#### DEPARTMENT OF ENVIRONMENT, FORESTRY AND FISHERIES

NO. 833 31 JULY 2020

#### NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998

(ACT NO. 107 OF 1998)

CONSULTATION ON THE ADOPTION OF A GENERIC ENVIRONMENTAL MANAGEMENT PROGRAMME FOR THE MANAGEMENT AND MITIGATION OF ENVIRONMENTAL IMPACTS RESULTING FROM THE IMPLEMENTATION OF THE WORKING FOR WETLANDS PROJECTS AND THE EXCLUSION OF THESE PROJECTS FROM THE REQUIREMENT TO OBTAIN AN ENVIRONMENTAL AUTHORISATION

I, Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, hereby consult on the intention to adopt, as an environmental management instrument, the *Generic Environmental Management Programme for Working for Wetlands Programme (version 0 of June 2020)* and based on compliance with this generic environmental management programme, exclude, in terms of section 24(2)(e) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), identified activities, including the associated activities related to the implementation of the Working for Wetlands Programme, from the need to obtain environmental authorisation as set out in the Schedule.

Members of the public are invited to submit written comments or inputs, within 30 days after the publication of this Notice in the Government Gazette, to the following address:

By post to: The DirectorGeneral

Department of Environment, Forestry and Fisheries

Attention: Dr Dee Fischer

Private Bag X447 PRETORIA 0001

By hand at: Reception, Environment House, 473 Steve Biko Road, Arcadia, 0083

By e-mail: dfischer@environment.gov.za Enquiries: Dr Dee Fischer 012 399 8843

Comments or inputs received after the closing date may not be considered.

BARBARA DALLAS CREECY

MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

#### SCHEDULE

- 1. Section 24(2)(e) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (the Act) allows for the Minister to exclude activities identified in terms of section 24(2)(a) and (b) of the Act from the need to obtain environmental authorisation based on an environmental management instrument adopted in the prescribed manner.
- 2. The Department of Environment, Forestry and Fisheries has prepared a Generic Environmental Management Programme for the Working for Wetlands Programme (version 0 of June 2020) (the EMPr), to avoid, manage and mitigate the environmental impacts and risks associated with the activities of the programme including those identified in section 24(2)(a) and (b) of the Act.
- 3. The EMPr which has been developed by a multi-disciplinary team of specialists based on 16 years of experience in implementing the programme, has been reviewed and has been found to meet the requirements and principles contained in section 2, 24(1) and 24N of the Act.
- 4. The EMPr is therefore, to be adopted as an environmental management instrument for the purposes of excluding the identified activities associated with the Working for Wetlands programme, from the need to obtain environmental authorisation prior to commencement in terms of section 24(2)(e) of the Act.
- 5. Based on compliance with the impact mitigation measures contained in of Part C of the EMPr and the registration requirements contained in this paragraph and paragraph 6 of this Schedule, any activities described in paragraph 1.4 of Part 1 of the EMPR and which is identified in the Environmental Impact Assessment Regulations Listing Notice 1, Listing Notice 2 or Listing Notice 3 of 2014, as amended, is hereby excluded from the need to obtain environmental authorisation in terms of section 24(2)(e) of the Act.
- 6. In order for this exclusion to apply, at least 30 days¹ prior to the commencement of a Working for Wetlands project, the national deputy director for implementation of the Working for Wetlands Programme must register the project with the competent authority by submitting to the competent authority the signed registration form together with the declaration of compliance.
- 7. Within 10 days of receipt of the correctly completed registration form and supporting documentation described in paragraph 6 of this Schedule, the competent authority must register the project and provide the national deputy director for implementation of the Working for Wetlands Programme with a registration number.
- 8. The competent authority must maintain a record of all registered projects and provide access to the record through their website.
- 9. Failure to obtain a registration number prior to commencement of the project and failure to comply with the mitigation measures set out for identified activities in Part C of the EMPr, constitutes and offence in terms of section 49A(1)(d) of the Act.
- 10. Any amendments to the EMPr will be required to be consulted on through the publication in the Government Gazette.
- 11. The Government Gazette notice can be accessed at <a href="https://www.environment.gov.za/legislation/gazetted\_notices">https://www.environment.gov.za/legislation/gazetted\_notices</a> and the Generic EMPr can be accessed at <a href="http://www.environment.gov.za/projectprogrammes/environmental\_management\_instruments">http://www.environment.gov.za/projectprogrammes/environmental\_management\_instruments</a>.
- 12. A hard copy of the document can be viewed in the Departments library located at Environment House, 473 Steve Biko Road, corner Soutpansberg and Steve Biko Road, Arcadia, Pretoria.
- 13. Hard copies of the document can also be requested from Ms M Masondo at +27 12 399 9277/9280; email mmasondo@environment.gov.za.

This gazette is also available free online at www.gpwonline.co.za

<sup>&</sup>lt;sup>1</sup> Days means calendar days

# Generic Environmental Management Programme (EMPr) for the Working for Wetlands Programme

### Version 0 of June 2020

# Prepared for: Department of Environment, Forestry and Fisheries (DEFF)



# GENERIC ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR) FOR THE WORKING FOR WETLANDS PROGRAMME

#### Prepared for:

Department of Environment, Fisheries and Forestry

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#### EMPr to be cited as:

Department of Environment, Forestry and Fisheries, 2020. Generic Environmental Management Programme for the Working for Wetlands Programme (version 0 of June 2020).

