



PO Box 494,  
Cape Town  
8000

30 November 2012

Email: [Claire.blanche@aurecongroup.com](mailto:Claire.blanche@aurecongroup.com)

Dear Sir / Madam,

## WORKING FOR WETLANDS REHABILITATION PROJECT

### DEA REFERENCE NUMBERS:

**MPUMALANGA Province Wetlands rehabilitation projects: 14/12/16/3/3/1/760**

**LIMPOPO Province Wetlands rehabilitation projects: 14/12/16/3/3/1/761**

**KZN Province Wetlands rehabilitation projects: 14/12/16/3/3/1/762**

**GAUTENG Province Wetlands rehabilitation projects: 14/12/16/3/3/1/759**

### NEAS REFERENCE NUMBERS:

**MPUMALANGA Province Wetlands rehabilitation projects: DEA/EIA/0001565/2012**

**LIMPOPO Province Wetlands rehabilitation projects: DEA/EIA/0001566/2012**

**KZN Province Wetlands rehabilitation projects: DEA/EIA/0001567/2012**

**GAUTENG Province Wetlands rehabilitation projects: DEA/EIA/0001564/2012**

## 40 DAY COMMENT PERIOD ON DRAFT REPORTS

**This letter is available in any of the official languages on written request.**

### BACKGROUND INFORMATION

Aurecon South Africa (Pty) Ltd was appointed by the South African National Biodiversity Institute (SANBI) to undertake the various project activities and associated reporting required for the various phases of the wetland rehabilitation planning cycle. These include both Phase 1 & 2 Reports, the Wetland Rehabilitation Plans as well as the Basic Assessment Reports required for each project area within the nine provinces.

As part of the planning process, the Phase 1 reports prioritised the wetlands to be visited for Phase 2. The field work was subsequently undertaken by the project team (consisting of the Environmental Practitioner, the Engineer, the Wetland ecologist as well as the Working for Wetland's Provincial Coordinator) whereby the selected wetland sites were visited and the rehabilitation measures for each of the wetland sites agreed. This information has been included in the Phase 2 reporting in the form of a Wetland Rehabilitation plan (written for each project) and the draft Basic Assessment Report (BAR) which has been compiled for each of the affected Provinces, for the upcoming planning cycle (2013/2014).

### LEGAL PROCESSES UNDER THE NATIONAL WATER ACT (NO. 36 OF 1998) AND THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NO. 107 OF 1998)

In terms of Section 39 of the National Water Act (NWA), a General authorisation (GA) is granted for certain activities that are listed under the NWA (Act No. 36 of 1998) that usually require a Water Use

Licence. Government Notice (G.N.) 1198 of 18 December 2009 introduced a GA for activities undertaken for the rehabilitation of wetlands for conservation purposes. Applications for a GA will be submitted to the competent authority, viz. the Department of Water Affairs simultaneously with the other authorisations required for this work.

### **EIA listed activities**

The programme is listed in terms of the National Environmental Management Act (NEMA) (Act No. 107 of 1998) and therefore requires authorisation from the competent authority, viz. the Department of Environmental Affairs (DEA) via the Environmental Impact Assessment (EIA) process (GN R543 of 18 June 2010). The proposed rehabilitation project triggers the following listed activities:

- 11 and 18 of Listing Notice 1 in Government Notice R. 544, 2010; and
- 13 and 16 of Listing Notice 3 in Government Notice R. 546, 2010.

Accordingly, the EIA application form notes all triggered 2010 listed activities.

### **EXEMPTION FROM INDEPENDENCE**

Aurecon applied for exemption from independence as its engineers are undertaking the design work for the interventions. DEA is currently considering the request.

### **PUBLIC PARTICIPATION PROCESS AND WAY FORWARD**

This letter, a national advertisement in the *Sunday Times* and *Die Rapport* on 1 and 2 December 2012; along with site notices (in at least two official languages), forms the official notification of the Public Participation process (PPP) for the 2013/2014 planning cycle. The draft rehabilitation plans (written for each project) and the draft Basic Assessment Report (BAR) (compiled for each Province) has been made available for public comment.

Please find enclosed a copy of the Summary document which provides an overview of the Working for Wetlands programme, as well as highlights the key findings for each project located within the affected Province. A response form has also been provided whereby Interested and Affected Parties (I&APs) can provide written comment on the proposed wetland rehabilitation measures and associated projects.

The Draft BAR as well as the Draft Rehabilitation plans for the proposed wetland rehabilitation activities for each affected Province (four in total) have been made available for a 40 day review period from **Wednesday, 5 December 2012**. The SANBI PC and implementer have hard copies of the Phase 2 Reporting for their Province. Should you wish to review the report, please contact Franci Gresse to have this arranged. The draft Reports have also been made available for download from the Aurecon website (<http://www.aurecongroup.com> - - click on the "South Africa", "Public Participation", "Environmental Projects" and finally the "SANBI Working for Wetlands" project). I&APs have until **4 February 2013** to submit comments on the draft Phase 2 reports. Electronic copies of the Phase 2 reporting will also made available on written request.

After the 40 day public comment period, the draft BAR as well as the draft Rehabilitation Plans will be updated via incorporating I&AP comments received on the reports. The updated, final Reports will then be submitted to DEA for their decision. Registered I&APs will simultaneously be afforded a further 21 days to provide comment on the Final BAR. Further comments received will be collated

by Aurecon and submitted to DEA. Once DEA have made their decision on the proposed project, all registered I&APs on the project database will be notified of the outcome of the decision within twelve (12) calendar days of the date of the decision. Should anyone (a member of public, registered I&AP or the Applicant) wish to appeal DEA's decision, a Notice of Intention to Appeal must be lodged with the Minister within twenty (20) calendar days of the date of the decision.

