Appendix B

PUBLIC PARTICIPATION

Appendix B1: DEA Meeting Minutes

Appendix B2: Landowner Agreements

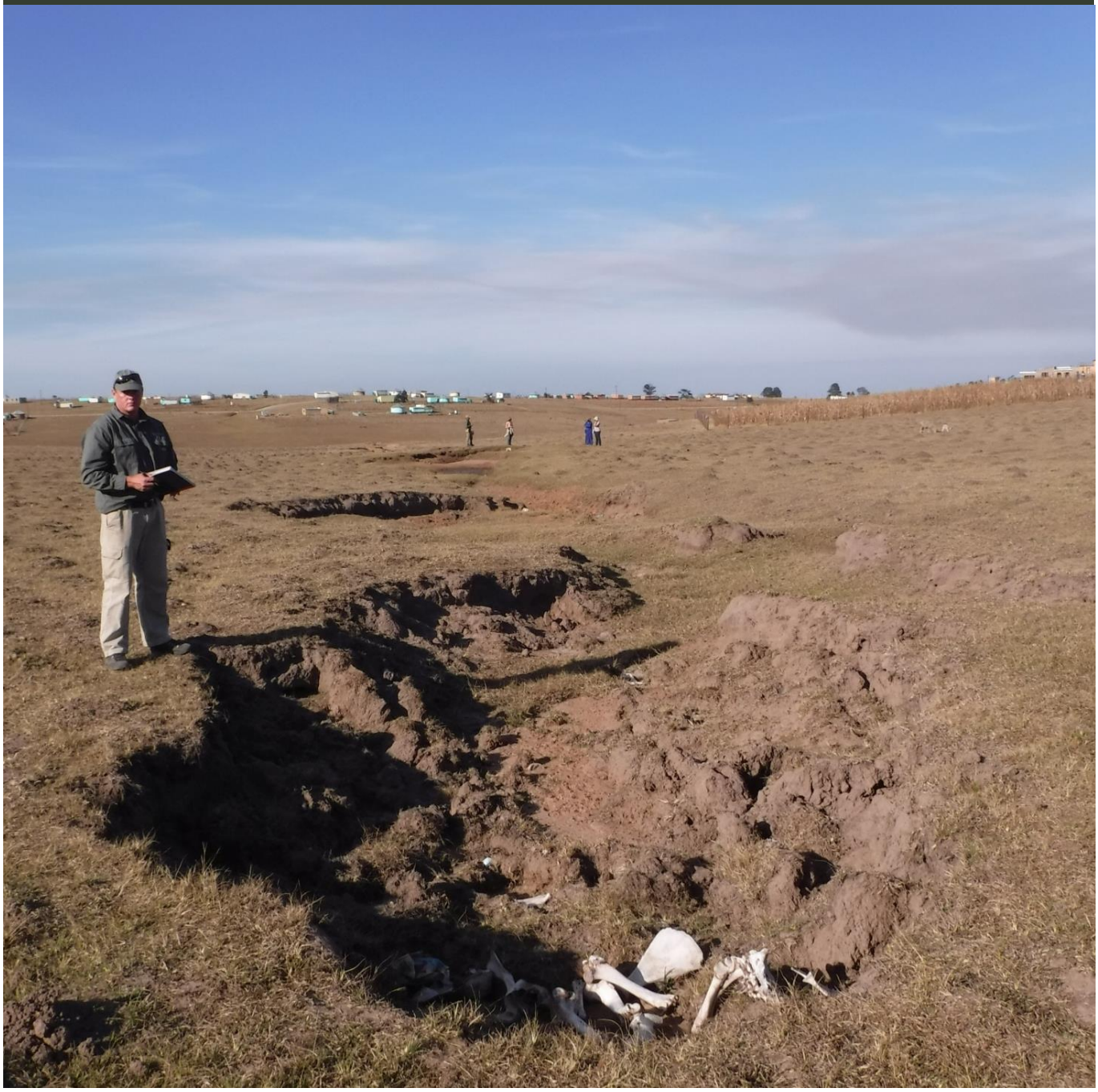
Appendix B3: Written Notification

Appendix B4: Proof of Mailing

Appendix B5: Comments and Responses

Working for Wetlands: Free State

Public Participation Report



This page was left blank intentionally

1 INTRODUCTION

The proposed interventions for wetland rehabilitation require the Working for Wetlands Programme to apply for environmental authorisation in terms of the Environmental Impact Assessment (EIA) Regulations (Government Notice (GN) Regulation (R) 982) of the National Environmental Management Act (Act 107 of 1998) (NEMA), as amended. To ensure that the Department of Environmental Affairs (DEA) can make an informed decision, based on a transparent and meaningful process, this Basic Assessment (BA) process must undergo a Public Participation Process (PPP).

This PPP must be undertaken in accordance with regulations 39-44 of the EIA Regulations. Additional guidance has also been incorporated from the Western Cape[1] Department of Environmental Affairs and Development Planning (DEA&DP) Guideline Document on Public Participation (March 2013).

This Public Participation Report (PPR) has therefore been compiled to collectively represent the consultation process that has been undertaken through the PPP. The following sections include:

Section 2 A database of interested and affected parties (I&APs) has been created and updated over the last 10 planning years. This database will be updated and maintained throughout the BA process.

Section 3 The consultation that was undertaken during the pre-application phase of the project has been described. Proof of advertisements and site notices are included in the report, and proof of delivery is attached as Appendix 4 to this PPR (i.e. Appendix B4).

Section 4 The consultation that was undertaken during the BA phase has been described. Proof of notification has been included in Appendix B4.

Section 5 Comments received during the PPP and responses provided will be summarised into a table in this section. All original comments and responses will be attached in Appendix B5.

Section 6 The way forward has been identified in this section.

2 I&AP DATABASE

A register of I&APs has been recorded for WfWetlands over the previous planning years undertaken by Aurecon. The existing national and provincial database has been updated with information from new I&APs responding to the advertisements and site notices throughout the application process. Proactive identification of I&APs, municipal representatives, organs of state, competent authorities and surrounding landowners was also undertaken to update the database specific to the new planning year.

Table 1 on the following page provides a summary of the I&AP database for the Free State Province. Please note that contact details have been omitted for privacy reasons.

[1] These guidelines have been considered as best practice even though the project may be located outside of the province.

Table 1: I&AP Database

Stakeholder	Contact	Organisation
State authority - national	Mr Mark Anderson	BirdLife South Africa
	Ms Mpume Ntlokwana	Department of Agriculture Forestry & Fisheries (DAFF): Deputy Director
	Ms Wilma Lutsch	Department of Environmental Affairs (DEA): Biodiversity Conservation
	Mr Danie Smit	DEA: Sensitive Environments
	Dr Guy Preston	DEA: Natural Resource Management (NRM)
	Mr Michael Braack	DEA: NRM, Planning
	Mr Christo Marais	DEA: NRM
	Ms Naomi Fourie	Department of Water and Sanitation (DWS)
	Dr Paul Meulenbeld	DWS
	Dr Wietshce Roets	DWS: Instream Water Use
	Ms Jackie Jay	DWS: Integrated Planning Section
	Ms Barabara Weston	DWS: Surface Water Reserve Determinations
	Mr Kelvin Legge	DWS: Integrated Environmental Engineering
	Mr Bongani Madikizela	Water Research Commission: Research Manager
	Ms Olga Jacobs	SANParks: Biodiversity and Social Projects
	Ms Helette Dunne	SANParks: Implementation Manager
	Mr Steven Segang	Endangered Wildlife Trust (EWT)
	Mr Ahmed Kahn	DEA
	Mr Louwrens Ferreira	DEA
	Mr Werner Roux	DEA
	Ms Kerryn Morrison	EWT
	Ms Tanya Smith	EWT
	Morgan Griffiths	WESSA
	Mr Umesh Bahadur	DEA: Working for Wetlands
	Dr Farai Tererai	DEA: Working for Wetlands: Manager: Planning, Monitoring and Evaluation
	Dr Piet-Louis Grunding	DEA: Working for Wetlands: Manager: Implementation
	Mr Seoka Lekota	DEA: Biodiversity Conservation
	Mr Dumisani Mabona	DEA: Biodiversity Conservation
State authority – provincial	Ms Grace Mkhosana	Department of Economic Development, Tourism and Environmental Affairs (DETEA): Deputy Director, Environmental Impact Management
	Ms Kefilwe Disipi	Department of Agriculture, Forestry and Fisheries (DAFF): Control Resource Auditor

	Dr Takisi Masiteng	Free State Provincial Department of Agriculture: Manager for Agricultural Development Support & Livelihoods
	Dr Tseliso Ntili	Department of Water and Sanitation (DWS): Acting Regional Head
	Mr Sibusiso Mthembu	DWS: Provincial Head, Gauteng Region
	Mr Nacelle Collins	DETEA: Wetland Forum Representative
	Ms Ramogele Sekwele	DWS: Scientific Manager, Coordination and Liaison
	Mr Ephraim Matsebe	DWS: Water Pollution Control Officer
Municipality	Mr Bernard Mphahlele	Thabo Mofutsanyana District Municipality: Manager for Technical Services
	Ms N.F Malatjie	Phumelela Local Municipality: Acting Municipal Manager
	Adv Robert	Maluti a Phofung Local Municipality: Municipal Manager
	Mr George Bengell	Thabo Mofutsanyana District Municipality: Councillor
	Ms Takatso Lebenya	Thabo Mofutsanyana District Municipality: Municipal Manager
	Mr Vusimusi Shabalala	Maluti a Phofung Local Municipality: Executive Mayor
	Cllr Mandla Tshabalala	Maluti a Phofung Local Municipality: Councillor
	Cllr Sebina Mahlangu	Maluti a Phofung Local Municipality: Councillor
	Cllr Joseph Rantsane	Maluti a Phofung Local Municipality: Councillor
	Mr Tlokotsi John Motaung	Phumelela Local Municipality: Mayor/Councillor
	Cllr Roseline Zwane	Phumelela Local Municipality: Councillor
Landowners	Piet Roets	Alieda Langspruit
	George Spies	Schoondraai
	Sithembile Mhlophe	SANParks: Park Manager
	Magdaleen Brits	Karkloof
	Jaco Maritz	Gansvlei
	Nacelle Collins	Seekoeivlei Nature Reserve & Sterkfontein Nature Reserve
General I&APs	Ms Caroline Bruce	Oaklands country manor (owner)
	Ms Terry Calmeyer	ILISO Consulting Environmental: Director (Certified EAP)
	Martin Campher	
	M.P Gavhi	South African National Biodiversity Institute: Free State National Botanical Garden (SANBI:FSNBG)
	Mr Zebulon Hlungwani	South African National Parks (SANPARKS)
	Mr Douglas Judd	N3TC (Technical Manager)
	Mr Anesh Madanlal	N3TC
	Ms Suzan S Mandla	South African National Biodiversity Institute (SANBI)
	Ms Nonzukiso Mbona	South African National Biodiversity Institute (SANBI)
	Mr Bornett Mototo	WfW
	Mr Ncedo Msutwana	Private