# **Contents**

	nitions and Terminology nyms and abbreviations	
	A: BACKGROUND	
	ITRODUCTION	
1.1	Background to the Working for Wetlands Programme	
	1.1.1 Listed and specified activities under NEMA section 24(1)	6
	1.1.2 Water uses under NWA section 21(c) and (i)	
1.2	1.1.3 Compliance and registration	
1.3	Purpose	
1.4	Scope	
	1.4.1 Intervention types	10
	1.4.2 Spatial extent	
1.5	1.4.3 Proponent/Implementer	
1.6	Structure and framework of the EMPr	
PART	B: REGISTRATION AND DECLARATION OF COMPLIANCE WITH THE EMPR	18
1 R	EGISTRATION AND DECLARATION	18
1.1	Registration form	
1.2	Declaration form	
1.3	Site plan	18
PART	C: ENVIRONMENTAL CONTROLS AND REPORTING	19
1 IN	ITRODUCTION	19
2 M	IONITORING AND AUDITING	20
2.1	Environmental documentation, monitoring and reporting	
	2.1.1 Document control/Filing system	20
	<ul><li>2.1.2 Documentation to be available</li><li>2.1.3 Weekly environmental checklists</li></ul>	
	2.1.4 Required method statements	
	2.1.5 Audit findings	21
	2.1.6 Corrective action report	
	<ul><li>2.1.7 Service provider agreement</li><li>2.1.8 Photographic record</li></ul>	
	2.1.9 Monitoring requirements	
	2.1.10 Environmental audits	
	2.1.11 Environmental audit report (EAR)	23
APPEN	NDIX 1 - REGISTRATION FORM	1
APPEN	NDIX 2 - DECLARATION FORM	3
APPEN	NDIX 3 - ENVIRONMENTAL MANAGEMENT PROGRAMME TEMPLATE	4
APPEN	NDIX 4 - METHOD STATEMENTS	56
TABL	ES ES	

Generic Environmental Management Programme for the Working for Water Programme (version 0 of
June 2020)

Table 1: Definitions and Terminology	1
Table 2: Acronyms and Abbreviations	5
Table 3: Roles and responsibilities for the implementation of the EMPr	11
Table 4: Format of the Method Statement	16
FIGURES	
Figure 1: Framework for the EMPr	17

### **Definitions and Terminology**

The definitions and terminology used in this EMPr are described in Table 1.

Table 1: Definitions and Terminology

Term	Definition
Alien invasive species	Plants, animals, pathogens and other organisms that are non-native to an ecosystem and which are listed under National Environmental Management: Biodiversity Act (National Environmental Management: Biodiversity Act) (GNR 864 in Government Gazette 40166 of 29 July 2016 – Alien and Invasive Species Lists) and regulations 15 and 16 of the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983) Regulations (GNR 1048 in Government Gazette 9238 of 25 May 1984, as amended) as they cause economic or environmental harm or adversely affect human health.
Bio-engineered structure	Any organic slope-stabilising or water-flow-control structures. Examples include sawdust filled onion bags, hessian bags filled with mulch, hessian bags rolled with plant material, hessian nets with captured seed material.
Biological control	The use of specimens of one species for the purpose of preying on, parasitising on, damaging, killing, suppressing or controlling a specimen of another species (National Environmental Management: Biodiversity Act: GNR 598 of Government Gazette 37885 of 1 August 2014 – Alien and Invasive Species Regulations, 2014).
Biomass	The total quantity or weight of organic matter in a given area; in terms of this the plant material accumulated through mechanical and manual control of alien invasive species.
Bush encroachment/thinning	Stands of plants declared as bush encroacher species in column 1 of Table 4 in respect of regulation 16 of the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983) (Regulations (GNR 1048 in Government Gazette 9238 of 25 May 1983, as amended) where individual plants are closer to each other than three times the mean crown diameter.
Clearance	Ploughing of land, bulldozing of an area, eradication or removal of vegetation cover with chemicals, amongst others, constitutes clearance of vegetation, provided that this will result in the vegetation being eliminated, removed or eradicated.
Competent authority	The competent authority in respect of a listed activity or specified activity, means the organ of state charged by the Act with evaluating the environmental impact of that activity and, where appropriate, with granting or refusing an environmental authorisation in respect of that activity. In the case of the Working for Programmes and the Land Care programme, the competent authority is identified as the Minister in terms of Section 24C of the Act, as the activity is to be undertaken by a national department.
Ecologist	A person registered with the South African Council for Natural Scientific Professionals (SACNASP).

