuss it with Mr Potgieter outside this meeting. Agriculture needs large volumes of water to produce food. We will look at our data again. Normally we do not calculate the impact of dry land, but in this study it has been included in the economic assessment.</i>
60	<i>Has climate change been taken into consideration. Changes in water quantity and quality due to climate change are expected to affect water and food availability, stability, access and utilisation. The quality and quantity of groundwater resources will be exacerbated by climate change.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Ms Tovho Nyamande (DWA) said it was not taken into account for this study. She emphasised that the first step is to define the required protection and then monitor long term implications such as climate change.</i>
61	<i>Have the lifelong impacts of gold mines in the VRS been taken into consideration for the socio-economic study with particular reference to Acid Mine Drainage (AMD).</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Mr Pieter van Rooyen said AMD is definitely part of the operating scenarios and has been identified as a management option. Mr Johan van Rooyen (DWA) said the AMD problem is currently being addressed by the DWA through another forum. This study must classify water resources and not make judgements about the future of mining. Mitigation measures must be investigated to prevent problems downstream.</i>
62	<i>According the Department of Mineral Resources' Draft Regional Mine Closure Strategy for the East Rand Goldfield (2008), the Marievale Bird Sanctuary in the Blesbokspruit is under serious threat due to AMD from the gold mines in the area.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Ms Louw said the Blesbokspruit will be in the lowest ecological category due to all the impacts, but the negative impacts of AMD on the Maryvale Bird Sanctuary will be taken into account.</i>
63	<i>Were data from the Water Research Commission and the Department of Mineral Resources have been used in this study.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Ms Louw said all information that was readily available has been used in this study.</i>
64	<i>The biggest impact on the VRS is infrastructural problems at waste water treatment plants and raw sewage that is pumped into the rivers.</i>	<i>Mr Benedict Itholeng (Gauteng Department of Agriculture and</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10</i>	<i>DWA is liaising with the municipalities on their mandate in relation to treatment plants discharges through</i>

	COMMENTS, QUESTIONS AND ISSUES	COMMENTATOR(S)	SOURCE(S)	RESPONSE(S)
		<i>Rural Development)</i>	<i>November 2011.</i>	<i>Blue and Green Drop.</i>
65	<i>Do Goods and Services place more emphasis on livelihoods and if the ecosystem was investigated as well.</i>	<i>Mr John Dini (SANBI)</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Ms Louw said although the emphasis was on livelihoods, all aspects were investigated.</i>
66	<i>Were any toxicity studies undertaken in order to quantify the chronic effects such as mutagenicity, teratogenicity and estrogenicity.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Dr Patsy Scherman (Study team) said the standard toxicity studies were done during the reserve determination study and this information was used for the classification study.</i>
67	<i>Do sediment loads have an influence on this study and the VRS?</i>	<i>Mr Jan Potgieter (Department of Agriculture, Forestry and Fisheries).</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Ms Louw said too much sediment, normally the result of over grazing, is difficult to control, but has been investigated. Dr Scherman said it also played in role in the water quality studies.</i>
68	<i>Have the impacts of the high sulphate loads of untreated AMD and of neutralised AMD upon the VRS been assessed. The impacts of the proposed treatment of AMD by means of neutralisation, and not desalination, must be taken into account in the various scenarios and strategies in the VRS. The sulphate concentrations of AMD after neutralisation will be reduced from 4 700mg/l (West Rand Basin) to 3 000mg/l. The World Health Organisations standard for sulphates in drinking water is 200mg/l; the DWA's standard for sulphates in drinking water is 600mg/l; for irrigation the standard is 150mg/l; for watering of cattle, the standard is 1 000mg/l, and for the environment the standard is 100mg/l. In substantiation, reference is made to the TCTA's document entitled: "The Impact of Acid Mine Drainage in the Witwatersrand on the Mining Industry in Mpumalanga, Free State, Limpopo, North West and Northern Cape Provinces."</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment).</i>		<i>Mr Pieter van Rooyen said feasibility studies are currently being done to find solutions to the AMD problem. The current management strategy indicates desalination will be in place from 2014 and neutralisation will be used until desalination becomes an option as the long term solution. The feasibility study will identify the most appropriate long term solutions. Ms Naidoo said the various studies in the VRS work closely together.</i>
69	<i>The study places a lot of emphasis on the ecology. The study should also take the needs of the downstream users into consideration, because their water use must also be protected. The Resource</i>	<i>Mr Jurgo van Wyk (DWA)</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Dr Scherman said the next step in the classification process will take this into consideration.</i>