If no appeals are received and the landowner(s) have signed (i.e. approved) the proposed rehabilitation work detailed in the Final Rehabilitation plan, the interventions will be constructed from April 2013 until March 2014.

Should you wish to raise any issues, concerns and/or suggestions on the draft Phase 2 reports, and/or register as an I&AP, please contact Franci Gresse at Tel: (021) 526 6022; Fax: (021) 526 9500; Mail: PO Box 494, Cape Town, 8000; or Email: [franci.gresse@aurecogrou.com](mailto:franci.gresse@aurecogrou.com) or [Claire.Blanche@aurecogroup.com](mailto:Claire.Blanche@aurecogroup.com); by **4 FEBRUARY 2013**.

Should you have any queries, please do not hesitate to contact us.

Yours sincerely  
AURECON

A handwritten signature in blue ink, appearing to be 'C. Blanché', with a long horizontal line extending to the right.

**CLAIRE BLANCHÉ** (*Pr. Sci. Nat.*)  
Practitioner: Environmental & Advisory Services

## **Annexure A – Executive Summary**

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## WORKING FOR WETLANDS REHABILITATION PROJECT IN



## THE GAUTENG PROVINCE: DRAFT BASIC ASSESSMENT REPORT



### Summary Document

The South African National Biodiversity Institute (SANBI) appointed Aurecon South Africa (Pty) Ltd to undertake the project activities and associated reporting required for the various phases of the rehabilitation planning cycle. These include Phase 1 Reports, the wetland rehabilitation plans as well as the BARs required for each project area within four provinces. Refer to **Figure 1** below that graphically depicts the entire 24 month planning and implementation process which begins in Phase 1 and ends in Phase 3. Phase 1 and 2 are undertaken in the first twelve months and Phase 3 in the second twelve months.

#### Objectives of the Working for Wetlands Programme

Working for Wetlands is (WfWetlands) a government funded programme that started in 2001 with a R20 million budget that was implemented across 14 projects. The programme is managed by SANBI and is currently implemented across 35 projects countrywide with a budget of R83 million. Being part of the Expanded Public Works Programme (EPWP), more than 1 500 local people are recruited to work in projects on limited term contracts. Typical activities undertaken within the projects include:

- constructing structures (gabions, berms, weirs) in wetlands;
- removing invasive alien plants from the wetland and immediate catchment;
- plugging artificial drainage channels in the wetland;
- raising awareness of wetlands among workers, landowners and the general public;
- providing adult basic education and training, and technical skills; and
- developing management plans for the rehabilitated wetlands.

The two main objectives of the programme are **wetland conservation** in South Africa and **poverty reduction** through **job creation** and **skills development** amongst **vulnerable** and **marginalised** groups.

#### Environmental legislation

##### EIA listed activities

The proposed project(s) triggers listed activities 11 and 18 of Regulation 544 and activities 13 and 16 of Regulation 546 of 18 June 2010 of the National Environmental Management Act (No. 107 of 1998) (NEMA), as amended.

A Basic Assessment (BA) process must therefore be undertaken before the authorities, in this instance the national Department of Environmental Affairs (DEA), can make a decision

on whether the proposed activities and ultimately the proposed projects should be authorised.

### **Exemption from independence**

The Public Participation process (PPP) was formally initiated with notifications to Interested and Affected Parties (I&APs) of the availability of this Draft BAR for comment on 28 November 2012. Adverts were also placed in *Die Burger* and *Sunday Times* on 1 and 2 December 2012, respectively. Aurecon applied for exemption from independence as its engineers are undertaking the design work for the interventions.

As part of the BA process, environmental (biophysical and socio-economic) impacts are identified and assessed to ascertain the consequences of the project on the environment and the people that live in it. Based on the findings from the impact assessment, specific mitigation measures are recommended to reduce the significance of negative impacts and enhance positive impacts (those that improve the integrity and health of an ecosystem or human health and well-being). The process also gives I&APs an opportunity to comment and to be kept informed about decisions that may impact them or the environment.

As planning continues over a 24 month period, prioritisation and planning (in terms of identifying which wetlands will be rehabilitated and how) is undertaken within the first 12 months, while the actual implementation (via the construction of the interventions) is undertaken within the second 12 months. Interventions may be postponed even if they have received environmental authorisation due to issues such as lack of budget, logistical problems in the area, and / or dramatic changes to the receiving environment (flooding etc.). In other words these structures would be 'banked' for implementation as/ when suitable or appropriate.

In terms of Section 39 of the National Water Act (No. 36 of 1998), a General Authorisation (GA) has been granted for certain activities that are listed under the NWA that usually require a Water Use Licence. Such a GA exists for wetland rehabilitation as long as the activities are for **conservation purposes**. As some of the rehabilitation activities entail '*impeding or diverting the flow of water in a watercourse*' and / or '*altering the bed, banks, course or characteristics of a watercourse*', a number of GAs have been registered with the Department of Water Affairs (DWA) for structures that would ordinarily require a Water Use Licence. For each planning cycle the proposed rehabilitation work will be submitted to DWA, the requisite approval sought and project monitoring reported as required.

### **Phase 1, 2, and 3 explained**

The purpose of **Phase 1** and the associated reporting is to identify within a province:

1. which are the priority catchments and associated wetlands / sites within which rehabilitation work needs to be undertaken; and to
2. identify key stakeholders who would review and comment on the detailed planning (Phase 2) reports.