Term	Definition
Endemic species	Plants and animals that exist only in restricted geographic regions.
	An annih anna antal alama da anna alama anna antal
Environmental impact	An environmental change caused by some human act.
Environmental impact	A study of the environmental consequences of a proposed course of action via
assessment	the process of collecting, organising, analysing, interpreting and communicating
	information that is relevant to the consideration of that application.
Gabion	A structure made of wire mesh baskets filled with regularly sized stones, and
	used to prevent and/or repair erosion. They are flexible and permeable
	structures which allow water to filter through them. Vegetation and other biota
	can also establish in/around the habitat they create.
Hazardous substance	A substance governed by the Hazardous Substances Act, 1973 (Act No. 15 of
	1973) as well as the Hazardous Chemical and Substances Regulations, 1995.
Herbicides	Herbicides are a type of pesticide, specifically a substance that is toxic to plants,
	which is used to destroy unwanted vegetation.
Heritage resource	In terms of the National Heritage Resources Act, 1999 (Act No 25 of 1999),
	means all those heritage resources that are of cultural significance.
	The autitus generalists for the construction of MONetlands gelectivities
Implementing agent	The entity responsible for the construction of WfWetlands rehabilitation interventions by means of various contracted teams.
Important species	Species that help define an entire ecosystem or provide a specific function
	within the ecosystem which cannot be replaced by something else or which are
	already endangered.
Indigenous vegetation	Refers to vegetation consisting of indigenous plant species occurring naturally
	in an area, regardless of the level of alien infestation and where the topsoil has
	not been lawfully disturbed during the preceding ten years.
Intervention	An engineered structure such as a concrete or gabion weir, earthworks or
	revegetation that that achieves identified objectives within a wetland e.g. raising
	of the water table within a drainage canal.
Laura tuana	Established material transcripts a store dispersion of according to the control of the control o
Large trees	Established, mature trees with a stem diameter of more than 10 cm at a height of 1.5 meter or a canopy height of more than 10 meters.
	of 1.5 fricter of a carropy fielgrit of more than 10 fricters.
Method statement	Written submission by the service provider/implementing agent to the project
	coordinator in response to this Environmental Management Programme (EMPr)
	setting out the equipment, materials, labour and method(s) the contractor
	proposes using to meet an impact management outcome or action.
Mitigation	Means to anticipate and prevent negative impacts and risks, then to minimise
	them, rehabilitate or repair impacts to the extent feasible.
National Deputy	The official responsible for the implementation of the programme within the
Director:	Department of Environment, Forestry and Fisheries.
Implementation Populty	The official recognition for the manifering and evaluation of the programme
National Deputy	The official responsible for the monitoring and evaluation of the programme within the Department of Environment, Forestry and Fisheries.
Director: Monitoring and Evaluation	walin the Department of Environment, Forestry and Fisheries.
Lvaluation	

Term	Definition
Non-target plant	Plant species present on or around the project site that is not the target for
	removal and/ or control.
Provincial coordinator	The designated person in the Department of Environment, Forestry and
	Fisheries: National Resources Management Programme Regional charged with
	the Working for Wetlands Programme
Quaternary catchment	A fourth order catchment in a hierarchal classification system in which a primary
Quaternary cateriment	catchment is the major unit and that is also the "principal water management
	unit in South Africa"
Rehabilitation	Refers to re-instating the driving ecological forces (including hydrological,
	geomorphological and biological processes) that underlie a wetland, so as to
	improve the wetland's health and the ecological services that it delivers
Codinomiation !	Tomporary or permanent measures or devises designed to keep lesses or graded
Sedimentation and	Temporary or permanent measures or devices designed to keep loose or eroded soil within a defined site boundary, preventing runoff into a watercourse and
erosion prevention	leading to water quality degradation. Sediment controls are usually employed
	together with erosion controls, which are designed to prevent or minimize
	erosion and thus reduce the need for sediment controls.
Sensitive area	Any area that is denoted as sensitive due to its particular attributes, which could
	include the presence of rare or endangered vegetation, habitat or rare and
	endangered fauna, the presence of heritage resources (e.g. archaeological
	artefacts or graves), the presence of a unique natural feature, the presence of
	a watercourse or water body, including the 1:100 flood line, the presence of
	steep slopes (in excess of 1:4).
Service level agreement	The contractual agreement signed between the Department and the
Con vide for or agreement	implementing agent.
Slope	The inclination of a surface expressed as one unit of rise or fall for so many
	horizontal units.
Ctroom divorcion	The use of a temporary channel or other diversion methodology used to redirect
Stream diversion	a stream flow.
	a sa sam nom
Storm water	Management actions implemented to manage surface runoff.
management	
The Act	National Environmental Management Act, 1998 (Act No. 107 of 1998), as
	amended
	The Department of Engineering to Secretary and Elebert
The Department	The Department of Environment, Forestry and Fisheries
The EMPr	The Generic Environmental Management Programme (EMPr) for the Working for
	Wetlands Programme, version 0 dated June 2020.
Threatened or protected	Species listed as threatened or protected under the Threatened and Protected
species	Species Regulations (National Environmental Management: Biodiversity Act: GN
	151 in Government Gazette 29657 of 23 February of 2007). Species that are
	facing a high risk of extinction. Any species classified in the IUCN categories
	Critically Endangered, Endangered or Vulnerable is a threatened species.