Mr Mphadeni Nthangeni	South African National Parks (SANPARKS): Project Manager & Implementer
L.D Rambuwani	South African National Biodiversity Institute: Free State National Botanical Garden (SANBI:FSNBG)
Mr Maitland Seaman	University of Free State
Mr Nditshedzeni Cedric Singo	Working for Water representative
Mr Johan van der Schyff	Implementor (Wilge, Maluti)
Ms Marie Watson	University of Free State
Khambule	South African National Biodiversity Institute (SANBI)
Mr Richard Ubisi	South African National Parks (SANPARKS): Project Manager
Ms Helette Dunn	South African National Parks (SANPARKS):
Mr Ernest Daemane	South African National Parks (SANPARKS):
Mpho Mafika	Private
Leonard Gumendega	CWR
Albert Sibeko	CWR
Tshepo Mokoena	CWR
Mr Marc 'de Fontaine	Rand Water
Mr William Mabotha	Rand Water Foundation
Mr Henk Stuart	
Johannes Roets	
Mr JJ Joubert	DETEA: Sterkfontein Reserve Manager

3 PRE-APPLICATION PHASE CONSULTATION

Prior to the circulation of the draft Basic Assessment Report (BAR) and submission of the application form to DEA, the following measures are undertaken to ensure that the legislated 30-day public comment period will reach the relevant parties.

ion meeting with DEA

A pre-application meeting was held between Aurecon, Working for Wetlands, and DEA on 30 October 2017 at Environment House. The meeting minutes are included in Appendix B1.

consultation

Landowner consultation is a vital component of the Working for Wetlands Programme Standard Operating Procedures. Landowners are consulted with during the planned Phase 1 and Phase 2 site visits, and Landowner Agreements must be signed prior to any construction commencing. Although it can be difficult to access landowner agreements for the full wetland system (some wetlands have more than 30 properties intersecting the wetland), landowner agreements will be obtained for work where targeted rehabilitation interventions are planned for the following implementation cycles. Landowner Agreements are included in Appendix B2.

3.3 Advertisements

Advertisements were placed in the national newspapers the *Sunday Times* (in English) and *Die Rapport* (in Afrikaans) to allow the public the opportunity to register their interest in the project. The advertisement in *Die Rapport* was published on 5 November 2017, and the advertisement in the Sunday Times will be published on 12 November 2017.

The English text has been included below in Figure 1 to ensure the text is legible. Proof of the page on which the advertisement in *Die Rapport* was published, is included in Figure 2. Please note that the original page size is A2, and the advertisement is therefore clearly legible. Following the 30-day public comment period, the proof of advertisement in the *Sunday Times* will be included in this document.

PUBLIC PARTICIPATION PROCESS: WORKING FOR WETLANDS PROGRAMME

Proposal: The Working for Wetlands (WfWetlands) Programme intends to rehabilitate a number of degraded wetlands within South Africa. Wetland rehabilitation involves the construction of a variety of interventions that could include, for example, gabion and concrete structures, as well as soft options such as re-vegetation and/ or alien plant removal. The number, type, scale and location of each of these interventions vary according to the nature and magnitude of the problem and the state of the wetland (i.e. the receiving environment).

Legal Framework: Authorisation is required in terms of the National Environmental Management Act (Act 107 of 1998), as amended, as described below:

A. National Environment Management Act, No. 107 of 1998 (NEMA), as amended: Rehabilitation proposals trigger the requirement for Basic Assessment (BA) approval in terms of the 2014 Environmental Impact Assessment (EIA) Regulations (Government Notice Regulation (GN R) 982, as amended) pursuant to NEMA. Aurecon South Africa (Pty) Ltd (Aurecon) has been appointed to undertake the BA processes and separate provincial applications will be submitted to the Department of Environmental Affairs (DEA) as the competent authority. The Listed Activities that are relevant to each application in terms of the 2014 EIA Regulations are GN R 983 (as amended): 12 and 48 (Listing Notice 1) and GN R 985 (as amended): 14 and 23 (Listing Notice 3).

B. National Water Act, No. 36 of 1998 (NWA): In terms of Section 39 of the NWA, a General authorisation (GA) has been granted for certain activities that are listed under the Act that usually require a Water Use Licence; as long as these activities are undertaken for wetland rehabilitation and the primary purpose of the rehabilitation is for conservation purposes (i.e. GN R 1198 of 18 December 2009).

Opportunity to Participate: Notice is hereby given of a public participation process in terms of the NEMA EIA Regulations (2014) and the NWA (1998). Draft BA Reports for the seven affected provinces, and Rehabilitation Plans for each of the associated wetland projects, are available to Interested and Affected Parties (I&APs) for a public comment period of 30 days from **10 November – 12 December 2017.** Notification will be sent to all identified and registered I&APs prior to the start date of this comment period. Digital copies of the reports will be available for download from Aurecon's website (http://aurecongroup.com/en/public-participation.aspx).

Province	Reports		Nearest City / Town(s)
	BAR	Rehabilitation Plan	
Eastern Cape	Yes	Gatberg, Qunu	Maclear, Umthatha
Free State	Yes	Seekoeivlei, Upper Wilge, Maluti and Golden Gate	Memel, Harrismith and Phuthaditjhaba
Gauteng	Yes	Gauteng North	Pretoria
KwaZulu-Natal	Yes	KZN Midlands, KZN North and Maputaland	Hluhluwe, Vryheid and Howick
***Limpopo**	Yes	Sekhukhune, Waterberg and Mahumani	Mogaladi , Lephalale and Baleni / Giyani
***Mpumalanga**	Yes	Lowveld Botanical Gardens and Draaikraal	Nelspruit and Dullstroom
***Western Cape**	Yes	Agulhas, Table Mountain National Park, West Coast and Peninsula	Bredasdorp, Worcester, Porterville and Cape Town

** Registered I&APs will be informed of the availability of the BAR and/or Rehabilitation Plans for public comment as soon as they are available.*

I&APs should refer to the relevant province and wetland project, and provide their comments together with their name, contact details and an indication of any direct business, financial, personal or other interest which they have in the applications to the contact person indicated below.

Contact: Franci Gresse / Simamkele Ntsengwane (of Aurecon) by **12 December 2017**

E-mail: franci.gresse@aurecongroup.com / Simamkele.Ntsengwane@aurecongroup.com

Tel: 021 526 9560, **Fax:** 021 526 9500, or **Post:** P.O. Box 494, Cape Town, 8000

Agriculture, Forestry and Fisheries
Environmental Affairs
Water Affairs and Sanitation

EXPANDED PUBLIC WORKS PROGRAMME
Creating opportunities towards human fullfilment

Working for Wetlands

aurecon

Figure 1: Advertisement for the Working for Wetlands Programme 2017/2018 Planning Cycle

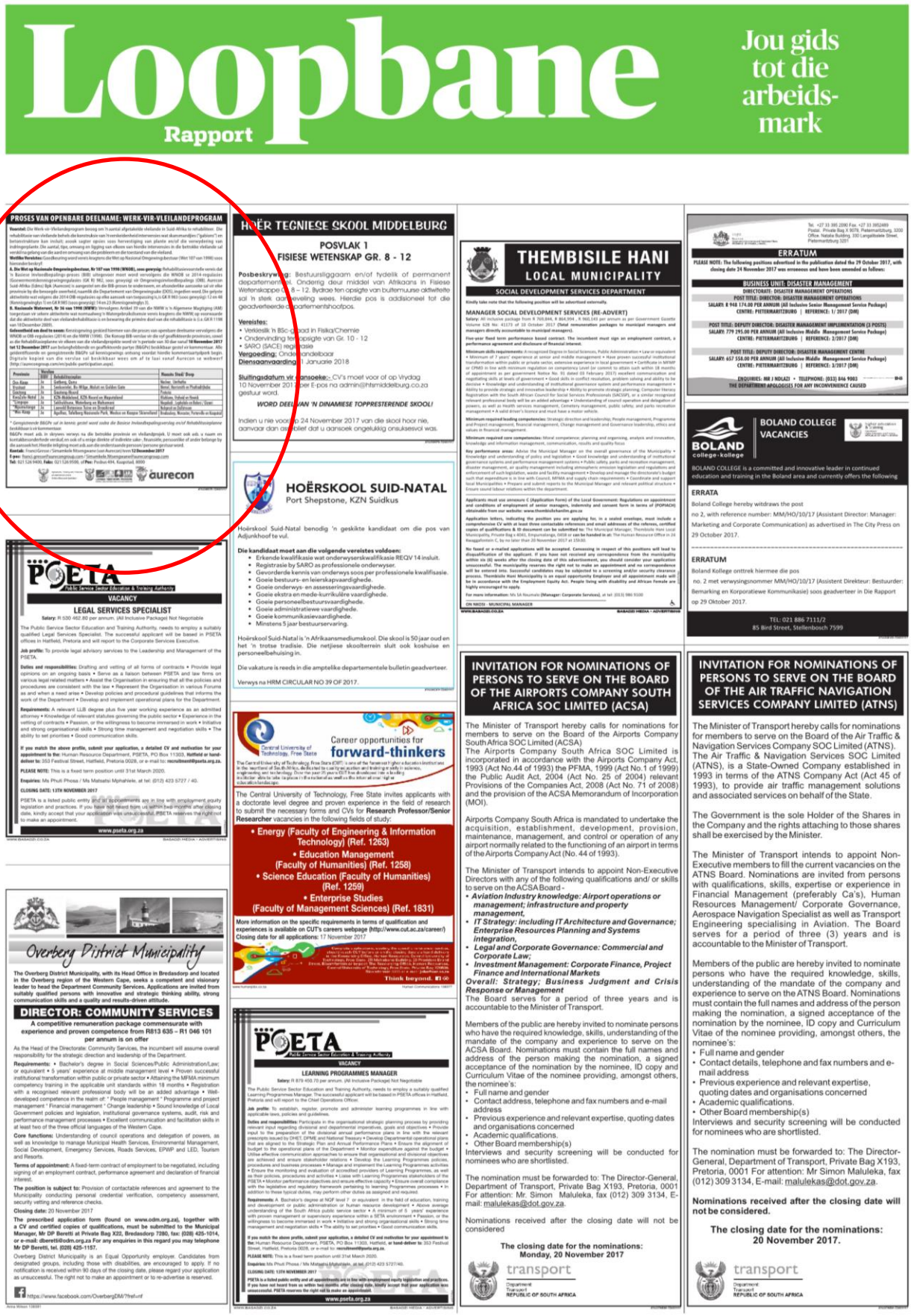


Figure 2: Proof of advertisement in *Die Rapport* (5 November 2017)