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	<i>Water Quality Objectives defined in the Integrated Water Quality Management Plan should also be presented for the nodes where applicable.</i>			
70	<i>How can PSC members access the studies and reports used by the study team?</i>	<i>Mr Benedict Itholeng (Gauteng Department of Agriculture and Rural Development)</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Ms Naidoo said he must send a request through to Mr Andre Joubert (Study team) or Ms Nyamande. Most of the information has been summarised in the Status Quo Report and it also lists all the resources used for this study.</i>
71	<i>The Olifants WMA needs an additional 159 million m<sup>3</sup> of water per year just for its current needs. Augmentation from the VRS is one of the options mentioned. How do the various water systems in South Africa interact with each other and how can this be taken forward?</i>	<i>Mr John Dini (SANBI)</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>Mr Seef Rademeyer (DWA) said there is a close link between the two systems. Augmentation is only an option in the long term. Short term solutions such as water conservation and demand management must be used in the Olifants in the short term to make extra water available.</i>
72	<i>The way forward revolves around the finalisation of the scenarios. Three types of scenarios will be considered:</i> <ul style="list-style-type: none"> <li><i>• ESBC scenario;</i></li> <li><i>• Water planning needs scenario; and</i></li> <li><i>• RDM scenario (based on protection).</i></li> </ul>	<i>Ms Tovho Nyamande (DWA)</i>	<i>Meeting 2 of Project Steering Committee at the DWA on 10 November 2011.</i>	<i>The scenario implications will be evaluated and discussed at the next PSC meeting.</i>
73	<i>Is there a public participation process being followed in this study.</i>	<i>Mr Matome Makwela (Chamber of Mines)</i>	<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<i>Ms Nyamande said this is indeed being done. All catchment management forums in the Vaal River System have been visited to do presentations. Newsletters have also been sent out to stakeholders on a large database. This PSC meeting is also part of the public participation process.</i>  <i>Ms Mariette Liefferink (Federation for a Sustainable Environment) said care should be taken when talking to local communities, because sometimes the presentations are too technical for</i>

	COMMENTS, QUESTIONS AND ISSUES	COMMENTATOR(S)	SOURCE(S)	RESPONSE(S)
				people to understand.
74	<i>Will additional energy be needed for Scenario E to transfer water from Woodstock Dam to the Sterkfontein Dam?</i>	<i>Mr Martin Ginster (Sasol)</i>	<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<p><i>Mr Van Rooyen said no additional energy will be needed. The same quantity of water will be pumped, the flow will just be managed differently to simulate a more seasonal flow distribution. The current rule is that if the Vaal Dam is low or Sterkfontein is too full, then water will be released. The downside of this scenario is that around 45 million cubic metres per annum of the firm water supply will be reduced due to spillage and evaporation losses. Due to this reduction more water need to be transferred into the Vaal River System (VRS) which will result in additional costs, because augmentation will have to take place earlier than planned which will result in additional capital costs. Mr William Mullins (Study Team) said it will either be an additional cost for augmentation or a reduction in water use equivalent to 16 000 hectares under irrigation.</i></p>
75	<i>Will the reduction mentioned in Point 74 have an impact on the irrigation farmers in the Vaalharts.</i>	<i>Ms Sanet de Klerk (Obaro)</i>	<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<p><i>Mr Van Rooyen said there will not be an impact on the irrigation sector alone. Should there be a reduction in water then the load will be equally carried by all users and not just the Vaalharts farmers. The economy of the VRS is the heart of the South African economy and it must grow. The principle is that the system will always be augmented. The economic team will be investigating the cost of bringing augmentation forward.</i></p>
76	<i>Does the study have sufficient data on irrigation in</i>	<i>Ms Sanet de Klerk</i>	<i>Meeting 3 of the</i>	<i>Mr Van Rooyen said the study is using</i>

	COMMENTS, QUESTIONS AND ISSUES	COMMENTATOR(S)	SOURCE(S)	RESPONSE(S)
	<i>the VRS?</i>	<i>(Obaro)</i>	<i>Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<i>the data sourced by Schoeman and Vennote during the validation and verification process which has the most reliable figure of hectares under irrigation and associated water use in the whole VRS.</i>
77	<i>The validation and verification data are dated 2009. Could the situation in the VRS have deteriorated since then?</i>	<i>Mr Nic Opperman (Agri SA)</i>	<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<i>Mr Van Rooyen said there could have been both positive and negative changes since 2009. Ms Naidoo said the Schoeman and Vennote study results will be incorporated into the Reconciliation Strategy study once it has been completed.</i>
78	<i>The Klip River in Gauteng could have been in a far better state had the relevant national departments and local municipalities worked together to avoid over-exploiting this water source.</i>	<i>Mr Benedict Itholeng (GDARD)</i>	<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<i>Ms Naidoo said municipalities will have to play a key role in managing MCs. There must be cooperation between national and local government to ensure efficient management of our water resources. The resource quality objectives (RQOs) will define in what state a specific water resource must be in and if someone contravenes this, then they will be prosecuted.  The municipalities must abide by the MCs and cannot issue building approvals that will contravene a MC.</i>
79	<i>Will RQOs be set for a specific resource?</i>	<i>Ms Calvinia Shomolekae (DWA)</i>	<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<i>Mr Sadimo Manamela (DWA) said each significant water resource will have its own set of RQOs.</i>
80	<i>What will the relationship be between the provincial conservation plans and RQOs?</i>	<i>Mr Benedict Itholeng (GDARD)</i>	<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<i>Ms Naidoo said the RQOs will feed into the conservation plans of the provinces.</i>