Term	Definition
Topsoil	A varying depth (up to 300 mm) of the soil profile, including existing vegetation cover and soil seed bank, irrespective of the fertility, appearance, structure, agricultural potential, fertility and composition of the soil.
Waste	Any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, or that is intended or required to be discarded or disposed of, by the holder of that substance, material or object, whether or not such substance, material or object can be re-used, recycled or recovered and includes all wastes as defined in Schedule 3 the National Environmental Management: Waste Act 2008 (Act No. 59 of 2008). Examples include construction debris, chemical waste, used oils and lubricants, batteries, metal and wood off-cuts, excess cement/ concrete, wrapping materials, timber, tins and cans, drums, wire, nails, food and domestic waste (e.g. plastic packets and wrappers).
Watercourse	Means a river or spring, a natural channel in which water flows regularly or intermittently and a wetland, pan, lake or dam in which, or from which water flows and any collection of water which the Minister may, by notice in the <i>Gazette</i> , declare to be a watercourse as defined in the National Water Act 1998 (Act No. 36 of 1998) and a watercourse includes, where relevant, its bed and banks.
Wetland	Means 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.
Windy conditions	In terms of this EMPr conditions can be considered windy when the wind carries dust or pesticide sprays to neighbouring non-target activity areas or plants.
Works	Works to be executed in terms of the contract.

#### **Acronyms and abbreviations**

The acronyms and abbreviations used in this EMPr are described in Table 2.

Table 2: Acronyms and Abbreviations

	Abbreviations	
AIP	Alien invasive plants	
CA	Competent authority	
CARA	Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)	
CCA	Copper chrome arsenate treated timber	
EA	Environmental authorisation	
EIA	Environmental impact assessment	
EMPr	Environmental management programme report	
EPWP	Expanded Public Works Programme	
DEFF	Department of Environment, Forestry and Fisheries	
FFFSRA	Fertilizers, Farm Feeds, Seeds and Remedies Act, 1947 (Act No. 36 of 1947)	
FPA	Fire Protection Association	
HSE	Health, Safety and Environment	
GPS	Geographical positioning system	
IA	Implementing agent	
MSDS	Material Safety Data Sheet	
M&E	Monitoring and evaluation	
NWA	National Water Act, 1998 (Act No. 36 of 1998)	
NRMP	National Resource Management Programme	
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998) as amended	
NEM: BA	National Environmental Management: Biodiversity Act 2004 (Act No. 10 of 2004)	
NHRA	National Heritage Resource Agency	
NWA	National Water Act, 1998 (Act No. 36 of 1998)	
OSHA	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)	
PC	Provincial coordinator	
PCO	Pest control operator	
PES	Present ecological state	
PPE	Personal protective equipment	
NDD	National Deputy Director: Planning, Monitoring and Evaluation	
NDD	National Deputy Director: Implementation	
RI&AP	Registered Interested and Affected Parties	
SAHRA	South African Heritage Resource Agency	
SLA	Service level agreement	
WfWetlands	Working for Wetlands	

# GENERIC ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR) FOR THE WORKING FOR WETLANDS PROGRAMME

#### PART A: BACKGROUND

#### 1 INTRODUCTION

#### 1.1 Background to the Working for Wetlands Programme

The Working for Wetlands (WfWetlands) is a government wetlands conservation initiative within the National Resource Management Programmes (NRMP) of the Department of Environment, Forestry and Fisheries (DEFF). The programme started in 2000 and its mandate involves the protection, promotion of sustainable use and rehabilitate of South Africa's wetlands. Much of the work involves rehabilitation activities ranging from stabilising degraded area to the more ambitious rehabilitation of wetlands to a targeted structural and functional condition. The programme also provides a national focal point for wetland research. The WfWetlands programme is undertaken through the Expanded Public Works Programme (EPWP), which is a nation-wide government programme aimed at providing poverty and income relief through providing temporary work, while carrying out socially useful activities. Thus the Working for Wetlands (WfWetlands) programme achieves the objective of wise use and rehabilitation of wetlands in a manner that maximises employment, targeting those groups most excluded from the mainstream economy, with particular emphasis on women, youth and people with disabilities.

The objective of the programme which is to halt or reverse degradation of wetlands and related aquatic systems invariably means that projects are often undertaken within ecologically sensitive environments. Because these areas are regarded as being environmentally sensitive, the project interventions of the WfWetlands projects trigger activities which are identified in terms of section 24(2)(a) and (b) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), (hereafter referred to as "the Act") and therefore may not commence without environmental authorisation from the competent authority. The interventions are also regarded as water uses in terms of section 21(c) and (i) of the National Water Act, 1998 (Act No. 36 of 1998) (the NWA).

#### 1.1.1 Listed and specified activities under NEMA section 24(1)

When activities are identified, section 24(1) of the Act requires that the potential impacts of these activities on the environment must be considered, investigated, assessed and reported on. The manner in which these investigations, assessments and reports are to be undertaken is through an environmental impact assessment process prepared in accordance with the Environmental Impact Assessment Regulations, 2014, as amended.

The Act allows for identified activities to be excluded from the requirement to obtain an environmental authorisation from the competent authority under certain circumstances. In this regard section 24(2)(e) of the Act allows for exclusion of activities from the requirement to obtain an environmental authorisation from based on an environmental management instrument, adopted in the prescribed manner.

As the projects undertaken by the WfWetlands Programme are rehabilitation oriented, human labour intensive and avoid the use of heavy machinery, they do not fall within the usual development projects which have the potential to cause significant detrimental impacts on the environment. In addition, the rehabilitation interventions are similar over all projects and have been consistently implemented over 16 years, their impacts and mitigation measures are therefore well understood, As such, it is deemed appropriate that projects implemented under the WfWetlands Programme can be excluded from the need to obtain environmental authorisation as provided for in Section 24(e) of the Act, based on adherence to this *Generic* 

Environmental Management Programme for the Working for Wetlands Programme (version 0 of June 2020), which is to be adopted as an environmental management instrument.