3.4 Site notices

Site notices were fixed on the farm boundaries or locations near to the affected wetland systems. The text of the site notice in English is included in

PUBLIC PARTICIPATION PROCESS: WORKING FOR WETLANDS PROGRAMME

FREE STATE PROVINCE

Proposal: The Working for Wetlands (WfWetlands) Programme intends to rehabilitate a number of degraded wetlands within South Africa. Wetland rehabilitation involves the construction of a variety of interventions that could include, for example, gabion and concrete structures, as well as soft options such as re-vegetation and/ or alien removal. The number, type, scale and location of each of these interventions vary according to the nature and magnitude of the problem and the state of the wetland (i.e. the receiving environment). Each Province has been considered separately and includes a number of Wetland Projects within which specific wetlands have been identified for rehabilitation. The following wetland rehabilitation projects are proposed in the **Free State** Province for the 2017/2018 planning cycle:

PROJECT	WETLAND SYSTEM	NEAREST TOWN	LATITUDE (DDMMSS)	LONGITUDE (DDMMSS)
Seekoevlei	Eben	Memel	27° 37' 11.60"S	29° 35' 42.33"E
	Seekoevlei		27° 33' 45.23"S	29° 35' 17.03"E
	Seekoeivlei Poort		27° 33’ 44.38”S	29° 36’ 53.20”E
	Gansvlei		27° 36’ 26.46"S	29° 31’ 30.25”E
Upper Wilge	Clifford	Harrismith	28° 21’ 19.80”S	29° 8’ 32.66”E
	Skoondraai		28°19'40.28"S	29°14'00.60"E
	Wapad		28° 17’ 17.19”S	29° 27’ 49.60”E
Maluti	Sedan	Phuthaditjhaba and Harrismith	28° 30' 11.67"S	29° 2' 32.36"E
	Statherick		28° 25' 13.353"S	28° 59' 12.107"E
	Niewejaar's Vley		28° 29' 55.01"S	29° 2' 2.92"E
Golden Gate	Ascot	Phuthaditjhaba	28° 31' 4.912"S	28° 41' 11.062"E
	Initium		28° 28' 29.44"S	28° 46' 12.34"E
	Twijfelhoek		28° 30' 55.31"S	28° 44' 11.80"E
	Vredenhof		28°31’16.44’’S	28°44’47.91’’E

Legal Framework: Authorisations are required in terms of the National Environment Management Act, No. 107 of 1998 (NEMA), as amended, as described below:

A. National Environment Management Act, No. 107 of 1998 (NEMA), as amended: Rehabilitation proposals trigger the requirement for a Basic Assessment (BA) in terms of the 2014 Environmental Impact Assessment (EIA) Regulations (Government Notice Regulations (GN R) 982) pursuant to NEMA. Aurecon South Africa (Pty) Ltd (Aurecon) has been appointed to undertake the BA processes to authorise wetland systems within the applicable provinces, as well as rehabilitation plans for each wetland project identified. These rehabilitation plans will have detailed information on the proposed interventions and will be used on site during implementation. Both the Basic Assessment Report and Rehabilitation Plans will be submitted to the Department of Environmental Affairs (DEA) as the competent authority. The Listed Activities that are relevant to each application in terms of the 2014 EIA Regulations are GN R 983: 12, 48 (Listing Notice 1) and GN R 985: 14 and 23 (Listing Notice 3).

B. National Water Act, No. 36 of 1998 (NWA): In terms of Section 39 of the NWA, a General Authorisation (GA) has been granted for certain activities that are listed under the Act that usually require a Water Use Licence; as long as these activities are undertaken for wetland rehabilitation and the primary purpose of the rehabilitation is for conservation purposes (i.e. GN R1198 of 18 December 2009).

Opportunity to Participate: Notice is hereby given of a public participation process in terms of the NEMA EIA Regulations (2014) and the NWA (1998). Interested and Affected Parties (I&APs) are invited to register their interest for future correspondence to the people mentioned below and to submit comments on the above mentioned reports between **10 November – 12 December 2017**. I&APs should please refer to the province, and where possible the project, and provide any comments with their name, contact details and an indication of any direct business, financial, personal or other interests which they have in the applications. I&APs also have 30 days to comment on the proposed exemptions from the public participation process.

More information can be found in a ‘context document’ available for download from Aurecon’s website (http://aurecongroup.com/en/public-participation.aspx).

Contact: Franci Gresse / Simamkele Ntsengwane (of Aurecon) by **12 December 2017.**
E-mail: franci.gresse@aurecongroup.com / Simamkele.Ntsengwane@aurecongroup.com
Tel: 021 526 9560, **Fax:** 021 526 9500, or **Post:** P.O. Box 494, Cape Town, 8000

Figure 3, and is followed by proof of placement of the site notices in the sub-section thereafter. The site notice was of a size and content required by the relevant guidelines.

Please note that proof of placement for the Upper Wilge and Seekoeivlei wetland projects will be included in the PPR of the Final Basic Assessment Report.

PUBLIC PARTICIPATION PROCESS: WORKING FOR WETLANDS PROGRAMME

FREE STATE PROVINCE

Proposal: The Working for Wetlands (WfWetlands) Programme intends to rehabilitate a number of degraded wetlands within South Africa. Wetland rehabilitation involves the construction of a variety of interventions that could include, for example, gabion and concrete structures, as well as soft options such as re-vegetation and/ or alien removal. The number, type, scale and location of each of these interventions vary according to the nature and magnitude of the problem and the state of the wetland (i.e. the receiving environment). Each Province has been considered separately and includes a number of Wetland Projects within which specific wetlands have been identified for rehabilitation. The following wetland rehabilitation projects are proposed in the **Free State** Province for the 2017/2018 planning cycle:

PROJECT	WETLAND SYSTEM	NEAREST TOWN	LATITUDE (DDMMSS)	LONGITUDE (DDMMSS)
Seekoevlei	Eben	Memel	27° 37' 11.60"S	29° 35' 42.33"E
	Seekoevlei		27° 33' 45.23"S	29° 35' 17.03"E
	Seekoeivlei Poort		27° 33’ 44.38”S	29° 36’ 53.20”E
	Gansvlei		27° 36’ 26.46"S	29° 31’ 30.25”E
Upper Wilge	Clifford	Harrismith	28° 21’ 19.80”S	29° 8’ 32.66”E
	Skoondraai		28°19'40.28"S	29°14'00.60"E
	Wapad		28° 17’ 17.19”S	29° 27’ 49.60”E
Maluti	Sedan	Phuthaditjhaba and Harrismith	28° 30' 11.67"S	29° 2' 32.36"E
	Statherick		28° 25' 13.353"S	28° 59' 12.107"E
	Niewejaar's Vley		28° 29' 55.01"S	29° 2' 2.92"E
Golden Gate	Ascot	Phuthaditjhaba	28° 31' 4.912"S	28° 41' 11.062"E
	Initium		28° 28' 29.44"S	28° 46' 12.34"E
	Twijfelhoek		28° 30' 55.31"S	28° 44' 11.80"E
	Vredenhof		28°31’16.44’’S	28°44’47.91’’E

Legal Framework: Authorisations are required in terms of the National Environment Management Act, No. 107 of 1998 (NEMA), as amended, as described below:

A. National Environment Management Act, No. 107 of 1998 (NEMA), as amended: Rehabilitation proposals trigger the requirement for a Basic Assessment (BA) in terms of the 2014 Environmental Impact Assessment (EIA) Regulations (Government Notice Regulations (GN R) 982) pursuant to NEMA. Aurecon South Africa (Pty) Ltd (Aurecon) has been appointed to undertake the BA processes to authorise wetland systems within the applicable provinces, as well as rehabilitation plans for each wetland project identified. These rehabilitation plans will have detailed information on the proposed interventions and will be used on site during implementation. Both the Basic Assessment Report and Rehabilitation Plans will be submitted to the Department of Environmental Affairs (DEA) as the competent authority. The Listed Activities that are relevant to each application in terms of the 2014 EIA Regulations are GN R 983: 12, 48 (Listing Notice 1) and GN R 985: 14 and 23 (Listing Notice 3).

B. National Water Act, No. 36 of 1998 (NWA): In terms of Section 39 of the NWA, a General Authorisation (GA) has been granted for certain activities that are listed under the Act that usually require a Water Use Licence; as long as these activities are undertaken for wetland rehabilitation and the primary purpose of the rehabilitation is for conservation purposes (i.e. GN R1198 of 18 December 2009).

Opportunity to Participate: Notice is hereby given of a public participation process in terms of the NEMA EIA Regulations (2014) and the NWA (1998). Interested and Affected Parties (I&APs) are invited to register their interest for future correspondence to the people mentioned below and to submit comments on the above mentioned reports between **10 November – 12 December 2017**. I&APs should please refer to the province, and where possible the project, and provide any comments with their name, contact details and an indication of any direct business, financial, personal or other interests which they have in the applications. I&APs also have 30 days to comment on the proposed exemptions from the public participation process.

More information can be found in a ‘context document’ available for download from Aurecon’s website (http://aurecongroup.com/en/public-participation.aspx).