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81	<i>How long it will take for a MC to be implemented.</i>	<i>Ms Calvinia Shomolekae (DWA)</i>	<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<i>Ms Naidoo said the Minister will issue a date of implementation but the MC will also need a management plan or a catchment management strategy for implementation thereof.</i>
82	<i>Mr Joubert said public meetings to fulfil Step 6 of the WRCS process will be held in Pretoria (23 July 2012) and in Kimberley (24 July 2012). Mr Joubert said information will be sent to all municipalities and their libraries in the Vaal area. Ideally meetings should have been held at most towns in the study area but it will not be possible due to budgetary constraints.</i>		<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<i>Mr Ginster suggested care should be taken to develop presentations and documentation so that people will be able to understand the study, but the scientific side of the study should also be explained and not ignored.</i>  <i>Ms Naidoo said they will also talk to the DWA's Chief Directorate Communication Services and Stakeholder Engagement colleagues for advice.</i>  <i>Ms Liefferink said she is concerned that there are only two meetings. The poorer communities which are the most vulnerable will be ignored. How will they be able to attend? The DWA is mandated to disseminate information to all people. It is not the job of civil society to distribute information on behalf of government.</i>
83	<i>Can the comments emailed by her colleague Dr Koos Pretorius to Mr Joubert regarding the Olifants Study be added to this set of minutes?</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17 May 2012</i>	<i>Ms Naidoo and Ms Nyamande said this will not be a problem but the information will first be studied to see if it reflects what was discussed here today.</i> <i>Ms Joubert asked Ms Liefferink to edit the comments to reflect the Vaal study, because they are very specific to the Olifants study before emailing it to him.</i>
84	<i>Dr Martine Visser on behalf of the FSE would like to review the socio-economic study.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Meeting 3 of the Project Steering Committee held at the DWA in Pretoria on 17</i>	<i>Ms Naidoo said Dr Visser can contact the study team for the relevant information.</i>

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			May 2012	
85	<i>How does the study define 'sustainable'? Does this definition look at the three pillars – environment, economic and social?</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Ms Nyamande explained that the study strives to strike a balance between these three pillars without giving preference to one of the three.</i>
86	<i>Why is the National Nuclear regulator not on the stakeholder database?</i>	<i>Ms Keamogetse Mampe (National Nuclear Regulator)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Ms Ndileka Mohapi (DWA) said some organisations could have been left out of the database. She asked all present to send the names of organisations or persons who should be added to the database for this study.</i>
87	<i>Eskom has water data that could be of value to the study team.</i>	<i>Mr Minolen Reddy (Eskom)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Ms Nyamande thanked him and said Eskom has been part of this process since the first PSC meeting.</i>
88	<i>How were stakeholders informed of this study?</i>	<i>Mr Minolen Reddy (Eskom)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Ms Nyamande explained that the PSC members report back to their organisations after meetings and newsletters have been sent out to stakeholders in the study area. Additional to that the DWA has a stakeholder engagement plan to reach all stakeholders in communities around the river.</i>
89	<i>Does the integrated approach include all water resources? Does this include groundwater and has it been included in all your modelling?</i>	<i>Mr Minolen Reddy (Eskom)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Yes, all significant water resources form part of the study and groundwater has been included.</i>
90	<i>What data were used for the water resource planning model? Is this data based on reality or are assumptions being made?</i>	<i>Ms Ann Naidoo (Sasol)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Mr Van Rooyen said the model uses hydrological databases that were developed through hydrological studies by the DWA. The hydrology and models are derived through calibration against actual recorded data to ensure reliability. Actual water use data from users such as Rand Water, Sasol and Eskom are used in the planning scenarios. A model is then built based on reality, but a model is not always a perfect reflection of the real world and</i>

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				<i>need to be continuously revised and updated. This water resource planning model has been used for years by the DWA and is updated regularly with the latest available data.</i>
91	<i>Have heavy metals other than uranium been taken into consideration during this study? Based on the findings of inter alia the WRC Report 1214/01/06 the heavy metals are adsorbed or chemisorbed to a number of sediment phases, all of which can be re-released by plausible geochemical processes. The Report concluded that while current conditions were relatively stable, albeit not totally effective in removing metals from the water, the unpredictability of the future required management plans that would either maintain conditions as they were ad infinitum or would have to contemplate rehabilitation of the contaminated areas within the environment.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Dr Scherman explained that this study used data obtained during the Vaal River System Reserve Study where a toxicology testing was done. A whole range of heavy metals other than uranium were discovered in the sediment. Under various pH levels these can be released from the sediment.</i>
92	<i>There are more than 1 000 sinkholes within the West and Far West Rand, some of which were historically filled with uraniferous tailings. The gold mining industry is in decline. When mining ceases, pre-mining flow patterns and volumes of water will be restored which will result in the mobilisation of the uraniferous tailings. Has this impact upon the water quality been taken into consideration? Tailings storage facilities contain 6 billion tons of iron pyrite tailings. Since TSFs cannot be maintained in an oxygen free or anaerobic environment, AMD will be generated for centuries.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Dr Scherman said the information used for the water quality assessment comes from various DWA studies done during the last few years. The comprehensive data used by the water quality planning directorate of the DWA is the most recent data available and includes all factors that can impact on water quality.</i>
93	<i>Was the unlawful water use by mining companies taken into consideration?</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Ms Mohapi said the DWA has other processes looking at matters such as unlawful water use. It falls outside this study but that does not mean it is ignored and data from other studies are included in the classification process.</i>
94	<i>Did the study investigate the effects of acid mine drainage (AMD).</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July</i>	<i>Dr Scherman explained that the objectives of classification are broad. Other studies such as the reconciliation</i>