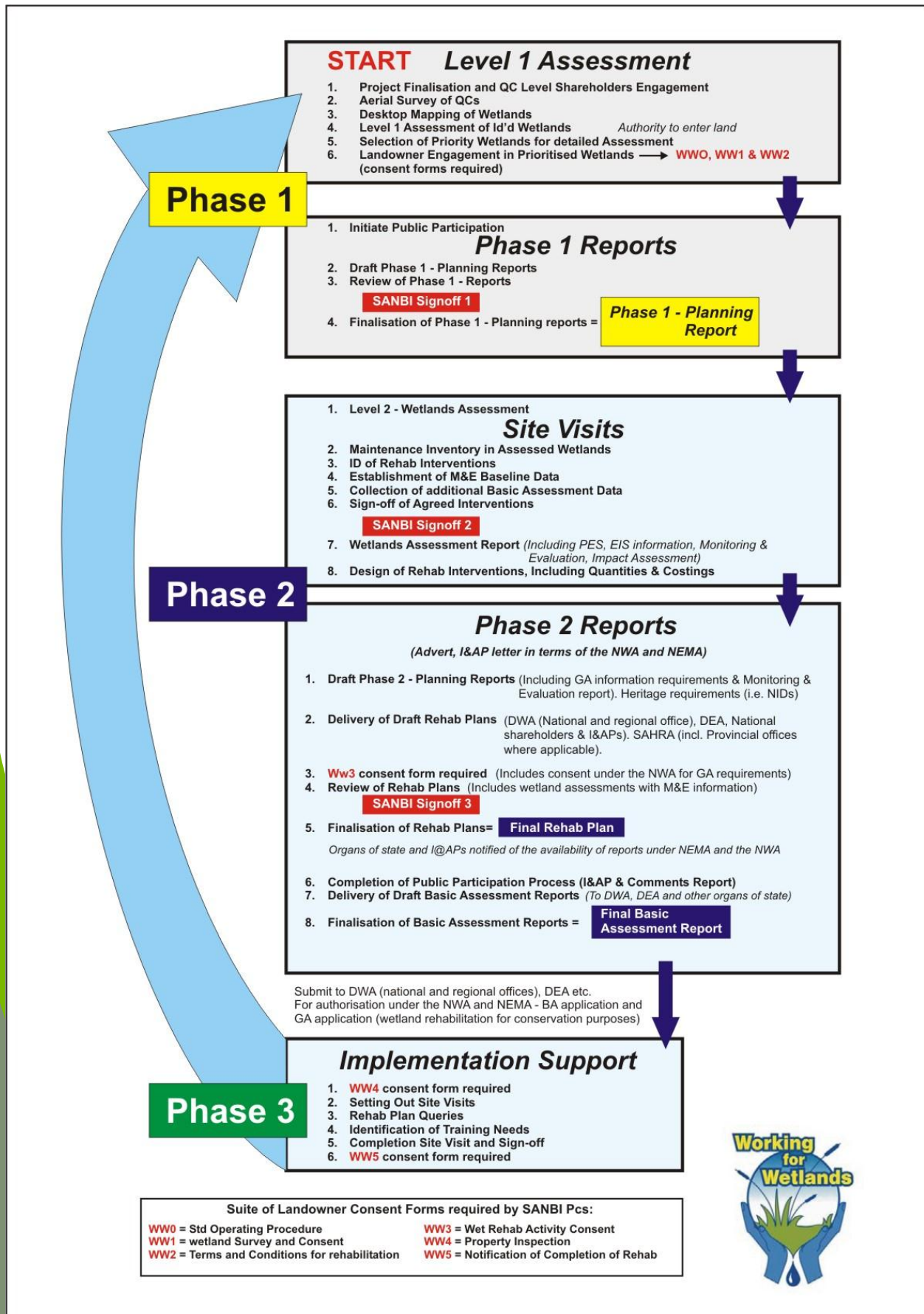


Figure 1: The Working for Wetlands planning process (Phase 1 to Phase 3)

As part of Phase 1, the Engineers peg / set-out the previous year's interventions that had been authorised by DEA. Refer to **Figure 1** below that graphically depicts the entire 24 month planning process which begins in Phase 1 and ends in Phase 3.

During **Phase 2**, the wetlands that were prioritised in Phase 1 are visited by the project team which consists of a Wetland ecologist, Engineer, Environmental Practitioner, SANBI's Provincial Coordinator (PC), and where possible and / or appropriate Implementers, Landowners, and other specialists.

The Phase 2 reports document and provide detail on the type and location of interventions that are needed to rehabilitate the prioritised wetlands within a specific catchment area. A wetland assessment is undertaken using the WET-Tools methodologies (WRC 2010) to ensure that systematic assessments are utilised and the ecosystem consequences and benefits understood. This is described in more detail below. The motivation for the rehabilitation work, and the potential impacts associated with the interventions are also detailed in these reports.



***Wetland ecologist working in the Gauteng wetlands.***

Regular monitoring and evaluation (M&E) of the interventions is undertaken to establish the effectiveness of the structure in rehabilitating the identified wetland. This baseline data is also included in the Phase 2 reporting. BARs are compiled as separate documents (one for each province), while the Rehabilitation Plans are compiled for each project and are attached as an Appendix to the provincial BAR and submitted to DEA for their environmental authorisation decision. Summaries of the wetland prioritisation, problems and rehabilitation objectives are included in the rehabilitation plans.

As part of Phase 2, a maintenance inventory is undertaken by the PC, in consultation with the Engineer of any existing interventions that are damaged and/ or failing and thus requires maintenance.

Upon approval of the wetland rehabilitation plan by DEA, DWA, and the directly affected landowners, the work detailed for the project will be implemented within a year with on-going monitoring being undertaken thereafter. This occurs within **Phase 3** of the project cycle.



The Rehabilitation Plans are considered to be the primary working document for the implementation of the project via the construction / undertaking of interventions<sup>2</sup> listed in the Plan. Fourteen implementing agents (IAs) are currently employed and are responsible for employing contractors and their teams (workers) to construct the interventions detailed in each of the Rehabilitation plans.