Contact: Franci Gresse / Simamkele Ntsengwane (of Aurecon) by **12 December 2017.**
E-mail: franci.gresse@aurecongroup.com / Simamkele.Ntsengwane@aurecongroup.com
Tel: 021 526 9560, **Fax:** 021 526 9500, or **Post:** P.O. Box 494, Cape Town, 8000

Agriculture, Forestry and Fisheries
Environmental Affairs
Water Affairs and Sanitation

EXPANDED PUBLIC WORKS PROGRAMME
Creating opportunities towards human fullfilment

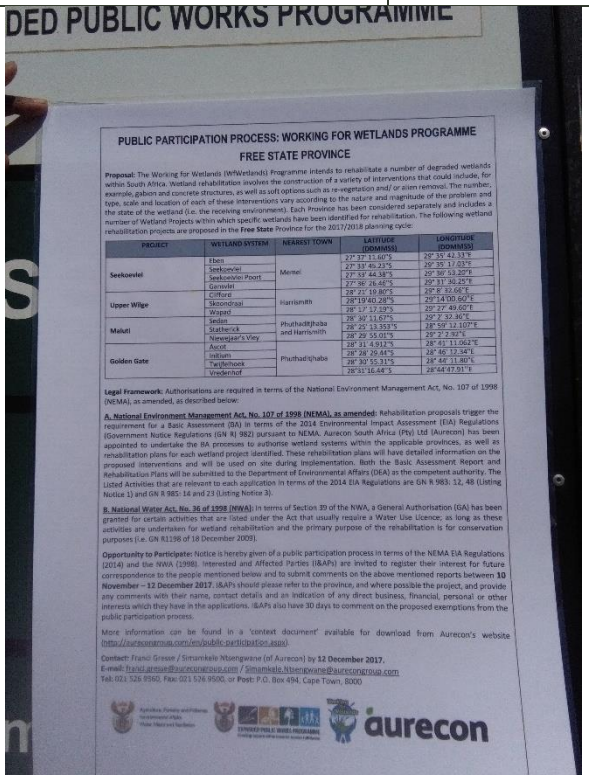
Working for Wetlands

aurecon

Figure 3: Example of text included in the Free State site notice

3.4.1 Proof of placement

Project:	Maluti	
Wetlands:	Niewerjaar's Vley 1, Sedan 1, Statherick 1 and 2	
Notice site:	Qwantji Junction	
Coordinates:	28˚26'14.7" S	28˚57'53.8" E



Project:	Maluti	
Wetlands:	Niewerjaar's Vley 1, Sedan 1, Statherick 1 and 2	
Notice site:	Qwantji Road	
Coordinates:	28˚29'33.7" S	28˚58'15.8" E

Project:	Maluti	
Wetlands:	Niewerjaar's Vley 1, Sedan 1, Statherick 1 and 2	
Notice site:	Sterkfontein	
Coordinates:	28˚24'50.8" S	29˚02'42.7" E

Project:	Maluti	
Wetlands:	Niewerjaar's Vley 1, Sedan 1, Statherick 1 and 2	
Notice site:	Qwantani Bridge	
Coordinates:	28˚30'56.0" S	28˚58'47.7" E

4 BASIC ASSESSMENT PHASE CONSULTATION

The Basic Assessment Report (BAR) for the Free State was made available for a 30-day public comment period from 10 November to 12 December 2017. Registered I&APs identified in the pre-application phase were notified of this comment period via letters delivered by courier, post or email. The written notification provided to the I&APs is included in Appendix B2.

Hardcopies and electronic copies on CD were made available to selected organs of state and municipalities based on their internal requirements. Electronic copies were made available to I&APs receiving email via Dropbox, and the full report was uploaded to the Aurecon website: http://www.aurecongroup.com/en/public-participation.aspx. The proof of delivery and notification is included in Appendix B3.

5 COMMENTS AND RESPONSES

Following the 30-day public comment period, Table 2 will be updated with a summary of the comments received and responses provided by Aurecon, the applicant, or the wetland specialist (where appropriate). The original comments and responses will be included in Appendix B4.

Table 2: I&AP Comments and Responses

No.	Date of comment, format of comment, name of organisation/ I&AP	Comment	Response from EAP/ Applicant/ Specialist
1			
2			
3			
4			

6 WAY FORWARD

This PPR was compiled for the draft BAR and will be updated following the 30-day public comment period (10 November – 12 December 2017). This document forms an annexure to the draft BAR for Working for Wetlands Programme for the Free State which will be submitted to the DEA for review and decision making in December 2017.

This document should be seen as a live document which will be updated and circulated upon finalisation of the BAR.

7 Appendices

Appendix 1 | DEA Meeting Minutes

Appendix 2 | Landowner Agreement(s)

Appendix 3 | Written Notification

Appendix 4 | Proof of Delivery

Appendix 5 | Comments and Responses

Appendix B1

DEA PRE-APPLICATION MEETING MINUTES

Aurecon South Africa (Pty) Ltd
Reg No 1977/003711/07

Aurecon Centre
1 Century City Drive
Waterford Precinct
Century City
Cape Town 7441

PO Box 494
Cape Town 8000
South Africa

T +27 21 526 9400
F +27 21 526 9500
E capetown@aurecongroup.com
W aurecongroup.com

Meeting Record

Project number	**113223**	Meeting date	**30 October 2017**
Project name	**Working for Wetlands**	Recorded by	**ZP**
Meeting/subject	**Pre-application meeting with DEA**	Total pages	**7**

Present	Apology	Copy	Name	Organisation	Contact details
☐	☑	☑	Mr Danie Smit (DS)	DEA: IEA	012 399 9394 dsmit@environment.gov.za
☑	☐	☑	Mr Vincent Chauke (VC)	DEA: Protected Areas	012 399 9399 vchauke@environment.gov.za
☑	☐	☑	Mr Coenraad Agenbach (CA)	DEA: SID	012 399 9403 cagenbach@environment.gov.za
☑	☐	☑	Ms Zamalanga Langa (ZL)	DEA: Protected Areas	012 399 9389 zlanga@environment.gov.za
☑	☐	☑	Ms Nyiko Nkosi (NN)	DEA: Protected Areas	012 399 9392 nnkosi@environment.gov.za
☑	☐	☑	Ms Dakato Notsholombo (DN)	DEA: SID	012 399 8877 dnotsholombo@environment.gov.za
☑	☐	☑	Mrs Olivia Letlalo (OL)	DEA: SID	012 399 8815 oletlalo@environment.gov.za
☑	☐	☑	Ms Samkelisiwe Dlamini (SD)	DEA: IEA	012 399 9379 sdlamini@environment.gov.za
☑	☐	☑	Dr Farai Tererai (FT)	NRM: WfWetlands	012 399 8970 ftererai@environment.gov.za
☑	☐	☑	Ms Franci Gresse (FG)	Aurecon	021 526 6022 franci.gresse@aurecongroup.com
☑	☑	☐	Ms Zoë Palmer (ZP)	Aurecon	021 526 6069 zoe.palmer@aurecongroup.com

Item	Topic	Recommended action
1	**Welcome and introductions** NN welcomed everyone to the meeting. She highlighted that the 2017 environmental authorisation (EA) processes for Working for Wetlands (WfWetlands) would be assessed by all directorates within the Chief Directorate of Integrated Environmental Authorisations, the Strategic Infrastructure Development (SID) directorate, Public Sector, Directorate of Integrated Permitting System as well as the Protected Areas (PA) directorate as part of the work-sharing initiative within DEA. NN requested that each attendee introduce themselves and indicate their department.	
2	FG began the presentation thanking DEA for the opportunity to meet. She highlighted that Aurecon have been involved in the project since 2010, and VC and ZL since 2014. Between the parties, the project has a wealth of shared experiences on the process.	
3	FG provided an outline of the agenda for the meeting and key definitions that would be used through the process.	
4	FG provided an overview of the WfWetlands Process by explaining the three phases according to which wetlands are identified, prioritised and rehabilitated.	

Item	Topic	Recommended action
	Phase 1: Areas for potential rehabilitation are identified by the Wetland Specialist and Provincial Coordinator (PC)[1] that should be taken forward as priority areas. This process is guided by a desktop assessment, the developed knowledge from previous planning cycles, as well as engagement with key stakeholders such as the local wetland forum, conservation bodies, etc. A ground-truthing exercise is undertaken to validate the findings, and get a better understanding of the drivers of the wetland problems, etc. Landowner engagement is an important part of this phase. **Phase 2:** The priority areas from Phase 1 are then visited by a multi-disciplinary team for each province consisting of an Engineer, a Wetland Specialist, an environmental assessment practitioner (EAP) and the PC to plan specific interventions to rehabilitate the identified wetland problems. In some cases, other stakeholders (such as Implementing Entities, conservation bodies, park managers, etc.) join for the planning visit to share their local knowledge of the systems and areas. During the planning process[2] the wetland specialist typically explains the wetland problem and what objective should be realised by the intervention. The engineer provides rehabilitation intervention options that could be considered which is then debated by the team to select the most appropriate intervention for the specific site. The EAP further ensures that the planning is undertaken in line with the necessary permitting and licensing procedures, and provides mitigation measures to be considered for implementation. Key deliverables in this phase include the following, more detail for which can be found below: • Landowner Agreements • Provincial Basic Assessment Report (BAR) (Item 8) • National Environmental Management Programme (EMPr) (Item 6) • Project Specific Wetland Status Quo Report • Project Specific Rehabilitation Plan **Phase 3:** Following the receipt of the necessary approvals, the interventions are then implemented (usually the year after the planning site visit, but sometimes a few years later). To get to implementation, Project Implementation Plans (PIPs) are compiled and approved which identify the specific interventions that will be used, and costed for. Final construction drawings will be drafted and signed off by the Engineer, and the interventions will be set out with the Implementing Entities. Following this, construction activities will commence, and will be audited by WfWetlands. Completed works are signed off by the Engineer.	
5	During the above discussion, FG highlighted that **WfWetlands is not a development project**. The purpose of the programme is to rehabilitate damaged wetlands. As such, the planning is aimed to be a supporting and efficient process so that as much funds as possible can be spent on the actual labour and materials for the interventions.	
6	**EMPr** The construction environmental management plan (CEMP) was first written in 2006 when the National Environmental Management Act (Act 107 of 1998) (NEMA) Environmental Impact Assessment (EIA) Regulations were promulgated and has been updated regularly since then. This year the EMPr is undergoing significant improvement to make the document more user-friendly. General environmental management measures are included in this document, which are shaped by the mitigation hierarchy. Furthermore, key roles and responsibilities are fully detailed. The purpose is to use this document in addition to the Rehabilitation Plan which will provide any site-specific mitigation measures worth implementing.	