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		<i>Environment)</i>	2012	<i>strategy investigated AMD. In this classification study AMD was investigated as part of the water quality studies. The DWA currently has specific studies focusing solely on AMD.</i>
95	<i>Were water quality of both ground and surface water investigated?</i>	<i>Mr Minolen Reddy (Eskom)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Dr Sherman explained the importance of both surface water and groundwater in the Vaal WMAs and that both were included in this study. Mr Van Rooyen said Rand Water is an important user of groundwater through boreholes. The big dolomite areas in the Vaal River System such as the Schoonspruit Eye were investigated during this study. General modelling that included all significant water resources for the whole Vaal River System was done.</i>
96	<i>Was a reference site used for the water quality studies?</i>	<i>Ms Ann Naidoo (Sasol)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Dr Scherman said it is almost impossible to find a reference site for water quality on the Vaal River System. A reference site must be set up where a river is still in its natural state, which is not possible for this system. The Reserve Study used an un-impacted site high up in the Upper Vaal as a reference site.</i>
97	<i>What nutrient exceedances are referred to in the presentation? Does it exceed a legal allowable level?</i>	<i>Ms Ann Naidoo (Sasol)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Dr Scherman said these nutrient exceedances refer to the difference between the points used by the Integrated Water Quality Management Plan compared with the EWR sites of this Classification study.</i>
98	<i>Ms Liefferink commented that the Marievale bird sanctuary has lost its RAMSAR status. This is not stated in the presentation.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Ms Louw said the Blesbokspruit area was investigated, which includes this sanctuary.</i>
99	<i>Why is the ecological category (EC) of a water resource only moved from a D to a C or a C to a B.</i>	<i>Ms Mariette Liefferink (Federation for a</i>	<i>Stakeholder meeting held at the DWA in</i>	<i>Ms Louw said it will not be practical by setting an unreachable EC. An EC</i>

	<b>COMMENTS, QUESTIONS AND ISSUES</b>	<b>COMMENTATOR(S)</b>	<b>SOURCE(S)</b>	<b>RESPONSE(S)</b>
	<i>Why can it not be moved from a D to a B or a C to an A?</i>	<i>Sustainable Environment)</i>	<i>Pretoria on 23 July 2012</i>	<i>should be obtainable and realistic and not impossible.</i>
100	<i>Why are some of the scenarios even considered when it can be seen that it will be impossible to achieve.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Ms Louw said all scenarios had to be investigated to if they are practical or not.</i>
101	<i>Why is there such a focus on rivers with an EC below a D.</i>	<i>Ms Marina Kruger (Midvaal Water Company)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Ms Louw explained that significant water resources under an EC D must be improved, because below a D means it is not sustainable and needs a major improvement.</i>
102	<i>The mining contribution to the GDP is not the true costs, because true costs will only manifest after mine closure.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Mr Van Rooyen said the study assume mitigation activities will also contribute to GDP, because mitigation is also an economic activity. Ms Shane Naidoo said the GDP data used by the DWA and for this study is sourced from the South African Revenue Service.</i>
103	<i>Scenario B looks the best option. When will Phase 2 of the Lesotho Highlands Water Project (LHWP) be completed.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Mr Van Rooyen said the target date is 2020.</i>
104	<i>Will there be sufficient water in the VRS to dilute AMD before Phase 2 becomes operational. Will there not be severe water restrictions in the Upper Vaal or a reduction of water quality in the Lower Vaal?</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Mr Van Rooyen explained that a feasibility study is currently being done and that study are considering options, timelines and implications including risk of restrictions.  Mr Peter Pike (DWA) added that the LHWP can only add water to the VRS by 2020 and other intervention options will have to be used to stretch the VRS water resources until 2020.  The management of all the water resources in SA allows for restrictions due to drought. Should drought happen, then there will be certain restrictions. This has been planned.</i>
105	<i>The feasibility study investigating the treatment of</i>	<i>Ms Mariette Liefferink</i>	<i>Stakeholder meeting</i>	<i>Mr Van Rooyen said the System is in a</i>

	COMMENTS, QUESTIONS AND ISSUES	COMMENTATOR(S)	SOURCE(S)	RESPONSE(S)
	<i>AMD will only be finished by February 2013. Then funding will first have to be sourced before construction can begin on the infrastructure to clean up AMD which could take until 2019. From 2014 there could be too little water for dilution in the VRS.</i>	<i>(Federation for a Sustainable Environment)</i>	<i>held at the DWA in Pretoria on 23 July 2012</i>	<i>fortunate position that the Bloemhof Dam is not full and the level is actually dropping. This means losses (spills) from the system will be low when releases are made for dilution over the short term from Vaal Dam. According to the current target planning scenario we should have enough water in the VRS until 2020.</i>
106	<i>The real problem is the water quality and in future there will not be enough quantity to effectively dilute the water to counter AMD. Sulphates are currently being reduced from 4 500mg/l to 3 000mg/l in the short term while in the Central Basin it will be reduced from 5 200mg/l to 3 000mg/l. A total of 800 tons of salts will be entering the Vaal River System daily and there will not be enough water to dilute the high salinity.</i>	<i>Ms Mariette Liefferink (Federation for a Sustainable Environment)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Mr Pike commented that the VRS is a complex system and short term solutions are being used to counter water quality problems. Mr Pike responded that planning is being done to best address this with the water we have. Ms Calvinia Shomolekae (DWA) added that the DWA is investigating various interventions such as specific plants that can remove some of the sulphates from the system.</i>
107	<i>Will the removal of alien vegetation along the rivers have an impact on the System?</i>	<i>Mr Jan Potgieter (Department of Agriculture, Forestry and Fisheries)</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Ms Louw said the removal of alien vegetation will make a huge difference, but the upkeep is vital after removal and the affected areas should be visited annually to keep them clean of alien vegetation. Such a removal of alien vegetation could improve the ecological category of a specific resource when managed properly.</i>
108	<i>The study sounds a little biased towards ecology. Where are the social aspects in the scenarios?</i>	<i>Stakeholder</i>	<i>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</i>	<i>Mr Van Rooyen explained that the social and economic aspects were included in the Goods and Services. Examples of this are the Vredefort Dome and the various wetlands that were taken into consideration. The scenarios do not, however, affect social aspects negatively.</i>
109	<i>When are you planning of having all resource quality objectives (RQOs) in place?</i>	<i>Stakeholder</i>	<i>Stakeholder meeting held at the DWA in</i>	<i>Mr Sadimo Manamela (DWA) said consultants have been appointed and</i>