***A buttress weir being built and a site being prepared by the Implementing agents***

### Wetland Assessments

Time and resources required for detailed assessments of the wetlands is limited, and thus using the WET-Tools methodology, a rapid procedure was adopted to assist the project team in systematically carrying out the assessments under constraints. The assessments entailed the following steps:

1. Assessment of the impacts and threats within each wetland system via establishing the current 'health' of the wetland;
2. Establishment of rehabilitation objectives and the selection of appropriate interventions to achieve the identified rehabilitation objectives; and finally; and
3. Assessment of the likely contribution of rehabilitation interventions to the wetland health and ecosystem delivery via determining the spatial area likely to be affected by the proposed intervention(s) and assessing the benefits to the health and / or ecosystem services of the specific wetland i.e. the difference between the current health and the projected health of the wetland with and without the intervention(s).

### Screening process – Alternative

While on-site during Phase 2, the project team identify and locate the interventions that would meet the rehabilitation objectives as well as the programme's overall objectives (wetland conservation in South Africa and poverty reduction through job creation). The project team discuss and evaluate the potential intervention options; and factoring in environmental, social, and economic considerations into their discussions, they agree on the most appropriate intervention that would meet the rehabilitation objectives for the wetland.

<sup>2</sup> This could include soft options such as alien clearing, eco-logs, gabion structures as well as hard structures for example weirs.

### **Increased labour requirement for the Working for Wetlands Programme**

As a result of changes to the donor fund requirements, an increase in the labour percentage requirement for the WfWetlands programme has been experienced since 2010. The project team were thus required to investigate more labour intensive intervention options for wetland rehabilitation. These included soft engineering options such as berms, eco-logs, as well as alien clearing.

This resulted in the project team having to investigate other wetland areas in order to meet the requirements. Consequently, some of the wetlands prioritised during 2012 in the Phase 1 reporting would not be rehabilitated during this planning cycle (due to the large amount of hard engineering required which was less labour intensive), while new additional wetlands were identified during the Phase 2 site visits as their rehabilitation requirements contributed towards meeting the increased labour component for the programme.

### **Rehabilitation work within floodplain systems**

Based on lessons learnt and project team discussions had during the National Prioritisation workshop in November 2010 SANBI took an in-principle decision regarding work within floodplain systems.

Recognising the ecosystem services provided by floodplain wetlands and the extent to which they have been transformed, SANBI do not intend to stop undertaking rehabilitation work in floodplains entirely. Instead, SANBI propose to adopt an approach to the rehabilitation of floodplain areas that takes into account the following guiding principles:

1. As a general rule, avoid constructing hard interventions within an active floodplain channel; and rather
2. explore rehabilitation opportunities on the floodplain surface using smaller (possibly more) softer engineering options outside of the main channel.

When rehabilitation within a floodplain setting is being contemplated, it will be necessary to allocate additional planning resources, including the necessary specialist expertise towards ensuring an adequate understanding of the system and appropriate design of interventions.

### **Intervention design**

After appropriate interventions have been decided upon by the project team, GPS coordinates and digital photographs are taken for record purposes. Appropriate dimensions of the locations are recorded in order to design and calculate quantities for the interventions. At the end of the site visit a location layout of the agreed interventions and rehabilitation objectives is agreed upon by the project team. Based on certain criteria and data measurements (water volumes, flow rates, and soil types); the availability of materials such as rock; labour intensive targets; maintenance requirements etc., the interventions are then

designed. Bills of quantity are calculated for the designs and cost estimates made. Maintenance requirements for existing interventions in the assessed wetlands are similarly detailed and costs calculated. The engineer also reviews and, if necessary, adjusts any previously planned interventions that are included into the historical rehabilitation plans.

### Maintenance and amendments to authorized interventions

Based on discussions with DEA, it was agreed that variations and deviations (in design or location) to the already authorised intervention(s) could be made via written notification to DEA which would include a motivation, supporting information, and the proposed changes clearly detailed. The DEA have formalised this approach by including a condition in the WfWetlands EA whereby any changes to, or deviations from, the project description require written approval from DEA. The proposed changes (type, design, location), motivation, as well as other project-related information (redesigns, site photographs etc.) are provided to DEA. Anticipated reasons for the changes could include modifications to the aquatic system as a result of unforeseen circumstances such as flooding, fires etc., savings to the project budget, improved rehabilitation and/ or enhanced protection from erosion etc.

As per the definition of maintenance<sup>3</sup>, modifications would be made to existing (built) interventions as long as the changes occur within the same footprint, location etc. DEA would be informed of the changes in writing.

For a list of interventions requiring redesign, maintenance and or new structures, please refer to the summary in **Table 5** below.

**Maintenance** The replacement, repair or the reconstruction of an existing structure within the same footprint, in the same location, having the same capacity and performing the same function as the previous structure ('like for like').

### Monitoring and Evaluation

During the Phase 2 site visits, baseline monitoring is carried out prior to the rehabilitation of the wetland to provide comparable data for monitoring at a later stage (once the intervention(s) have been constructed). Monitoring and Evaluation (M&E) is thus a vital component of the project as it allows for the evaluation of the performance of the interventions in successfully rehabilitating the affected wetland. Baseline M&E data (fixed point photography, GPS co-ordinates, water quality measurements etc.) as well as information for the BAR is collected during the Phase 2 site visits.

<sup>3</sup> **Maintenance:** The replacement, repair or the reconstruction of an existing structure within the same footprint, in the same location, having the same capacity and performing the same function as the previous structure ('like for like').