[1] The PC is an Assistant Director for Wetland Projects from the DEA, who is responsible for the management of the WfWetlands Programme within a specific province.

[2] Please note that this description is highly simplified for the purpose of these minutes. Kindly refer to the Context Document in Appendix 1 which provides more detail.

Item	Topic	Recommended action
7	**Legislation** FG highlighted that the WfWetlands Programme triggers the following legislation: • NEMA (submission of application for EA and BAR) • NWA (registration of interventions for GA under Section 21) • NHRA (SAHRA included as a commenting authority, only some projects require heritage processes and where necessary a heritage consultant will be appointed to undertake an HIA).	
8	**NEMA – BAR and Rehab Plans** Prior to 2014, each proposed intervention (up to 800 per year) was included in the BAR application. However, the nature of the WfWetlands Programme made this very cumbersome. The wetland systems in which the interventions are proposed are dynamic and the receiving environment can often change rapidly between planning and implementation which may require an intervention to be moved a few metres (making the authorised coordinate irrelevant) or may need to be changed entirely. To amend the EA, would add months delaying the implementation thereof. Since 2014, WfWetlands has requested the DEA to authorise wetland systems[3] under the BAR process using high-level information, with the condition that a Rehabilitation Plan must be approved by the DEA before implementation commences. ***Question (Q) (NN): Will the EMPr be included in the BAR?*** Answer (A) (FG): Yes. We try to provide as much information as possible to help the Department make an informed decision. However, this EMPr will be general and site-specific measures will only be included in the applicable rehabilitation plan. ***Q (NN): Will the rehabilitation plans then come after the BAR?*** A (FG): Yes. Often due to time constraints, we will submit them at the same time. But if a wetland system is authorised in year one, then we submit a rehabilitation plan for a wetland (also referred to as a hydro-geomorphic unit (HGM unit)) within that system for year one, two, three etc. to the Department for approval (as a condition of the Environmental Authorisation). Comment (CA): For the last 15 years, there have been examples on other projects where IEM provided classes/ categories of interventions so you don't have to reinvent the wheel every time. ***Q (CA): How do you assess alternatives?*** A (FG): We don't explicitly assess the impact of alternatives because of the iterative process that is undertaken to ensure the selected intervention is the best suited intervention for the site. Comment (CA): Rather than keeping quiet about alternatives, please acknowledge that you've addressed it through your process. That way people who are not familiar with the project won't make assumptions (i.e. that the information hasn't been considered).	
9	FG displayed the new BAR template on the screen and circulated a hard copy for the attendees' perusal. FG highlighted that a table is provided in the front of the report to serve as a checklist that meets the requirements of Appendix 1 of the EIA regulations. This enables the reader to locate the necessary information in the report. A BAR is written at a provincial level, which will include one to four projects that will be further detailed in the applicable rehabilitation plans.	

[3] A wetland system consists of various hydro-geomorphic (HGM) units which are interlinked with each other. These HGM-units are defined based on their "geomorphic setting (e.g. hillslope or valley-bottom; whether drainage is open or closed), water source (surface water dominated or sub-surface water dominated) and pattern of water flow through the wetland unit (diffusely or channelled)" (Source: WET-Health series). (Please refer to the end of this document for an illustration).

Item	Topic	Recommended action
	The following list provides the outline of the proposed BAR for 2017. The column alongside highlights key suggestions to improve the template.	
	1. Introduction and background Section 1 provides a description of the projects within the province, and highlights the current wetland systems included in the application for EA. Key wetland information such as name, central coordinate and property description is included here. ***Q (NN): Are the wetlands in the same area for the projects?*** A (FG): Yes. A project area is an envelope of some wetland systems in proximity to one another. During implementation, a contractor is appointed per project so the wetlands need to be close to one another to reduce unnecessary costs (such as travel).	Include a more transparent introduction to the project and phases to assist readers that are unfamiliar with the Programme. For example, an infographic that guides the reader to the relevant sections. Highlight specialist input and acknowledge clearly why a specialist report does not accompany the BAR.
	2. Legal and planning context A table (similar to what was included in the old BAR form) is included and provides an overview of the legal and policy frameworks that are considered for this project. The National Water Act (Act 36 of 1998) (NWA) has provided legislation for WfWetlands that enables it to register each intervention for general authorisation (GA) rather than having to undertake a water use license process. The GA requirements are based on the contents of the rehabilitation plans and is therefore not available at the time of the BAR. With regard to the National Heritage Resources Act (Act 25 of 1999) (NHRA), the South African Heritage Resources Agency (SAHRA) is a registered interested and affected party (I&AP) and reports are uploaded on the SAHRIS for consideration, although comments are rarely received. In some projects, where heritage concerns arise, heritage specialists will be appointed to assist with assessment of potential impacts (e.g. MPU and WC). Listed activities are specific to the years' activities but are broad as the detailed work might not have yet been planned. Activities with exclusions for maintenance management plans are not included in the BAR, but are highlighted in the Rehab Plan. Expansion activities are included in case interventions need to be adjusted, e.g. if gabion baskets break, or something upstream affects the planned intervention.	(NN) Under Listing Notice 3, please address the sub-activities in your description. E.g. the x project is located within the xx Protected Area.
	3. Methodology This section provides a description on the approach to the project, detailing the three phases mentioned above in Row 4. It describes the impact assessment methodology that is applied. The assumptions and limitations are also addressed. There are a few gaps in knowledge due to the planning process, but these are generally addressed during the Phase 2 planning process.	
	4. Public participation WfWetlands builds on existing I&AP databases every year, and do not remove I&APs unless they specifically request to be	

Item	Topic	Recommended action
	removed. We try to get all adjacent landowners, but for big systems it can be challenging. We do however also advertise in national newspapers and place site notices on wetland boundary fences. Most of the comments received on reports today include "Thank you for the good work", "Is there a way that I can be involved" (collaboration or job seeker), and "I know of a wetland that needs rehabilitation". To date, no appeals have been lodged against the Programme. In terms of circulating reports for public comment, CDs with electronic copies are circulated as far as possible to limit printing (costs can exceed R50,000 with limited comments received). **5. Activity description** This section provides an overview of the types of interventions that might be considered for Phase 2 planning. Illustrations of these are included in Appendix A (Engineering Booklet). The need and desirability and alternatives are also detailed in this section. **6. Baseline description** This section provides the baseline description of the wetland systems including the biophysical, cultural and heritage, and socio-economic environment. The biophysical description is currently very high level and more information is provided in detail in the rehabilitation plans. It does however provide information on the general problems occurring within the wetland system and the rehabilitation objectives WfWetlands would like to achieve. The cultural and heritage environment is described very generally, but is broadened with detail where more information is applicable (e.g. Mpumalanga and Western Cape). The socio-economic environment provides high-level baseline based on StatsSA statistics, and then highlights the potential benefits created by the programme. **7. Impact assessment** Construction and operational impacts are detailed in tables with impact descriptions, assessment of impacts, and proposed mitigation measures. Mitigation measures are included in EMPr which will accompany the BARs and rehabilitation plans. Each assessment includes the no-go alternative. **8. Conclusion and way forward** Concluding information and summary of assessment. Level of confidence etc.	The section headings should be updated as the biophysical description currently looks like it is missing. This must contain enough information that will enable the case officer to make an informed decision as a stand-alone report.
10	**Q & A on report** ***Q (NN): What type of specialist studies do you do for the project?*** A (FG): We get input into the BAR from the wetland specialist who undertakes the Phase 1 and 2 planning, but this report is only included in the Rehab Plan. If a wetland is located within a sensitive	

Item	Topic	Recommended action
	heritage environment, then a heritage specialist will be appointed to undertake a Heritage Impact Assessment (HIA). Comment (NN): Please ensure that this is properly explained in the report. Otherwise we may assume that the EAP is the only party providing input. ***Q (SD): As a new person to the project, the overview of the project is not clear. Could this be improved?*** A (FG): We could highlight more information in the introduction and provide a diagram that provides a better overview. ***Q (DN): How was the application previously assessed, as it might be different with new case-officers?*** ***Q (CA): What was in the authorisation? Can we discuss the authorisation conditions internally and set up a meeting to plan way forward?*** DEA representatives agreed to this approach. Comment (NN): Because this project is different, the reminders must occur upfront in the report describing the process undertaken. ***Q (NN): For a maintenance management plan (i.e. the rehabilitation plan) do you include the excluded listed activities there?*** A (FG): No, but we highlight the impacts from those sorts of activities, so that the information is provided. But they are not explicitly assessed in the rehabilitation plans. ***Q (CA): Essentially we need to have enough information to make an informed decision. Have there been any appeals?*** A (FG, VC, FT): No appeals since we started. ***Q (CA): Without specialist input into your BAR, how are you going to know about an endangered fish species, for example, in an aquatic ecosystem? How are you going to assess that impact?*** A (FG): Where information is available on the occurrence of endangered species, the relevant specialists are contacted and involved during the planning phase. This information is often also obtained during Phase 1 when the PCs present the Phase 1 information to Wetland Forums and/or other conservation bodies. We also recently had a situation in Agulhas with a newly described fish species (red fin) that was found on site by the Implementing Entity during the construction phase. CapeNature was contacted as soon as the fish were spotted to provide guidance, and mitigation measures were implemented.	
11	FG offered for the new case officers to join the planning team on the Phase 2 planning site visit for Nylsvley in the next few weeks. CA agreed that it would be good to see the implemented interventions and get an idea of the planning process. The invitation should be extended to the Chief Director and a range of case officers. FG added that a “mock” planning session could also be arranged at a wetland located closer, like Colbyn. This wetland also includes existing intervention structures that could be shown to the Department.	
12	**Amendment process** FG raised a concern with the current amendment process. The process is currently cumbersome and expensive, which directly removes money that could be spent on rehabilitating wetlands. This process also requires a 30-day public comment period which also has time implications.	