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			Pretoria on 23 July 2012	the contracts will be signed soon. Work should start and will run for 12 months.
110	<p>Why is the Tugela Water Project used in the economic evaluation of the EWR site downstream of the Douglas Barrage and not pumping from the Orange? Water is being pumped from the Orange to the Vaal at Douglas.</p>	<p>Mr Jan Potgieter (Department of Agriculture, Forestry and Fisheries)</p>	<p>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</p>	<p>Mr Van Rooyen explained that the Orange does not have excess water. The current augmentation plans for the VRS after Phase 2 of the LHWP, will be to use water from the Tugela System and therefore the economic implication was determined based on the earlier expenditure of capital of the Thukela Water Project.</p>
111	<p>The FSE propose new scenario called the “Polluter Pays Principle”. It basically means that the mines, agriculture, local government and anybody who pollutes the water resources, must pay for cleaning up their waste to improve the quality of water received by downstream users. It should not be the responsibility of national government or the public.</p> <p>The National Water Act (NWA), the National Environmental Management Act (NEMA) and the Mineral and Petroleum Resources Development Act (MPRDA) have mechanisms to enforce the Polluter Pays Principle:</p> <ol style="list-style-type: none"> <li>1. In terms of the NWA, the companies can be held jointly and severally responsible.</li> <li>2. The NEMA makes provision for the recovery of costs prior to the cost being incurred as well as any person who had benefitted. In terms of the NEMA apportionment must take place.</li> <li>3. In terms of the MPRDA the liability of directors are jointly and severally. The Minister of Mineral Resources can however sell any assets needed for the remediation by means of an application to the High Court. The Minister may also direct the Regional manager to use the funds in the financial provision fund for remediation purposes.</li> </ol>	<p>Ms Mariette Liefferink (Federation for a Sustainable Environment)</p>	<p>Stakeholder meeting held at the DWA in Pretoria on 23 July 2012</p>	<p>Noted. The DWA is in the process of implementing the Waste Discharge Charge System which will apply the “Polluter Pays Principle” as a measure to achieve the required protection defined by the Management Classes. This implementation is a separate process which will (along with the Integrated Water Quality Management Strategy) provide the mechanisms for giving effect to the requirements embedded in the Management Classes as well as allow the appropriate use of the water resources.</p>
112	<p>Is it possible to work out a cost per kilolitre water to give people a better understanding of the costs</p>	<p>Mr Carl Woodhouse (Eskom)</p>	<p>Stakeholder meeting held at the DWA in</p>	<p>Mr Van Rooyen explained that such a sum will be too simplistic and does not</p>

	COMMENTS, QUESTIONS AND ISSUES	COMMENTATOR(S)	SOURCE(S)	RESPONSE(S)
	<i>involved?</i>		<i>Pretoria on 23 July 2012</i>	<i>give a true reflection of actual cost. Water resource experts use a term called Unit Reference Value that compares different options with each other. It looks at rand per cubic metre but many other factors are also included to work out this cost.</i>
113	<i>The irrigation boards such as Koedoeskop and Hartswater in the Vaal River System were not aware of the classification process.</i>	<i>Ms Sanet de Klerk (Obaro)</i>	<i>Stakeholder meeting held in Kimberley on 24 July 2012</i>	<i>Ms Mohapi requested that contact details of such organisations be sent to Andre Joubert who will add it to the database of the study. We must all share the responsibility of notifying uninformed parties. Ms Nyamande said the DWA will launch a stakeholder engagement plan to reach key stakeholders and the communities in the study area through workshops and further meetings. The study has been presented at various water forums in the Vaal during the past year and a half and this process will be continued.</i>
114	<i>Does the recent Present Ecological Study (PES) form part of the classification process.</i>	<i>Mr Leon Barkhuizen (Free State Department of Economic Development, Tourism and Environment)</i>	<i>Stakeholder meeting held in Kimberley on 24 July 2012</i>	<i>Various studies done by the DWA such as this PES study and the National River Health Programme, etc are being used as sources of information for this study.</i>
115	<i>Will the results of the recent study done on the yellow fish also be used in the Classification Study?</i>	<i>Mr Matt Bond (Kimberley North Farmers Association)</i>	<i>Stakeholder meeting held in Kimberley on 24 July 2012</i>	<i>Yes, this data have been included in the ecological data of the Reserve Determination Study, one of the main sources of information for the Classification Study.</i>
116	<i>What is the DWA doing to address water quality issues in the Vaal?</i>	<i>Mr Peter Ramollo (Northern Cape Department Environment and Nature Conservation)</i>	<i>Stakeholder meeting held in Kimberley on 24 July 2012</i>	<i>Mr Jurgo van Wyk said the DWA is busy with various actions to improve water quality in the Vaal River System (VRS). This includes the licensing of big water users, diffuse impacts of salts and nutrients. Water quality in the VRS is being managed and long term</i>