The procedures to adopt an environmental management instrument to be used for the purposes of excluding a listed or specified activity in terms of section 24(2)(e) of the Act, have been determined in Regulations<sup>1</sup>. These procedures entail among others, the requirement to ensure that the instrument to be adopted identifies the purpose for which it was developed and the requirement to gazette the instrument in the Government *Gazette*, both for notification of proposed adoption and for adoption purposes.

This EMPr has been developed by a multi-disciplinary team of specialists and is based on 16 years of implementing the WfWetlands Programme in executing wetland restoration plans and the various standard operating procedures developed by the WfWetlands Programme

In line with the requirement of the adoption procedures, it is noted that this document, entitled "The Generic Environmental Management Programme (EMPr) for the Wetlands Programme (version 0 of June 2020)" has been developed as an environmental management instrument which is intended to be adopted to allow for the exclusion of all activities triggered by the WfWetlands projects as identified in the Environmental Impact Assessment Regulations Listing Notice 1, 2 or 3 of 2014, as amended, from the requirement to obtain environmental authorisation from the competent authority as contemplated in section 24(2)(e) of the Act.

#### 1.1.2 Water uses under NWA section 21(c) and (i)

As a general principle of the National Water Act, a water use must be licensed. The NWA however, identifies permissible water uses, which include: a water use as listed in Schedule 1 to the NWA; an existing lawful water use; a water use permissible under a general authorisation; or a water use for which a licence has been waivered by the responsible authority.

Section 39(1)(a), (b) and (c) of the NWA allows for the responsible authority to generally authorise a water use, to authorise a water use in relation to a specific water resource, or to authorise a water use within an area specified in a Notice. These authorisations are subject to any Regulations made under section 26 and any conditions imposed under section 29 of the NWA.

In relation to the WfWetlands programme which would trigger a water use under sections 21(c) and (i) of the NWA, the Department responsible for water affairs published a general authorisation in terms of section 39 of the National Water Act, for water uses as identified under section 21(c) and (i) of that Act, in Government Notice No. 1198, in Government Gazette No. 32805 of 18 December 2009, where the uses were for the purposes of rehabilitating a wetland for conservation purposes. This general authorisation was subject to certain conditions which include among others the compiling and submission to the responsible authority for approval before commencement of the activity, the following documents:

- · An initial planning report; and
- A rehabilitation plan

On completion of the of the activity, annually for three years starting from 6 months of the finalisation of the activity, a habitat assessment study, which ensures that the rehabilitation is stable for that the necessary action is taking place to rectify any impacts, must be prepared and submitted for approval to the responsible authority.

Under paragraph 9 the person who intends to use water as contemplated in the notice must register such water use with the Department responsible for water affairs and must be issued with the certification of registration.

<sup>1</sup> The Regulations Laying Down the Procedures to be followed for the Adoption of Spatial Tools or Environmental Management Instruments were published under Government Notice No. 542, in Government *Gazette* No. 42380 of 5 April 2019.

#### 1.1.3 Compliance and registration

Although no environmental authorisation will be required should the exclusion be granted in terms of section 24(2)(e) of NEMA and a general authorisation may be registered in terms of Government Notice No. 1198, in Government *Gazette* No. 32805 of 18 December 2009, compliance with the requirements in Part C of this EMPr relating to the mitigation outcomes and actions to be employed for the avoidance, management and mitigation of impacts and risks associated with the implementation of WfWetlands projects, and compliance with the conditions of the general authorisation, where applicable are binding on the Department's service provider/implementing agent.

Compliance with the requirements of Part C of this EMPr and the conditions of the general authorisation will be monitored by the Department of Environment, Forestry and Fisheries: Compliance Chief Directorate, and the Compliance Unit of the Department responsible for water affairs respectively, and non-compliance will constitute an offence in terms of section 49A(1)(d) of the Act and section 151 of the NWA.

In order to facilitate compliance monitoring each project must be registered with the competent authority in terms of NEMA and the responsible authority in terms of the NWA and the service provider/implementing agent and contractor must sign a declaration indicating that they will comply with the requirements of the EMPr and the general authorisation. An integrated registration form for NEMA and the NWA and declaration forms are provided in Appendix 1 and 2 of this EMPr.

This EMPr does not exempt the WfWetlands Programme from the requirements of other Acts and obtaining other relevant authorisations. This includes, but is not limited to:

- Vegetation clearance in protected areas or control of protected vegetation types (e.g. trees) in terms of the relevant specific environmental management Act; and
- National and / or provincial permits for conducting work in and around heritage resources.

#### 1.2 Institutional framework and planning processes

The WfWetlands Programme operates under the Department of Environment, Forestry and Fisheries: Environmental Programmes Branch, Chief Directorate Natural Resource Management Programmes under the direct management of the Natural Resource Management Programmes. The Provincial coordinator (PC) charged by the WfWetlands Programme, as the project manager (PM), is the ultimate responsible party for the development of the strategic plan and all aspects and phases of the projects.