Item	Topic	Recommended action
	OL asked if this was something that could be addressed through Section 30 where interventions are changed due to an emergency? CA indicated that lives need to be at risk in an emergency for this section to be applicable. CA stated that legal requirements cannot be avoided. Aurecon could send a well-motivated email to the Department to enquire if there are other methods available. For example, another method could be to reconsider what boundaries/ parameters are authorised from the beginning of the process. ***Q (CA): Do you pay application fees for EIA processes?*** A (FG): No, WfWetlands is exempt as it is a government project.	
13	NN closed the meeting shortly after 12h15.	

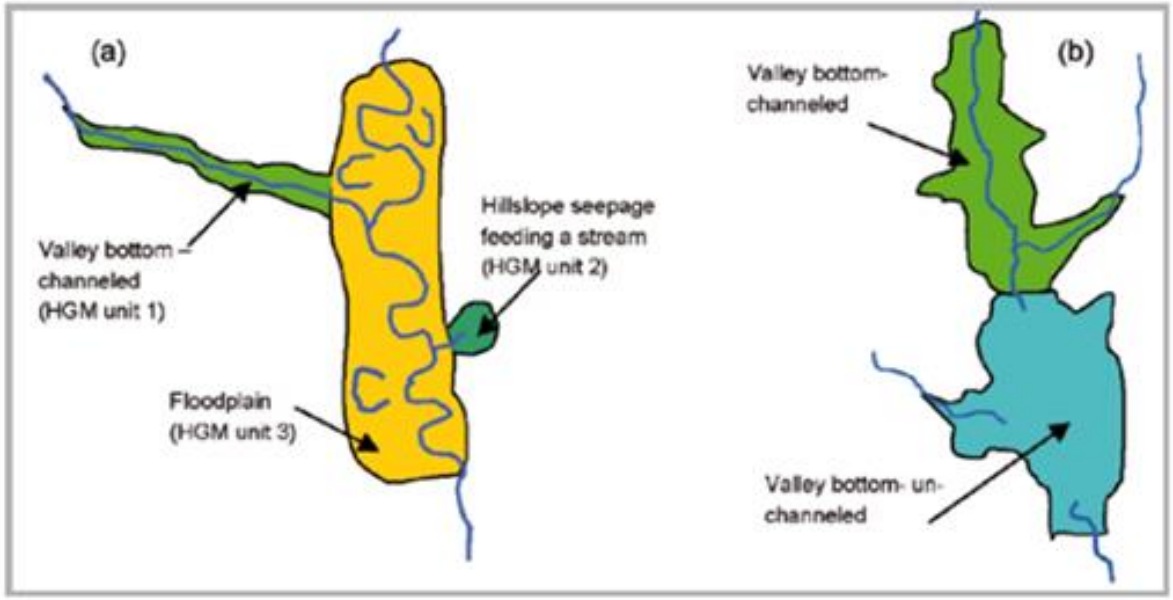


Figure 1.3: Two wetlands, the first comprising three different hydro-geomorphic units and the second comprising two units (see Table 1.2 for definitions of the HGM unit types)

Figure 1 | Illustration of two wetlands/ wetland systems comprising different HGM units (Source: WET-Health series)

WORKING FOR WETLANDS: CONTEXT DOCUMENT

1. Introduction

Working for Wetlands (WfWetlands) is a government programme managed by the Natural Resource Management Programme (NRMP) of the Department of Environmental Affairs, and is a joint initiative with the Departments of Water and Sanitation (DWS), and Agriculture, Forestry and Fisheries (DAFF). In this way the programme is an expression of the overlapping wetland-related mandates of the three parent departments, and besides giving effect to a range of policy objectives, it also honours South Africa's commitments under several international agreements, especially the Ramsar Convention on Wetlands.

The programme is mandated to protect pristine wetlands, promote their wise-use and rehabilitate those that are damaged throughout South Africa, with an emphasis on complying with the principles of the Expanded Public Works Programme (EPWP) and using only local Small, Medium and Micro Enterprises (SMMEs). The EPWP seeks to draw significant numbers of unemployed people into the productive sector of the economy, gaining skills while they work and increasing their capacity to earn an income.

2. Wetlands and their importance

Once considered valueless wastelands that needed to be drained or converted to more useful land use purposes, wetlands are now seen in an entirely different light. Today wetlands are more commonly perceived as natural assets and natural infrastructure able to provide a range of products, functions and services free of charge.

That which actually constitutes a wetland is often not fully understood. Common misconceptions have been that wetlands must be wet, must have a river running through them, or must always be situated in low-lying areas. The definition of a wetland is much broader and more textured: they are characterised more by soil properties and flora than by an abundance of water.

The National Water Act, No. 36 of 1998 defines a wetland as:

> "*land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil*".

The Ramsar Convention defines wetlands as:

> "*areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed 6m*" (Article 1, Ramsar Convention on Wetlands. 1971).

Wetlands can therefore be seasonal and may experience regular dry spells (sometimes even staying dry for up to several years), or they can be frequently or permanently wet. Wetlands can occur in a variety of locations across the landscape (**Plate A**), and may even occur at the top of a hill, nowhere near a river. A pan, for example, is a wetland which forms in a depression. Wetlands also come in many sizes; they can be as small as a few square metres (e.g. at a low point along the side of a road) or cover a significant portion of a country (e.g. the Okavango Delta).

Plate A: A large, seasonal wetland identifiable by the characteristic flora. This wetland contained no surface water at the time of the photograph

Wetland ecosystems provide a range of ecological and social services which benefit people, society and the economy at large:

- 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.
- Providing ecological infrastructure replacing the need for municipal infrastructure by providing the same or better benefit at a fraction of the cost, for example:
    - The movement of water in the landscape is slowed down by wetlands, which offers the dual benefit of flood control as well as a means of purification.
    - The slow movement of water allows heavier impurities to settle and phreatic vegetation and micro-bacteria the opportunity to remove pollutants and nutrients.
- Functioning as valuable open spaces and create recreational opportunities for people that include hiking along wetlands, fishing, boating, and bird-watching.
- Having cultural and spiritual significance for the communities living nearby. Commercially, products such as reeds and peat are also harvested from wetlands (**Plate B**).

Plate B: Commercial products made by locals from reeds 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.

3. Wetland degradation

It has been estimated that originally over 10% of the Republic of South Africa (RSA) was covered by wetlands. However, this figure decreases significantly every year owing to unsustainable land-use practices. It is estimated that more than 50% of South Africa's wetlands have been destroyed through drainage of wetlands for crops and pastures, poorly managed burning regimes, overgrazing, disturbances to wetland soils, vegetation clearing as well as industrial and urban development (including mining activities).

Although wetlands are high-value ecosystems that make up only a small fraction of the country, they rank among the most threatened ecosystems in South Africa. According to a recent Council of Scientific Research (CSIR) study (Nel and Driver, 2012), South Africa's remaining wetlands were identified as the most threatened of all South Africa's ecosystems, with 48% of wetland ecosystem types being critically endangered, 12% endangered and 5% vulnerable. Only 11% of wetland ecosystem types are well protected, with 71% not protected at all.

The remaining wetland systems suffer from severe erosion and sedimentation, undesirable plant species and aquatic fauna infestations, unsustainable exploitation, artificial drainage and damming, and pollution. The continued degradation of wetlands will impact on biodiversity, ecological function, and the provision of ecosystem services with subsequent impacts on livelihoods and economic activity, as well as health and wellbeing of communities. In the absence of functional wetlands, the carbon cycle, the nutrient cycle and the water cycle would be significantly altered, mostly detrimentally.

Wetland conservation and rehabilitation should be at the heart of water management. It is necessary to prioritise South Africa's remaining wetlands such that those that offer valuable ecosystem services and are least impacted by current pressures or threats are offered immediate attention to avoid further loss, conversion or degradation.

4. The Working for Wetlands Programme

South Africa is a dry country, but is endowed with exceptionally rich biodiversity. The nation has a pressing reason to value the water-related services that wetlands provide. It is estimated that by 2025, South Africa will be one of fourteen African countries classified as "*subject to water scarcity*" (UNESCO, 2000). The conservation of wetlands is fundamental to the sustainable management of water quality and quantity, and wetland rehabilitation is therefore essential to conserving water resources in South Africa.

The guiding principles of the National Water Act, No. 36 of 1998, recognise the need to protect water resources. In responding to the challenge of stemming the loss of wetlands and maintaining and enhancing the benefits they provide, government has recognised that, in order to be truly effective, strategies for wetland conservation need to include a combination of proactive measures for maintaining healthy wetlands, together with interventions for rehabilitating those that have been degraded. These objectives are currently being expressed in a coordinated and innovative way through the WfWetlands Programme.

Working for Wetlands pursues its mandate of wetland protection, wise use and rehabilitation in a manner that maximises employment creation, supports small emerging businesses, and transfers skills amongst vulnerable and marginalised groups. In the 13 years since 2004, the WfWetlands Programme has invested just under R1 billion in wetland rehabilitation and has been involved in over 1,300 wetlands, thereby improving or securing the health of over 70 000 hectares of wetland environment. The WfWetlands Programme has a current budget of just over R 130 million, of which approximately 35% is allocated directly to paying wages. Being part of the EPWP, the WfWetlands Programme has created more than 27 000 jobs and over 3 million person-days of paid work. The local teams are made up of a minimum of 55% women, 55% youth and 2% disabled persons.

Wetlands are not easy ecosystems to map at a broad scale as they are numerous, often small and difficult to recognise and delineate on remotely sensed imagery such as satellite photos. The WfWetlands Programme houses the National Wetlands Inventory Project (NWI) which aims to provide clarity on the extent, distribution and condition of South Africa's wetlands. The project clarifies how many and which rivers and wetlands have to be maintained in a natural condition to sustain economic and social development, while still conserving South Africa's freshwater biodiversity.

The National Freshwater Ecosystem Priority Areas (NFEPA) has used the NWI data to produce the most comprehensive national wetland map to date, called the NFEPA Atlas. This atlas enables the planning of wetland rehabilitation on a catchment scale.

Other activities that form part of the WfWetlands Programme include:

- Raising awareness of wetlands among workers, landowners and the general public; and
- Providing adult basic education and training, and technical skills transfer (in line with the emphasis of the EPWP on training, the WfWetlands Programme has provided 250,000 days of training in vocation and life skills).