Based on WET-Rehab Evaluate tool, protocols for data collection for monitoring purposes have been developed, which includes compulsory collection of certain data<sup>4</sup>, while other data collection for monitoring would be considered to be optional<sup>5</sup> depending on the importance of the wetland, costs of rehabilitation undertaken etc.

Upon completion of the interventions within a wetland, the Engineer would revisit the site to sign-off on the interventions based on what was detailed in the rehabilitation plan; while the Wetland ecologist would assess the effectiveness of the intervention(s) in achieving the specified objectives and contributing towards the rehabilitation strategy. Appropriate corrective action would be specified if either of the project team members were unsatisfied with the intervention's effectiveness in terms of achieving the objectives and long-term stability. Ideally an annual M&E report would be compiled by the project team; however, this process is still being established and would require additional funding.

### Future planning for the project areas

**Table 1: Summary of possible budget allocations per project area**

Wetland name	Catchments and major rivers	Budget requirement	Period	Comments*
1. Gauteng South	Upper Vaal – Klipriver, Suikerbosrant	R 2,052,000.00	5 years	To achieve catchment objectives, which are improved water quality and quantity; safe guard biodiversity, improve ecosystem functioning and social livelihoods.
2. Gauteng North	Crocodile west and Marico – Hennops, Jukskei, Crocodile, Soutpan, and Kaalspruit rivers	R 1,864,652.87	5 years	
3. Gauteng East	Upper Olifants – Wilge Upper Vaal – Blesbokspruit, Natalspruit, Rietspruit	R 2,446,707.13	5 years	

#### Key project objectives include:

- Stabilisation of head-cuts
- Lift water table in degraded wetlands
- Biodiversity conservation

### Summary of the Final BAR findings

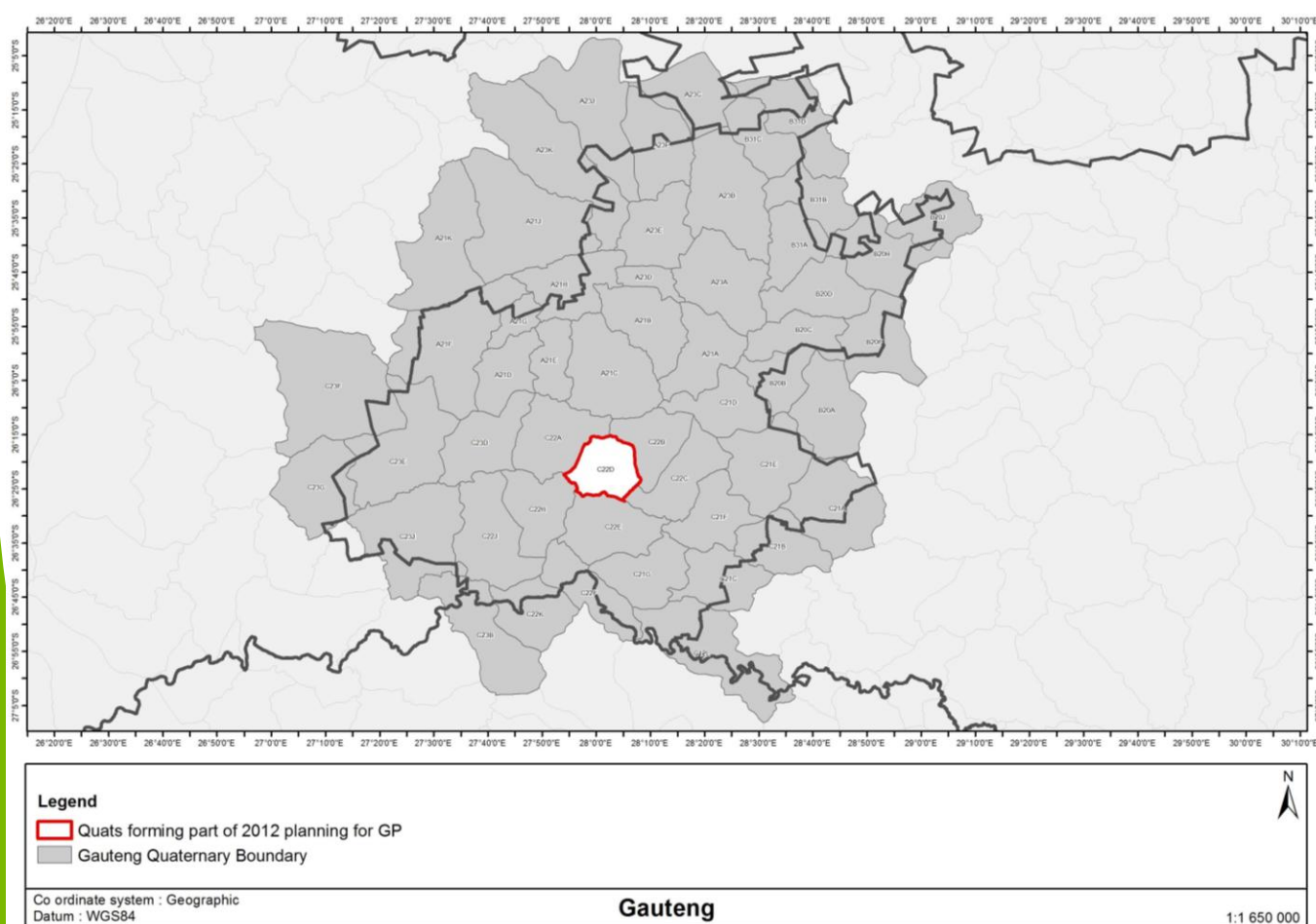
Wetlands that were prioritised during Phase 1 and visited during Phase 2 are located within the following quaternary catchments- refer to **Figure 2** below.