The WfWetlands Programme follows a five-year strategic planning and an annual detailed rehabilitation process with three distinct phases. The starting point is the development of five-year strategic plan which involves national prioritisation of catchments for intervention based on a five tier priority rating from very high to very low. This is followed by the three phase planning process as follows:

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

- Priority wetlands/ sites in the priority catchments identified in the five-year strategic plan 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.

The phase 1 activities commence with wetland prioritisation process for every province. The wetland ecologist 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 landowners and other interested and affected parties (I&APs) to gauge the level of interest and potential support for the work.

During this phase an aerial survey of the areas in question may be undertaken, as well as limited fieldwork investigations, to identify wetland types, function and evidence of degradation. The field work, attended by the fieldwork team comprising a wetland ecologist and the Provincial Coordinator (PC), to confirm the inclusion or exclusion of certain wetlands. Using the information from the survey and fieldwork, further desk top mapping is undertaken to select priority wetlands which are then agreed on by the various parties.

Phase 2 requires site visits. The fieldwork team comprises of a wetland ecologist, a design engineer, and the PC. Other interested stakeholders or authorities and in some cases the landowners may also attend the site visits which 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, the extent of the degradation is quantified, rehabilitation opportunities are investigated, baseline monitoring data is collected, details of the proposed interventions are discussed, some survey work is undertaken by the engineers, and GPS coordinates and digital photographs are taken for record purposes. Furthermore, appropriate dimensions of the locations are recorded in order to design and prepare a bill of quantities for the interventions. A maintenance inventory of any existing interventions that are damaged and/or failing and thus requiring maintenance is also compiled by the PC, in consultation with the design engineer. At the end of the site visit the rehabilitation objectives are determined. Based on these objectives, the proposed rehabilitation interventions are determined and their locations and layouts are agreed upon by the project team.

The interventions are designed based on certain criteria and data measurements such as water volumes, flow rates, and soil types); the availability of materials such as rock; labour intensive activities; maintenance requirements etc. Bills of quantity are calculated for the designs and cost estimates made. The information is all captured in the rehabilitation plan which is prepared for each WfWetland project. A rehabilitation plan is prepared by the the wetland ecologist and will include interventions to be undertaken, their detailed design drawings and the required specifications by the design engineer.

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 rehabilitation interventions that were included in the previously developed rehabilitation plans.

During this phase, monitoring systems are put in place by the PC to support the continuous evaluation of the interventions. The monitoring includes the environmental/ecological and socio-economic outcomes, including the benefits of the interventions.

Phase 2 activities are undertaken each year for the duration of the 5-year strategic plan, as new budget is identified.

**Phase 3** focuses on implementation. An implementing agent is appointed through a tender process undertaken at head office. The implementing agents are responsible for employing the project contractors who in turn are responsible for the appoint the EPWP participants. A project implementation plan is drawn up by the implementing agent under the supervision of the PC by the design engineer and a project site plan is drawn up by the PC. The project implementation plan identifies project specific deliverable of the project. Operational aspects of the project are detailed in a site plan which includes demarcation of eating areas, parking and drop off zones, storage areas, and sensitive areas to be avoided etc. It is typical at the project implementation plan stage that the final construction drawings are issued by the design engineer to the implementing agent.

The implementing agent identifies project specific information for the day to day operational aspects of the project. The information contained in the project site plan includes the demarcation of eating areas, parking and drop off zones, storage areas, areas to be avoided etc.

Based on the final engineering drawings the implementing agent prepares the method statements required as Appendix 4 of Part C of the EMPr for each project. The method statements are approved by the PC. The declaration of compliance (Appendix 2), which is Part C of the EMPr is also signed by the implementing agent, the PC and the contractor, at this point, and submitted to the competent authority to register the project. Part B and C are to be accompanied by the relevant supporting documentation.

The rehabilitation plan, the site plan, the EMPr template (Appendix 3) which is Part C of the EMPr together with the completed method statements are considered to be the primary working documents for the project. The implementing agent is responsible for complying with the EMPr during the construction phase and must ensure that the contractor and the EPWP participants adhere to the requirements of the EMPr. The implementing agent will also be responsible for any non-compliance with the EMPr. On-going monitoring of the project and compliance with the EMPr template (Appendix 3) will be undertaken through monthly site audits by the PC and occasional compliance audits as requested by the NDD.

For all interventions that are based on engineering designs (typically hard engineered interventions), the design engineer is required to visit the site before construction of the interventions commences to ensure that the original design is still appropriate. The design engineer will assist the IAs in pegging and setting-out interventions. Phase 3 concludes with the sign off of the construction interventions by the design engineer. Further detail is outlined in more detail in paragraph 1.4.

#### 1.3 Purpose

The purpose of the EMPr is to provide rules which must be complied with when planning and implementing a WFWetlands project, to –

- a) Ensure compliance with the principles contained in section 2 of NEMA and the duty of care requirements, in terms of section 28(1) of NEMA;
- b) Set generally accepted mitigation measures to ensure that the impacts associated with the WfWetlands projects are avoided, mitigated and managed;
- c) Provide a template for the generic impact management outcomes and impact management activities required to avoid, manage and mitigate identified impacts associated with the interventions of a WfWetlands project;
- d) Provide for an integrated registration process for a WFWetland project in terms of NEMA and the NWA which is a specific environmental management Act; and
- e) Constitute an environmental management instrument which, once adopted, will allow for the exclusion of activities associated with the WfWetlands Programme, identified in the Environmental Impact Assessment Regulations Listing Notice 1, Listing Notice 2 or Listing Notice 3 of 2014, as amended, from the requirement to obtain environmental authorisation.