5. Rehabilitation interventions

The successful rehabilitation of a wetland requires that the cause of damage or degradation is addressed, and that the natural flow patterns of the wetland system are re-established (flow is encouraged to disperse rather than to concentrate). Approximately 800 interventions are implemented every year in the WfWetlands Programme. The key purposes of implementing interventions include:

- Restoration of hydrological integrity (e.g. raising the general water table or redistributing the water across the wetland area);
- Recreation of wetland habitat towards the conservation of biodiversity; and
- Job creation and social upliftment.

Typical activities undertaken within the projects include:

- Plugging artificial drainage channels created by development or historical agricultural practices to drain wetland areas for other land use purposes;

- Constructing structures (gabions, berms, weirs) to divert or redistribute water to more natural flow paths, or to prevent erosion by unnatural flow rates that have resulted from unsustainable land use practices or development; and
- Removing invasive alien or undesirable plant species from wetlands and their immediate catchments (in conjunction with the Working for Water initiative).

Methods of wetland rehabilitation may include hard engineering interventions such as:

- Earth berms or gabion systems to block artificial channels that drain water from or divert polluted water to the wetland;
- Concrete and gabion weirs to act as settling ponds, to reduce flow velocity or to re-disperse water across former wetland areas thereby re-establishing natural flow paths;
- Earth or gabion structure plugs to raise channel floors and reduce water velocity;
- Concrete or gabion structures to stabilise head-cut or other erosion and prevent gullies;
- Concrete and/or reno mattress strips as road crossings to address channels and erosion in wetlands from vehicles; and
- Gabion structures (mattresses, blankets or baskets) to provide a platform for the growth of desired wetland vegetation.

Soft engineering interventions also offer successful rehabilitation methods, and the following are often used together with the hard engineering interventions:

- The use of biodegradable or natural soil retention systems such as eco-logs, Macmat-R plant plugs, grass or hay bales, and brush-packing techniques;
- The re-vegetation of stabilised areas with appropriate wetland and riparian plant species;
- Alien invasive plant clearing, which is an important part of wetland rehabilitation (this is supported by the Working for Water Programme).
- The fencing off of sensitive areas within the wetland to keep grazers out and to allow for the re-establishment of vegetation;
- In some instances, the use of appropriate fire management and burning regimes. The removal of undesirable plant and animal species; and
- In some wetlands, it may be possible to involve the community to develop a management plan for wise use within a wetland. This can involve capacity building through educating and training the community members who would monitor the progress. A plan could involve measures such as rotational grazing with long term benefits for rangeland quality.

6. Programme, projects and phases

In order to manage the **WfWetlands Programme**, wetlands have been grouped into “projects”, and each **Wetland Project** encompasses several smaller wetland systems which are each divided into smaller, more manageable and homogenous wetland units. A Wetland Project may be located within one or more quaternary catchments within a Province. The WfWetlands Programme is currently managing 37 Wetland Projects countrywide, and rehabilitation activities range from stabilising degradation to the more ambitious restoration of wetlands to their original conditions.

Each Wetland Project is managed in three phases (as shown in the flow diagram in **Plate C**) over a two-year cycle. The first two phases straddle the first year of the cycle and involve planning, identification, design and authorisation of interventions. The third phase is implementation, which takes place during the second year.

In order to undertake these three phases, a collaborative team has been established as follows. The **Programme Team** currently comprises two subdirectories: a) Implementation and After Care and b) Planning, Monitoring and Evaluation. The Assistant Directors for Wetlands Programmes (ASDs) [1] report to the Implementation and After Care Deputy Director and are responsible for the identification and implementation of projects in their regions. The Programme Team is further supported by a small team that fulfil various roles such as Geographical Information Systems (GIS) and training. Independent Design Engineers and Environmental Assessment Practitioners (EAPs) are appointed to undertake the

[1] Previously referred to as Provincial Coordinators (PCs).

planning, design and authorisation components of the project. The project team is assisted by a number of wetland specialists who provide scientific insight into the operation of wetlands and bring expert and often local knowledge to the project teams. They are also assisted by the landowners and implementers who have valuable local knowledge of these wetlands.

The first phase is the identification of suitable wetlands which require intervention. The purpose of Phase 1 and the associated reporting is to identify:

- Priority catchments and associated wetlands/ sites within which rehabilitation work needs to be undertaken; and
- Key stakeholders who will provide meaningful input into the planning phases and wetland selection processes, and who will review and comment on the rehabilitation proposals.

Phase 1 commences with a catchment and wetland prioritisation process for every province. The Wetland Specialist responsible for a particular province undertakes a desktop study to determine the most suitable wetlands for the WfWetlands rehabilitation efforts. The involvement of Provincial Wetland Forums and other key stakeholders is a critical component of the wetland identification processes since these stakeholders are representative of diverse groups with shared interests (e.g. from government institutions to amateur ecological enthusiasts). This phase also involves initial communication with local land-owners and other Interested and Affected Parties (I&APs) to gauge the social benefits of the work. Aerial surveys of the areas in question may be undertaken, as well as limited fieldwork investigations or site visits to confirm the inclusion of certain wetland projects or units. Once wetlands have been prioritised and agreed on by the various parties, specific rehabilitation objectives are determined for each wetland following a rapid wetland assessment undertaken by the Wetland Specialist.

Phase 2 requires site visits attended by the fieldwork team comprising a Wetland Specialist, a Design Engineer, an EAP, and an ASD. Other interested stakeholders or authorities, landowners and in some instances the Implementing Agents (IAs) may also attend the site visits. This allows for a highly collaborative approach, as options are discussed by experts from different scientific disciplines, as well as local inhabitants with deep anecdotal knowledge. While on site, rehabilitation opportunities are investigated. The details of the proposed interventions are discussed, some survey work is undertaken by the engineers, and Global Positioning System (GPS) coordinates and digital photographs are taken for record purposes. Furthermore, appropriate dimensions of the locations are recorded in order to design and calculate quantities for the interventions. At the end of the site visit the rehabilitation objectives together with the location layout of the proposed interventions are agreed upon by the project team.

During Phase 2, monitoring systems are put in place to support the continuous evaluation of the interventions. The systems monitor both the environmental and social benefits of the interventions. As part of the Phase 2 site visit, a maintenance inventory of any existing interventions that are damaged and/or failing and thus requiring maintenance is compiled by the ASD, in consultation with the Design Engineer.

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 the costs calculated. The Design Engineer also reviews and, if necessary, adjusts any previously planned interventions that are included into the historical Rehabilitation Plans.

Phase 2 also comprises a reporting component where Rehabilitation Plans are prepared for each Wetland Project. The Rehabilitation Plans include details of each intervention to be implemented, preliminary construction drawings and all necessary documentation required by applicable legislation. The Rehabilitation Plans are reviewed by various government departments, stakeholders and the general public before a specific subset of interventions are selected for implementation.

Landowner consent is an important component of each phase in each Wetland Project. The flow diagram, **Plate C**, demonstrates the point at which various consent forms must be approved via signature from the directly affected landowner. The ASDs are responsible for undertaking the necessary landowner engagement and for ensuring that the requisite landowner consent forms required as part of Phase 1 and 2 of this project are signed.

These include:

- WW(0): Standard operating procedure,
- WW(1): Wetland survey and Inspection consent,
- WW(2): Terms and Conditions for carrying out wetland rehabilitation,
- WW(3): Wetland Rehabilitation Activities Consent,
- WW(4): Property Inspection Prior to Wetland Rehabilitation, and
- WW(5): Notification of Completion of Rehabilitation.

Without these signed consent forms the WfWetlands Programme will not be able to implement rehabilitation interventions on the affected property.

Phase 3 requires that certain Environmental Authorisations are obtained before work can commence in the wetlands (please see subsequent sections of this document for detail on Environmental Authorisations). Upon approval of the wetland Rehabilitation Plans by DEA, the work detailed for the project will be implemented within a year with on-going monitoring being undertaken thereafter. The Rehabilitation Plans are considered to be the primary working document for the implementation of the project via the construction/ undertaking of interventions[2] listed in the Plan.

It is typically at this point in the process when the final construction drawings are issued to the IAs. IAs are currently employed in the WfWetlands Programme and are responsible for employing contractors and their teams (workers) to construct the interventions detailed in each of the Rehabilitation Plans. For all interventions that are based on engineering designs (typically hard engineered interventions), the Design Engineer is required to visit the site before construction commences to ensure that the original design is still appropriate in the dynamic and ever-changing wetland system. The Design Engineer will assist the IAs in pegging and setting-out interventions. The setting-out activities often coincide with the Phase 1 activities for the next planning cycle. Phase 3 concludes with the construction of the interventions, but there is an on-going monitoring and auditing process that ensures the quality of interventions, the rectification of any problems, and the feedback to the design team regarding lessons learnt.

[2] This could include soft options such as alien clearing or eco-logs, as well as hard structures for example weirs.