Phase 2 site visits were undertaken for the following projects:

- Gauteng South: Klipriviersberg (October 2012)

<sup>4</sup> Maintenance inventory, rehabilitation effectiveness, fixed point photography/ site photographs, and wetland assessments.

<sup>5</sup> Sediment and erosion control, hydrology, vegetation and water quality



**Figure 2: Quaternary catchments that were visited during the Phase 2 site visits for the Gauteng Province**

Within the Gauteng Province, the following wetland areas will be rehabilitated:

#### **Klipriviersberg (C22D-04)**

Existing rehabilitation work in this quaternary catchment will be augmented with new rehabilitation initiatives identified during a site visit undertaken in October 2012. The quaternary catchment is under pressure due to agricultural (overgrazing) and development related activities and infrastructure, e.g. stormwater outflows, roads, pipeline and railway line crossings, formal and informal residential developments. Other negative factors include alien invasive plant species, illegal dumping and mining. According to the Gauteng Biodiversity Conservation Plan Version 3.3, 2011 (C-Plan 3.3), the Klipriviersberg wetland area falls within a Critical Biodiversity Area (CBA) with Orange Listed plant species and Red Listed mammal and bird species occurring within the area.

The rehabilitation of the above wetland would involve the following interventions *inter alia*:

- Constructing gabions to deactivate eroding headcuts;
- Constructing gabions with concrete capping to prevent gully erosion;
- Earth structures to spread flow across wetlands; and
- Earth works including the infilling of drainage channels

The number, type, scale and location of each of these interventions within the wetlands would vary according to the nature and magnitude of the problem and the state of the receiving environment.

The list of interventions which form part of this Basic Assessment process is summarised in **Table 5** below. The engineering designs for each of these interventions are included in the Final Rehabilitation plan which forms part of the BAR.

### Summary of the potential impacts identified

**Table 3: Summary of impacts**

	Significance of impact		
	Preferred alternative		No go
	No mitigation	With mitigation	
<b>Construction phase</b>			
Aquatic ecosystems	Low (-)	Very Low (-)	Low (-)
Flora & fauna	Low (-)	Very Low (-)	Very Low (-)
Heritage	Very Low (-)	Neutral	Neutral
Nuisance	Low (-)	Very Low (-)	Neutral
Socio-economic	Medium (+)	High (+)	Medium (-)
<b>Operational phase</b>			
Ecosystem functioning	High (+)	High (+)	Medium (-)
Flora & fauna	Medium (+)	Medium (+)	Medium (-)
Socio-economic	High (+)	High (+)	Low (-)

### Key mitigation measures recommended

A summary of the key mitigation measures recommended to reduce the significance of the potential negative impacts and enhance potential positive impacts is provided in Table 3 below.

**Table 3: Key mitigation measures recommended for potential operational phase impacts**

<b>Construction phase impacts</b>
<b>Impacts on aquatic ecosystems</b>
Implement and enforce the CEMP
<b>Impacts on flora &amp; fauna</b>
Implement and enforce the CEMP
<b>Impacts on heritage resources</b>
Contact the provincial heritage resource agency should any artefact be found or cultural use of a wetland be noted
<b>Nuisance impacts</b>
Workers to be given environmental awareness "toolbox talks"
Implement and enforce the CEMP
Liaise with landowner

<b>Socio-economic impacts</b>
Draw labour from the local community
Workers to be aware of fire risks and contingency plans
<b>Operational phase impacts</b>
Undertake M&E of the structures to establish whether the wetland rehabilitation measures have been met. Undertake maintenance to structures where required.

Regarding the construction phase impacts, the standard Construction Phase Environmental Management Programme (CEMP) (included as **Appendix G** of the BAR) and must be on site and complied with during the construction phase.

### Need and desirability

Wetlands play a critical role in improving the ecological health of an ecosystem by performing many functions that include flood control, water purification, sediment and nutrient retention and export, recharge of groundwater, as well as acting as vital habitats for diverse plant and animal species. Wetlands are thus considered to be extremely important in preserving biodiversity and are regarded as fundamental to the sustainable management of South Africa's water resources.

Wetlands also function as valuable open spaces and create recreational opportunities for people that include hiking, fishing, boating, and bird-watching. Many wetlands also have cultural and spiritual significance for the communities living nearby. Commercially, products such as reeds and peat, are also harvested from wetlands. Wetlands are thus considered to be critically important ecosystems as they provide both direct and indirect benefits to the environment and society.

Extensive damage to wetlands has occurred as a result of poor land use practices which has resulted in erosion and further degradation to aquatic ecosystems. Without the implementation of the planned rehabilitation activities (the '**no-go**' option or retaining the status quo), the programme's objectives would not be realized; and the loss of wetland habitat and its associated eco-system services would be significantly greater. The strategic importance of the WfWetlands programme is clear as evidenced by the distinct positive impacts associated with the programme which has resulted in a **net benefit / gain** as wetland health and integrity is improved and the associated eco-services enhanced. Overall the cumulative impact of wetland rehabilitation would thus be positive (refer to the summary of potential impacts identified above) to both human beings and the environment, now and in the future. Based on the above information, it is clear that rehabilitating wetlands is considered to be the '**best practicable environmental option**' as a result of the positive impact that the programme has on both the natural and socio-economic environment.



***Commercial products made by locals from reeds harvested from wetlands***

### **Conclusions and recommendations**

The potential impacts associated with the rehabilitation of various wetlands within the Gauteng Province would result in impacts (both biophysical and social) that would positively affect the area and result in a net environmental gain for the project. These include:

- Socio economic impacts such as job creation, increased awareness of wetland importance and up-skilling;
- Restoring wetland corridors;
- Improvements in water quality and quantity;
- Improved biodiversity of the area via improvements to the wetland functioning; and
- Enhanced/ increased wetland habitat.