	COMMENTS, QUESTIONS AND ISSUES	COMMENTATOR(S)	SOURCE(S)	RESPONSE(S)
				<i>projections are in place to keep the river sustainable. Acid mine drainage (AMD) is a dilemma, but the DWA is attending to this problem with both short and long term interventions to solve these salinity issues.</i>
117	<i>Is an IUA just one Ecological Category (EC)?</i>	<i>Mr Leon Barkhuizen (Free State Department of Economic Development, Tourism and Environment)</i>	<i>Stakeholder meeting held in Kimberley on 24 July 2012</i>	<i>Ms Louw explained that there are various monitoring points (nodes) in an IUA and each one could have a different EC.</i>
118	<i>Who will take the responsibility to improve the EC for a specific water resource if it is too low?</i>	<i>Mr Leon Barkhuizen (Free State Department of Economic Development, Tourism and Environment)</i>	<i>Stakeholder meeting held in Kimberley on 24 July 2012</i>	<i>Ms Louw said this will be the responsibility of the DWA. Ms Shane Naidoo (DWA) explained that such an action will be part of a management plan for a specific area.</i>
119	<i>Subsistence farming is becoming more and more important and should be included in Goods and Services. More and more people in the VRS are becoming more dependent on fishing as a source of food and income.</i>	<i>Mr Leon Barkhuizen (Free State Department of Economic Development, Tourism and Environment)</i>	<i>Stakeholder meeting held in Kimberley on 24 July 2012</i>	<i>Ms Louw answered that this has been included in the Goods and Services study. She added that yellow fish is very robust and can adapt to changing conditions inside a system.</i>
120	<i>Some IUAs have very low ECs. What is the reason for this?</i>	<i>Mr Piet van Niekerk (Vaalharts Distrik Landbou Unie)</i>	<i>Stakeholder meeting held in Kimberley on 24 July 2012</i>	<i>Ms Louw said the alien vegetation and farming activities along the banks of water resources is the reason for bringing the EC down. In some cases it bring the EC down to an E.</i>
121	<i>The DWA must force mines, municipalities to pay for water pollution, because it has a major impact on the water quality downstream. Who is going to pay for this damage?</i>	<i>Mr Piet van Niekerk (Vaalharts Distrik Landbou Unie)</i>	<i>Stakeholder meeting held in Kimberley on 24 July 2012</i>	<i>Mr Pieter Viljoen (DWA) explained that this classification process will set various limits for the different Management Classes. How the current water quality will be improved is not to be decided by this study. The DWA is busy developing a Waste Discharge Charge System (WDCCS) which will take care of water polluters. This is all forms part of the Integrated Water Quality Management Plan for the</i>

	COMMENTS, QUESTIONS AND ISSUES	COMMENTATOR(S)	SOURCE(S)	RESPONSE(S)
				<p>three Vaal WMAs. Income made from WDCS will be used to clean up water resources.</p> <p>Ms Mohapi commented that the DWA has a whole host of actions that will all contribute to the improvement of water resources. Studies to determine the Resource Quality Objectives (RQOs) in the three Vaal WMAs will also assist to improve water quality on the Vaal River. The DWA is also improving its regulatory arm.</p>
122	<p>Did the floods during the past few years improve the water quality in the VRS?</p>	<p>Mr Matt Bond (Kimberley North Farmers Association)</p>	<p>Stakeholder meeting held in Kimberley on 24 July 2012</p>	<p>Mr Viljoen said it only improved in the short term, because the sediment transported by such a flood also creates additional water quality problems.</p>
123	<p>I am concerned about decreasing water quality. Farmers must put in more lime and gypsum due to the high salt content of the soil. Farmers are also losing lucrative contracts to farm with fresh produce due to high E.coli bacteria counts in the water. Something must be done to improve water quality.</p>	<p>Ms Sanet de Klerk (Obaro)</p>	<p>Stakeholder meeting held in Kimberley on 24 July 2012</p>	<p>Mr Viljoen said the DWA is not waiting for the Classification Study to be finalised before actions are implemented to address water quality issues. There are parallel processes taking place to counter these problems. If there are serious issues, contact the nearest DWA regional office and the problems will be investigated. Salinity is a big problem and AMD, for example, is currently being tackled, because this is where most of the salt comes from. Mr Van Wyk said part of the challenge is to coordinate all the DWA projects. This is being done by Study and Strategy Steering Committees to manage the various projects.</p>
124	<p>What are the correct channels of communication with the study team and the DWA?</p>	<p>Mr Matt Bond (Kimberley North Farmers Association)</p>	<p>Stakeholder meeting held in Kimberley on 24 July 2012</p>	<p>All the relevant contact information can be found in any of the study newsletters and emails can be sent should you want to comment or need further information.</p>
125	<p>Will it be possible to release water from the</p>	<p>Mr Leon Barkhuizen</p>	<p>Stakeholder meeting</p>	<p>Mr Van Rooyen explained that the</p>