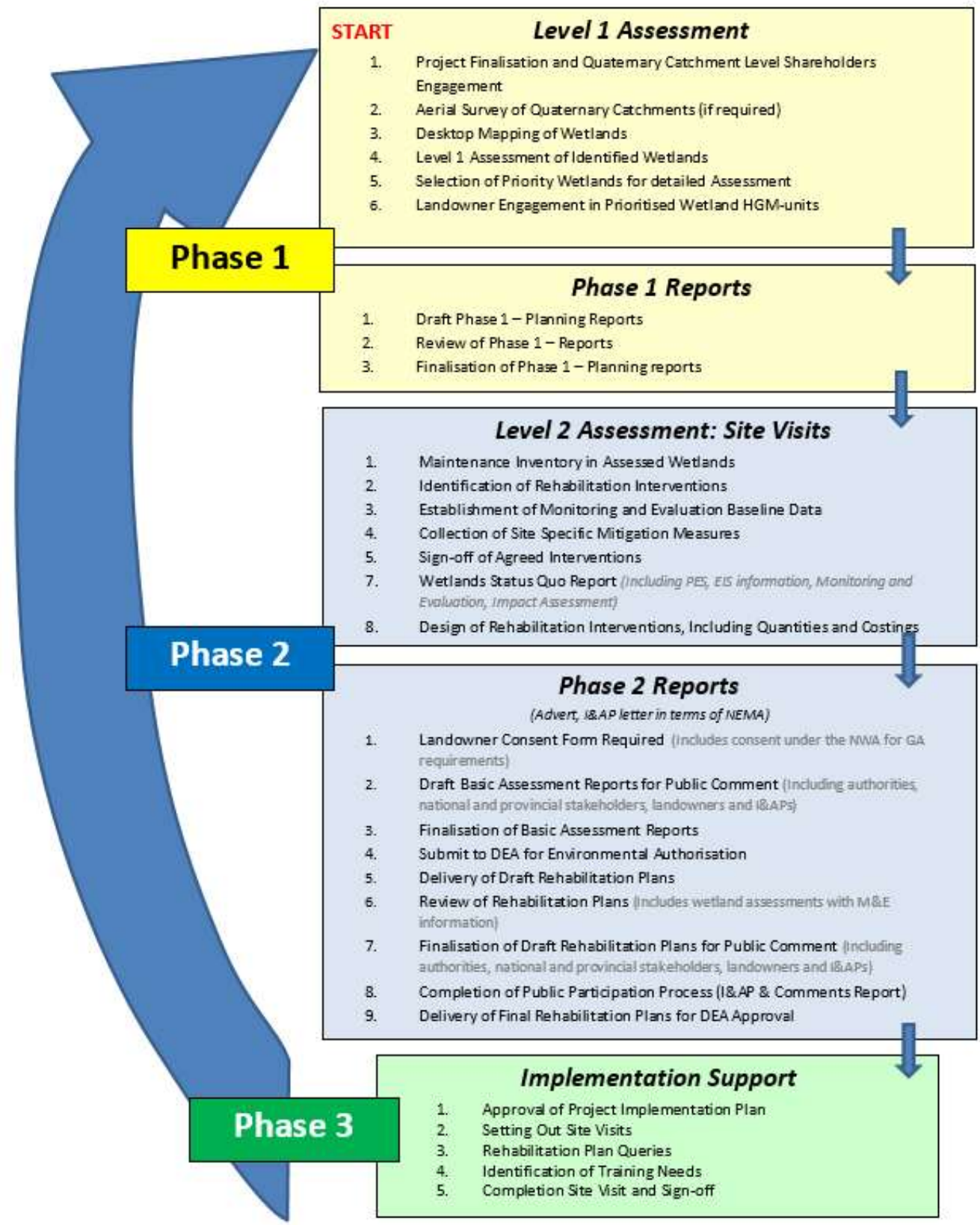


Plate C: The Working for Wetlands planning process (Phase 1 to Phase 3)

Rehabilitation work within floodplain systems

Based on lessons learnt and project team discussions held during the National Prioritisation workshop in November 2010 the WfWetlands Programme 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, WfWetlands do not intend to stop undertaking rehabilitation work in floodplains entirely. Instead, WfWetlands propose to adopt an approach to the rehabilitation of floodplain areas that takes into account the following guiding principles:

a) As a general rule, avoid constructing hard interventions within an active floodplain channel; and rather
b) 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 the interventions.

7. Environmental legislation

One of the core purposes of the WfWetlands Programme is the preservation of South Africa's valuable wetland systems through rehabilitation and restoration.

South Africa has rigorous and comprehensive environmental legislation aimed at preventing degradation of the environment, including damage to wetland systems. The following legislation is of relevance:

- The National Environmental Management Act, No. 107 of 1998 (NEMA), as amended
- The National Water Act, No.36 of 1998 (NWA)
- The National Heritage Resources Act, No. 25 of 1999 (NHRA)

Development proposals within or near any wetland system are subject to thorough bio-physical and socio-economic assessment as mandatory processes of related legislation. These processes are required to prevent degradation of the environment and to ensure sustainable and environmentally conscientious development.

The WfWetlands Programme requires that both hard and soft interventions are implemented in the wetland system, and it is the activities associated with the construction of these interventions that triggers requirements for various authorisations, licenses or permits. However, it is important to note that the very objective of the WfWetlands Programme is to improve both environmental and social circumstances. The WfWetlands Programme gives effect to a range of policy objectives of environmental legislation, and also honours South Africa's commitments under several international agreements, especially the Ramsar Convention on Wetlands.

Memorandum of Understanding for Working for Wetlands Programme

A Memorandum of Understanding (MoU) has been entered into between DEA, DAFF and DWS for the WfWetlands Programme. Through co-operative governance and partnerships, this MoU aims to streamline the authorisation processes required by the National Environmental Management Act (Act 107 of 1998), the National Water Act (Act 36 of 1998), and the National Heritage Resources Act (Act 25 of 1999) to facilitate efficient processing of applications for authorisation of wetland rehabilitation activities.

Table A: List of applicable legislation

Title of legislation, policy or guideline	Administering authority	Date
The Constitution of South Africa, Act No.108 of 1996	National Government	1996
National Environmental Management Act, No.107 of 1998	Department of Environmental Affairs	1998
The National Water Act, No. 36 of 1998	Department of Water and Sanitation	1998
Conservation of Agricultural Resources Act, No. 43 of 1983	Department of Agriculture, Forestry & Fisheries	1983
National Heritage Resources Act, No. 25 of 1999	National Heritage Resources Agency	1999
World Heritage Conventions Act, No. 49 of 1999	Department of Environmental Affairs	1999
The National Environmental Management: Biodiversity Act, No. 10 of 2004	Department of Environmental Affairs	2004
National Environmental Management: Protected Areas Act, No. 57 of 2003	Department of Environmental Affairs	2003
The Mountain Catchments Areas Act, No. 63 of 1970	Department of Water and Sanitation	1970
EIA Guideline Series, in particular: • Guideline 5 – Companion to the NEMA EIA Regulations, 2010 (DEA, October 2012) • Guideline 7 – Public Participation in the EIA process, 2012 (DEA, October 2012) • Guideline 9 - Guideline on Need and Desirability, 2010 (DEA, October 2014) • DEA&DP. 2013. Guideline on Public Participation (DEA&DP, March 2013). • DEA&DP. 2013. Guideline on Alternatives (DEA&DP, March 2013).	Department of Environmental Affairs	2012 - 2014
International Conventions, in particular: • The Ramsar Convention • Convention on Biological Diversity • United Nations Conventions to Combat Desertification • New Partnership for Africa's Development (NEPAD) • The World Summit on Sustainable Development (WSSD)	International Conventions	N/A

Of particular relevance in **Table A** is the following legislation and the WfWetlands Programme has put systems in place to achieve compliance:

- The National Environmental Management Act, No. 107 of 1998 (NEMA), as amended
    - In terms of the 2014 Environmental Impact Assessment Regulations pursuant to the NEMA, certain activities that may have a detrimental impact on the environment (termed Listed Activities) require an Environmental Authorisation (EA) from the DEA. The implementation of interventions will trigger NEMA Listing Notices 1 and 3 (G.N. R983 and G.N R985 as amended by R327 and R324 respectively). In order to meet the requirements of these Regulations, it is necessary to undertake a Basic Assessment (BA) Process and apply for an EA. This was previously undertaken on an annual basis per Province for each individual wetland unit. However as of 2014, applications were submitted (per Province) for wetland systems, allowing WfWetlands to undertake planning in subsequent years within these wetlands without having to undertake a BA process. The rehabilitation plans still however require approval from the competent authority (i.e. DEA).
    - **Basic Assessment Reports** (BARs) will be prepared for each Province where work is proposed by the WfWetlands Programme. These BARs will present all Wetland Projects that are proposed in a particular province, together with information regarding the quaternary catchments and the wetlands that have been prioritised for the next few planning cycles (anywhere from one to three planning cycles depending

on the information gained through the Catchment Prioritisation Process). The EA's will be inclusive of all Listed Activities that may be triggered and will essentially authorise any typical wetland rehabilitation activities required during the WfWetlands Programme implementation phase. Note that certain Listed Activities have been excluded from the Basic Assessment as they fall under the ambit of a 'maintenance management plan' in the form of the Rehabilitation Plan for each project and are therefore subject to exclusion. The impacts thereof have however been considered within the respective Rehabilitation Plans.

- A condition of the EAs is that **Rehabilitation Plans** will be prepared every year after sufficient field work has been undertaken in the wetlands that have an EA. These Rehabilitation Plans will be made available to registered Interested and Affected Parties (I&APs) before being submitted to DEA for approval. The Rehabilitation Plans will describe the combination and number of interventions selected to meet the rehabilitation objectives for each Wetland Project, as well as an indication of the approximate location and approximate dimensions (including footprint) of each intervention.

- The National Water Act, No.36 of 1998 (NWA)
  - In terms of Section 39 of the NWA, a General authorisation[3] (GA) has been granted for certain activities that are listed under the NWA that usually require a Water Use License; as long as these activities are undertaken for wetland rehabilitation. These activities include '*impeding or diverting the flow of water in a watercourse*[4]' and '*altering the bed, banks, course or characteristics of a watercourse*[5]' where they are specifically undertaken for the purposes of rehabilitating[6] a wetland for conservation purposes. The WfWetlands Programme is required to register the 'water use' in terms of the GA.

- The National Heritage Resources Act, No. 25 of 1999 (NHRA)
  - In terms of Section 38 of the NHRA; any person who intends to undertake a development as categorised in the NHRA must at the very earliest stages of initiating the development notify the responsible heritage resources authority, namely the South African Heritage Resources Agency (SAHRA) or the relevant provincial heritage agency. These agencies would in turn indicate whether or not a full Heritage Impact Assessment (HIA) would need to be undertaken. Should a permit be required for the damaging or removal of specific heritage resources, a separate application will be submitted to SAHRA or the relevant provincial heritage agency for the approval of such an activity. WfWetlands has engaged with SAHRA regarding the wetland planning process and has committed to achieving full compliance with the heritage act over the next few years.

[3]Government Notice No. 1198, 18 December 2009
[4]Section 21(c) of the NWA, No. 36 of 1998
[5]Section 21(i) of the NWA, No. 36 of 1998
[6]Defined in the NWA as "*the process of reinstating natural ecological driving forces within part of the whole of a degraded watercourse to recover former or desired ecosystem structure, function, biotic composition and associated ecosystem services*".