#### 1.4 Scope

This EMPr applies to rehabilitation projects undertaken by the WfWetlands Programme which aim to address the cause of damage or degradation, and re-establish the desired or target flow pattern of wetland systems.

#### 1.4.1 Intervention types

The interventions undertaken by WfWetlands projects include hard engineering interventions as well as softer more non-invasive interventions. The different types of interventions / activities are often combined in a single project, thus one project may comprise of both hard and soft interventions including the following;

Hard engineering interventions typically include the construction of:

- Concrete and gabion weirs which act as settling ponds, to reduce and divert flow velocity or to redisperse water across former wetland areas to re-establish natural flow paths;
- Earth or gabion structure plugs to raise channel floors and reduce water velocity;
- Concrete and/or Reno mattress strips as road crossings to address channels and erosion in wetland from vehicle movement; and
- Gabion structures (mattresses, blankets or baskets) to provide a platform for the growth of desired wetland vegetation.

The hard engineering interventions are supported by soft engineering interventions which include but are not limited to:

- Small earth berms or gabion structures to block artificial channels for divert water to certain parts of of a wetland:
- 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 plan species;
- Invasive plant clearing; and
- The fencing off of sensitive areas within the wetland to temporarily keep grazers out and to allow for re-establishment of vegetation.

#### 1.4.2 Spatial extent

This EMPr applies to WfWetlands projects in all nine provinces of the country.

#### 1.4.3 **Proponent/Implementer**

All WfWetlands projects must utilise and comply with the EMPr to manage the environmental impacts associated with programme's interventions.

#### 1.5 Roles and responsibilities for the implementation of the EMPr

The effective implementation of this EMPr is dependent on established and clear roles, responsibilities and reporting lines within the institutional framework and planning processes. This section of the EMPr gives guidance to the various roles and reporting lines and defines responsibilities for each role within the institutional framework for successful implementation of the EMPr. However, project specific requirements will ultimately determine the need for the appointment of specific person(s) to undertake specific roles and or responsibilities. The roles and responsibilities for implementing the EMPr are represented in Table 3.

Table 3: Roles and responsibilities for the implementation of the EMPr

Function	Role and Responsibilities
National Deputy Director: Planning, Monitoring and Evaluation	<ul> <li>Role:</li> <li>Coordinate the five-year strategic and rehabilitation planning process.</li> <li>Can request a compliance audit to be undertaken on the site at any time during the implementation of the project.</li> </ul>
	Responsibilities:  Form part of the fieldwork planning team.  Coordinate the preparation of the rehabilitation plans.  Ensure that the need to comply with the EMPr is included as a specific condition within the implementation agent's service level agreement (SLA) with the Department.

Function	Role and Responsibilities
	<ul> <li>In conjunction with the NDD, ensure that all PCs and implementing agents</li> </ul>
	are familiar with the requirements of the EMPr.
	<ul> <li>Undertake an annual audit of the final rehabilitation for a period of three</li> </ul>
	years after completion of the project.
	Approve the rehabilitation plans.
	, pproto the remaindation prants.
National deputy Director:	Role:
Implementation	<ul> <li>Register Working for Wetlands projects with the CA.</li> </ul>
	Sign the declaration of compliance and ensure that the other required
	parties sign.
	At least 14 days before the commencement of the WfWetlands project, notify
	the Compliance Unit of the competent authority of the commencement date of the project.
	<ul> <li>Coordinate project implementation at a national level.</li> </ul>
	<ul> <li>Will ultimately be held liable, should any non-compliance with this EMPr take</li> </ul>
	place.
	Can request a compliance audit to be undertaken on the site at any time
	during the implementation phase of the project.
	<ul> <li>Sign the declaration of compliance together with the IA.</li> </ul>
	Donnanaihilitica
	Responsibilities:  Ensure that the need to comply with the EMPr is included as a specific
	condition within the implementation agent's service level agreement (SLA)
	with the Department.
	<ul> <li>Ensure that a general authorisation is registered that the conditions for</li> </ul>
	that general authorisation are implemented.
	<ul> <li>In conjunction with DD Planning, Monitoring and evaluation, ensure that all</li> </ul>
	PCs and IAs are familiar with the requirements of the EMPr.
	Facilitate the signing of the declaration by the service
	provider/implementing agent.
	Take action against any non-compliance with the EMPr by the IA and/or any
	of his/her sub-contractors.
	·
Provincial coordinator (PC)	Role:
	Is responsible to ensure compliance with the EMPr.
	Consider, approve and sign the corrective action report.
	Coordinate projects on a provincial level.
	Prepare the site layout plan.
	<ul> <li>Assist with the preparation, approve and sign the method statements.</li> <li>Set up the EMPr file and keep it updated through the project.</li> </ul>
	oct up the Livit i file and keep it updated through the project.
	Responsibilities:
	Form part of the fieldwork team.
	<ul> <li>Assist with the development of the rehabilitation plan.</li> </ul>
	Communicate all issues raised in this EMPr with all personnel undertaking
	any work on the site.
	Ensure that each service provider/implementing agent fully understands
	the contents and requirements of the EA and EMPr and the legal and
	financial consequences of audit findings.
	Ensure that a general authorisation is registered and that the conditions for that general outhorisation are implemented.
	that general authorisation are implemented.
	Monitoring and oversight of the EMPr.      Take action against in terms of audit finding related to the EMPr by the IA.
	Take action against in terms of audit finding related to the EMPr by the IA     and/or any of his/hor sub-contractors.
	and/or any of his/her sub-contractors.