	<b>COMMENTS, QUESTIONS AND ISSUES</b>	<b>COMMENTATOR(S)</b>	<b>SOURCE(S)</b>	<b>RESPONSE(S)</b>
	<i>Sterkfontein Dam, because this dam is used by Eskom for a pumped storage scheme?</i>	<i>(Free State Department of Economic Development, Tourism and Environment)</i>	<i>held in Kimberley on 24 July 2012</i>	<i>hydro power function will not be affected and has been taken into consideration when the scenarios were developed.</i>
126	<i>Just concerned about the low “score” of the Mooi River – was the evaluation done as to the quality at C2H085?</i>	<i>Prof Les Stoch</i>	<i>Email on 20 August 2012</i>	<i>Ms Louw explained that the Mooi River suffers from various problems, most which will be difficult to address. Quality problems (in terms of physico-chemical variables) are an issue, both from tributaries such as the Wonderfonteinspruit and the Mooi River itself. Furthermore, there are major physical disturbances to the river. A large section of the river which was originally a wetland is not being bulldozed and structurally modified for peat mining and other activities. All these changes have resulted in the Mooi River having a low Environmental importance and the recommendations are that where the river is still functioning ecologically in a D state, it should be maintained. This translates to a Management Class III. There will also be areas in a better state such as the upper Mooi above most of the dams. Areas such as in the tributaries which are in a state below a D, such as the Wonderfonteinspruit, should receive attention to improve it to at least a D state. FYI, the reference to D, C and E are in terms of Ecological Categories, A to D with A being near natural, and D being seriously modified – however all these Ecological Categories are deemed to provide some level of resource sustainability. The E and F categories are critically modified area, are deemed to be unsustainable and should be improved.</i>

	<b>COMMENTS, QUESTIONS AND ISSUES</b>	<b>COMMENTATOR(S)</b>	<b>SOURCE(S)</b>	<b>RESPONSE(S)</b>
127	<i>How are you going to reach stakeholders without internet access?</i>	<i>Mr Phineas Malapela – (VEJA)</i>	<i>Rietspruit Forum meeting in Sebokeng on 14 August 2012</i>	<i>Documents will be circulated as per the needs of a specific stakeholder. It can either be by email, fax or normal post.</i>
128	<i>Why are licences currently being issued while the Reserve and RQOs are not yet in place?</i>	<i>Mr Simon Mporetjie – (Rand Water)</i>	<i>Wilge Forum meeting in Phuthaditjaba (Qwa-Qwa) on 21 August 2012.</i>	<i>The preliminary Reserve is in place and was a baseline data for the classification process. In the absence of RQOs, water resources have to be protected using existing tools in place. Management options are also in place from the Reconciliation process, giving ideas on how to meet EWRs.</i>
129	<i>To determine the management classes, did you use ecological categories (EC), and where can one get those ECs?</i>	<i>Mr Herman Keuris (DWA:HO – Water Resource Information Programmes)</i>	<i>Integrated Regional Water Monitoring Committee meeting on 28 August 2012 in Kimberley.</i>	<i>Ecological, social and economic implications were looked at. Some of the reports are already on the website.</i>
130	<i>Monitoring is a challenge for the Region and the local authority that are part of the committee.</i>	<i>Mr Herman Keuris (DWA:HO – Water Resource Information Programmes)</i>	<i>Integrated Regional Water Monitoring Committee meeting on 28 August 2012 in Kimberley.</i>	<i>After setting of the RQOs, monitoring system has to be in place. For the existing monitoring points, will continue generating data. Kimberley Office is about to execute RHP monitoring, which is coming at the right time to use the already established sites (EWR sites) for their monitoring.</i>
131	<i>Lack of resources is a challenge.</i>	<i>Mr Olebogeng Thebe (DWA regional office)</i>	<i>Integrated Regional Water Monitoring Committee meetings (28 August 2012), Kimberley</i>	<i>Assistance is needed from head office in Pretoria.</i>
132	<i>There is more than enough water in the canal during winter, which is overflowing into the river system, and we are not allowed to say “more water is available”.</i>	<i>Mr Andre Smith – Boegoeberg Water User Association</i>	<i>Integrated Regional Water Monitoring Committee meetings (28 August 2012), Kimberley</i>	<i>We have to be careful about announcing that there is a lot of water, because it might not be the true reflection of the whole catchment. The season when water is in abundance has to be clearly indicated or documented for clarity. If water shortages are experienced during summer, a provision has to be made to store water for use during summer</i>