Based on the above, the EAP (Aurecon) is of the opinion that the proposed wetland rehabilitation activities being applied for should be authorised, as the substantial benefits (both biophysical and socio-economic) substantially outweigh the minimal localised negative impacts that have been identified. Furthermore, the proposed activities undoubtedly meet the principles prescribed in NEMA.

### **Public Participation Process and Way Forward**

Public participation is an important part of the BA process, as it allows I&APs opportunity to obtain information about the proposed project and to provide input and raise any concerns at defined stages throughout the project.

The Public Participation process (PPP) was formally initiated with notifications to I&APs of the availability of this Draft BAR for comment on 5 December 2012. Adverts were also placed in *Die Burger* and *Sunday Times* on 1 and 2 December 2012, respectively. As part of the PPP, SANBI's Provincial Coordinators have been engaging with the directly affected landowners, while posters (in the key languages spoken in the Province) were erected at strategic locations in/ near the prioritised wetland(s).



As part of the 40 day public comment period on the draft Phase 2 reports, registered I&APs were sent copies of this Summary document, a letter notifying them of the public comment period as well as a response form. Based on the comments received, the draft reports will be updated. The final reports will then be made available for a 21 day comment period.

The Draft BAR for the proposed wetland rehabilitation activities for the Gauteng Province has been made available for review from Wednesday, 5 December 2012 for a 40 day comment period. SANBI's PC's and implementers have hard copies of the Phase 2 Reporting for their Province. Should you wish to review the report, please contact Franci Gresse to have this arranged. The Reports are also available for download from the Aurecon website (<http://www.aurecongroup.com> - follow the public participation links). I&APs have until **Monday, 4 February 2013** to submit comment on the Draft BAR.

After the 40 day public comment period, the final BAR, incorporating I&AP comments received on the Draft BAR (as well as the project team's responses to these), will be submitted to DEA for their decision. Registered I&APs will simultaneously be afforded a further 21 days to provide comment on the Final BAR. Further comments received will be collated by Aurecon and submitted to DEA. Once DEA have made their decision on the proposed project, all registered I&APs on the project database will be notified of the outcome of the decision within twelve (12) calendar days of the date of the decision. Should anyone (a member of public, registered I&AP or the Applicant) wish to appeal DEA's decision, a Notice of Intention to Appeal must be lodged with the Minister within twenty (20) calendar days after the date of the decision.

If no appeals are received and the landowner(s) have signed (i.e. approved) the proposed rehabilitation work detailed in the Final Gauteng Rehabilitation Plan, the interventions will be constructed from April 2013 until March 2014.

Should you wish to raise any issues, concerns and/or suggestions, and/ or register as an I&AP, please contact Franci Gresse at Tel: 021 526 6022, Fax: 021 526 9500, Mail: PO Box 494, Cape Town, 8000 or Email: [franci.gresse@aurecongroup.com](mailto:franci.gresse@aurecongroup.com) on/before **Monday, 4 February 2013**.

## Lst of Acronyms

BAR	Basic Assessment Report
CEMP	Construction phase Environmental Management Programme
DAFF	Department of Agriculture, Forestry and Fisheries
DEA	Department of Environmental Affairs
DWA	Department of Water Affairs
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EPWP	Expanded Public Works Programme
GA	General authorisation in terms of the NWA
IA	Implementing Agent
I&APs	Interested and Affected Parties
M&E	Monitoring and evaluation
NEMA	National Environmental Management Act (Act 107 of 1998)
NWA	National Water Act (Act 36 of 1998)
PC	Provincial Coordinator
SANBI	South African National Biodiversity Institute

**Table 5: Summary of the interventions included as part of this Basic Assessment process**

Descriptive name	Old intervention number (if applicable)	New Intervention number	Proposed action	Reference document
<b>NEW</b>				
MacMat-R	-	C22D-04-201-00	MacMat-R with earthworks and rock packing; site rehabilitation with indigenous plant species	Gauteng South Draft Rehab Plan: November 2012
Gabion weir	-	C22D-04-202-00	Gabion weir with MacMat-R, earthworks and rock packing; site rehabilitation with indigenous vegetation	
MacMat-R	-	C22D-04-203-00	MacMat-R with earthworks and rock packing; site rehabilitation with indigenous plant species	
MacMat-R	-	C22D-04-204-00	MacMat-R with earthworks and rock packing; site rehabilitation with indigenous plant species	
Gabion weir	-	C22D-04-205-00	Gabion weir with earth berm; site rehabilitation with indigenous vegetation	
MacMat-R	-	C22D-04-206-00	MacMat-R with earthworks and rock packing; site rehabilitation with indigenous plant species	
Gabion weir	-	C22D-04-207-00	Gabion weir; site rehabilitation with indigenous vegetation	
Stone Masonry weir	-	C22D-04-208-00	Stone masonry weir; site rehabilitation with indigenous vegetation	
Rock fill	-	C22D-04-209-00	Rock packing	
Gabion weir	-	C22D-04-210-00	Gabion weir with MacMat-R and earthworks; site rehabilitation with indigenous vegetation	
Gabion weir	-	C22D-04-211-00	Gabion weir; site rehabilitation with indigenous vegetation	
Gabion weir	-	C22D-04-212-00	Gabion weir; site rehabilitation with indigenous vegetation	
Gabion weir	-	C22D-04-213-00	Gabion weir; site rehabilitation with indigenous vegetation	