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				<i>months.</i>
133	<i>The absence of water management institutions in the Vaal WMAs is a cause for concern. It is difficult to communicate and interact without a Catchment Management Agency in place. We must think of something else to engage directly with stakeholders. In other areas most farmers belong to a water users association but this is not the case in the Vaal River System.</i>	<i>Mr Nic Opperman (Agri SA)</i>	<i>Project Steering Committee, meeting 4. 04 September 2012.</i>	<i>There are active catchment forums in the Upper Vaal that represent water users. A problem might be that only junior DWA officials attend these meetings.</i>
134	<i>How one-on-one meetings can be arranged between the DWA and the agricultural sector. Many irrigation boards have not heard of this process and the national bodies of agricultural unions must also be informed.</i>	<i>Ms Sanet de Klerk (Obaro)</i>	<i>Project Steering Committee, meeting 4. 04 September 2012.</i>	<i>Ms Naidoo or Ms Nyamande can be contacted to set up one-on-one meetings.</i>
135	<i>What intervention measures can be used to improve the water quality in the Klip River and Blesbokspruit.</i>	<i>Mr Benedict Itholeng (Gauteng Department of Agriculture and Rural Development)</i>	<i>Project Steering Committee, meeting 4. 04 September 2012.</i>	<i>DWA responded that in future the DWA will enforce stricter water licensing conditions. The DWA is also trying to prevent acid mine drainage (AMD) from spreading by working closely with the mining sector. Currently AMD seepage is causing the pollution problems in these two water resources.</i>
136	<i>What influence the DWA head office has over regional offices, because in Mpumalanga mining licenses are still being handed out although the water resources are overextended.</i>	<i>Mr du Plessis (TAU SA)</i>	<i>Project Steering Committee, meeting 4. 04 September 2012.</i>	<i>This is one of the shortcomings of government, because of poor interaction between the Department of Mineral Resources (DMR), that controls mining licenses and the DWA that controls water licenses. This is currently being discussed at ministerial level to prevent mining licenses from being handed out without interaction with the DWA that must first investigate the water availability. The DWA has recently stopped one mine and insisted a long term plan regarding AMD must</i>

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				<i>be prepared to the satisfaction of the department before the license will be considered.</i>
137	<i>Why the Lower Wilge River is a proposed MC II but Liebenbergsvlei River is a proposed MC III but it flows into the Lower Wilge.</i>	<i>Mr Jan Potgieter (Department of Agriculture, Forestry and Fisheries)</i>	<i>Project Steering Committee, meeting 4. 04 September 2012.</i>	<i>The Liebenbergsvlei only flows into the Lower Wilge about a kilometre from the Vaal Dam, so there is a very small impact that does not affect the proposed MC of the Lower Wilge.</i>
138	<i>Enquired if previous studies will be used in the RQO study.</i>	<i>Mr Martin Ginster (Sasol)</i>	<i>Project Steering Committee, meeting 4. 04 September 2012.</i>	<i>All available information, including the information gathered during the Classification Study on the Vaal River System will be used for the RQO study.</i>
139	<i>What are the implications of classification on water use authorisation, as is currently handled?</i>	<i>Mr G van Dyk-AngloGold Ashanti</i>	<i>Schoon/Koekemoerspruit Forum meeting – Ockney (26 Sep 2012)</i>	<i>Classification process will set Management classes (MC) per Integrated Units of Analysis (IUA) and Resource Quality Objectives will be set to give effect to the MCs. Water Use licences issued has to be in line with the set MCs for the catchment. Currently, the Preliminary Reserve in place has to be considered while issuing licences.</i>
140	<i>How are RWQOs differ with the Classification process?</i>	<i>Ms Marina Kruger (Midvaal Water Co)</i>	<i>Schoon/Koekemoerspruit Forum meeting – Ockney (26 Sep 2012)</i>	<i>Classification system incorporates data and studies done up to date as baseline information. RWQOs will also be incorporated into RQOs, and then monitoring system will be put in place to monitor RQOs compliance.</i>
141	<i>When is MCs going to be revised?</i>	<i>Ms Marina Kruger (Midvaal Water Co)</i>	<i>Schoon/Koekemoerspruit Forum meeting – Ockney (26 Sep 2012)</i>	<i>Unless it is stated on the Gazette, it will be revised when the Minister sees fit. Most Governments documents are revised after 5 years.</i>
142	<i>What will happen to the economic big players (big companies) on economic contribution and the different scenarios? Where they consulted?</i>	<i>Mr Samson Mokoena, Civil Society Groups</i>	<i>Leeu/Taaiboschspruit Forum Meeting – at Sasolburg (15 November 2012)</i>	<i>Scenario evaluation includes socio-economic study as part of the project, where socio-economic implications were assessed and undergo stakeholder engagement (including different companies) before adoption. Scenario evaluation involved striking a balance amongst Ecology, Social and</i>

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				<i>Economic imperatives</i>
143	<i>Why Vaal classification project is still running till to date?</i>	<i>Mr. Piet Theron</i>	<i>SK Forum meeting at Midvaal Water Company on 16/10/13</i>	<i>The project is almost complete. The Directorate is waiting for Resource Quality Objectives (RQOs) project to complete. The Management Classes (MC) and RQOs will be gazetted together by the Minister.</i>
144	<i>Is DAFF represented in this project?</i>	<i>Mr. Piet Theron</i>	<i>SK Forum meeting at Midvaal Water Company on 16/10/13</i>	<i>Yes, the project has robust stakeholder engagement such as Project Steering Committee and catchment forums and DAFF is part of those meetings.</i>
145	<i>If I want to ask something about the project who do I speak to?</i>	<i>Mr. Piet Theron</i>	<i>SK Forum meeting at Midvaal Water Company on 16/10/13</i>	<i>You can speak to me or Tovho Nyamande and the details will be given to you after the meeting.</i>