Descriptive name	Old intervention number (if applicable)	New Intervention number	Proposed action	Reference document
Earth works	-	C22D-04-214-00	Cut and fill drainage channel; site rehabilitation with indigenous vegetation	
Earth works	-	C22D-04-215-00	Cut and fill drainage channel; site rehabilitation with indigenous vegetation	
<b>MAINTENANCE</b>				
Gabion weir	C22D-04-001	C22D-04-216-00	Concrete capping with earth works to fill cavities	Gauteng South Rehabilitation Plan: October 2009
Gabion weir	C22D-04-002	C22D-04-217-00	Concrete capping with earth works to fill cavities; cut and slope downstream embankment	
Gabion weir	C22D-04-006	C22D-04-218-00	Raise spillway, key walls and splash wall; concrete capping	
Gabion weir	C22D-04-007	C22D-04-219-00	Raise spillway, key walls and splash wall; concrete capping	
Gabion weir	C22D-04-010	C22D-04-220-00	Reduce spillway height; concrete capping; raise key walls and splash walls	
Gabion weir	C22D-05-002	C22D-05-201-00	Raise left bank key wall; lengthen right bank key wall	
Gabion weir	C22D-05-003	C22D-05-202-00	Add berm to left bank key wall	
Gabion weir	C22D-05-004	C22D-05-203-00	Raise key walls and splash walls; concrete capping; earth works to fill cavities	
Gabion weir	C22D-05-006	C22D-05-204-00	Raise key walls and splash walls; extend left bank key wall; concrete capping; cut and slope downstream embankments; earth works to fill cavities	
Gabion weir	C22D-05-009	C22D-05-205-00	Cut and slope downstream left embankment	
Gabion weir	C22D-05-010	C22D-05-206-00	Cut and slope approach to bridge on both banks	
Gabion weir	C22D-05-013	C22D-05-207-00	Remove excess excavated soil; revegetation	
Gabion weir	C22D-05-014	C22D-05-208-00	Remove and redo left bank key wall and splash wall; raise left bank key wall and splash wall; revegetation	
Gabion weir	C22D-05-016	C22D-05-209-00	Fill cavities; raise key walls and splash walls	
Gabion weir	C22D-05-017	C22D-05-210-00	Raise spillway, key walls and splash walls	
Gabion weir	C22D-05-018	C22D-05-211-00	Raise left bank splash wall; raise key walls and right bank splash wall; earth works to fill cavities	
Gabion weir	C22D-05-019	C22D-05-212-00	Remove excess soil	
Gabion weir	C22D-05-020	C22D-05-213-00	Earth works to fill / re-compact area upstream of structure; redo upstream geo-fabric	

Descriptive name	Old intervention number (if applicable)	New Intervention number	Proposed action	Reference document
Gabion weir	Unknown	A21C-10-201-00	Raise key walls and splash walls; earth works to fill cavities; MacMat-R with revegetation	Pre 2007; no records could be found
Gabion weir	Unknown	A21C-10-202-00	Concrete capping; earth works to fill cavities	
Gabion weir	Unknown	A21C-10-203-00	Concrete capping; earth works to fill cavities	
Gabion weir	Unknown	A21C-10-204-00	Concrete capping; raise key walls; reduce spillway height; earth works to fill cavities	
Gabion weir	Unknown	A21C-10-205-00	Concrete capping	
Gabion weir	Unknown	A21C-10-206-00	Redo upstream geo-fabric; concrete capping; earth works to fill cavities	
Gabion weir	Unknown	A21C-10-207-00	Redo upstream geo-fabric; concrete capping; earth works to fill cavities	
Gabion weir	Unknown	A21C-10-208-00	Redo upstream geo-fabric; concrete capping; earth works to fill cavities	
Gabion weir	Unknown	A21C-10-209-00	Concrete capping	
Gabion weir	Unknown	A21C-10-210-00	Concrete capping	
<b>INTERVENTION REDESIGNS</b>				
N/A				

## **Annexure B – Response Form**

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**WORKING FOR WETLANDS REHABILITATION PROJECT IN THE GAUTENG PROVINCE**

DEA Reference No: 14/12/16/3/3/1/762 / NEAS Reference No: DEA/EIA/0001567/2012

**Response Form for comment by Interested and Affected Parties**

Please return this form to Aurecon on/ before 4 February 2013

Attention: Franci Gresse

Tel No: (021) 526 6022 Fax No: (021) 526 9500

Postal Address: PO Box 494, Cape Town, 8000

Email: franci.gresse@aurecongroup.com

**REQUIRED INFORMATION**

*(Please note: the legislation governing EIA processes requires you to provide the following information). Should your details change during this process it is your responsibility to send us updated information.*

1) Please provide your contact details:

NAME: .....

ORGANISATION (If applicable): .....

POSTAL ADDRESS: .....

.....CODE: .....

PHONE NUMBER: .....FAX NUMBER: .....

CELLPHONE NUMBER: .....EMAIL: .....

2) How would you prefer to receive future project information?

Please tick  the appropriate box  Post  Email  Fax

3) Do you have any direct interest in the approval or refusal of the proposed project by the environmental authorities? Please tick  the appropriate box/es below

**BUSINESS/ FINANCIAL**

Competing business.....  Yes  No

Neighbouring business.....  Yes  No

Potential employment opportunities.....  Yes  No

Service provision (machinery etc) .....  Yes  No

**PERSONAL**

Neighbour to proposed project site.....  Yes  No

**OTHER (please explain)**

.....  Yes  No

.....

Please Turn Over.../

**ADDITIONAL INFORMATION**

**4) Please list any other Interested and Affected Parties that should be contacted (with contact details if available):**

Name/ Organisation	Postal and/ or email address	Tel No.	Fax No.

PLEASE LIST ANY COMMENTS, ISSUES OR CONCERNS THAT YOU MAY HAVE.  
(These will be captured in a Comments and Responses Report in which responses will be provided. Feel free to submit additional pages if more space is required).

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Thank you for your time.