Function	Role and Responsibilities		
	Conduct site inspections on prepare a monthly report.		
Design engineer  Wetland ecologist/ aquatic scientist where relevant	Role: Form part of the phase two planning team. Undertake the planning and design components of the project.  Responsibilities: Assess rehabilitation potential. Reviews and, if necessary, adjusts any previously planned interventions that are included into the historical rehabilitation plans. Under take survey work and take GPS coordinates. Record appropriate dimensions of the locations in order to design and calculate quantities for the interventions. Take digital photographs for record purposes. Visit the site before construction commences to ensure that the original design is still appropriate. Assist the implementing agents in pegging and setting-out interventions. Sign off hard interventions. Sign off hard interventions. Provide detailed drawings of the planned rehabilitation works.  Role: Form part of the fieldwork team. Undertake the specialist studies relating to ecological issues to support the development of the rehabilitation plan.  Responsibilities: Prioritised wetlands screened by the PCs for inclusion in the rehabilitation projects. Investigate rehabilitation opportunities. Provide scientific insight into the development of the rehabilitation plan and site plan and bring expert and often local knowledge to the project team. Undertake a desktop study to determine the most suitable wetlands for rehabilitation efforts. Undertake a rapid wetland status quo. Determine rehabilitation objectives for each wetland. Provide scientific advice to the team on best practices for the diversions, ponding, riverbank stabilization. Collect any additional data/information required for the assessment of the potential impacts of the proposed interventions and construction activities to inform the rehabilitation plan and monitoring thereof.		
Service provider/Implementing agent (can delegate their responsibilities to a project manager)	<ul> <li>Role:         <ul> <li>Tender on the rehabilitation plan per priority interventions.</li> <li>Develop project implementation plans.</li> <li>Employ contractors and their teams (workers) and ensuring that rehabilitation plans are implemented in compliance to the quality measures identified in the SLA.</li> <li>Implement the project and is accountable for everything taking place on site and must operate within the bounds of the WfWetlands EMPr and the standard operating procedures.</li> <li>Develop a site plan that includes the demarcation of the target areas and no-go areas prior to any activity commencing.</li> <li>Provide an on-site notice board(s), where required.</li> <li>Provide danger / warning signs on site.</li> <li>Ensure qualified first aid attendants are available on the team.</li> <li>Undertake environmental awareness training for all staff.</li> </ul> </li> <li>Responsibilities:</li> </ul>		

Function	Role and Responsibilities
	<ul> <li>Implementation and compliance with environmental management actions of the EMPr, and the method statements for the project;</li> <li>Ensure all site staff are trained and kept updated in terms of the EMPr and other legal requirements.</li> <li>Project delivery and quality control for the development services as per appointment.</li> <li>Monitor and report to the PC on the daily activities on-site during the construction period.</li> <li>Ensure that safe, environmentally acceptable working methods and practices are implemented and that equipment is properly operated and maintained, to facilitate proper access and enable any operation to be carried out safely.</li> <li>Sign the EMPr template and the compliance declaration.</li> <li>Ensure that the contractor and participants understand the contract.</li> <li>Keep a digital dated photographic record of the progress of the project.</li> <li>Organise medical assessments for workers.</li> <li>Ensure that corrective actions required, take place within the stipulated timeframe.</li> <li>Issue a corrective action report in writing to the PC, on completion of the corrective action.</li> <li>Is responsible for communicating any issues or concerns of the surrounding community regarding the rehabilitation to the PC or other responsible party and visa-versa to ensure everyone is aware of the issues.</li> </ul>
Contractor	<ul> <li>Role:         <ul> <li>Appoint and remunerate the EPWP participants</li> <li>Construct the interventions detailed in each of the rehabilitation plans with their teams (workers).</li> </ul> </li> <li>Responsibilities:         <ul> <li>Engage with local communities and keep a complaints register.</li> <li>Ensure that the mitigation measure in the EMPr are implemented.</li> <li>Address any non-compliances identified.</li> <li>Ensure that the work remains within the demarcated areas.</li> <li>Ensure adherence to the site plan.</li> <li>Comply with the requirements of the EMPr.</li> <li>Monitor and report to the PC on the daily activities on-site during the implementation phase.</li> <li>Ensure qualified first aid attendants are available on the team.</li> <li>Ensure that safe, environmentally acceptable working methods and practices are implemented and that equipment is properly operated and maintained, to enable any operation to be carried out safely.</li> <li>Undertake environmental awareness training for all staff.</li> </ul> </li> </ul>
Competent Authority: Integrated Environmental Authorisations Chief Directorate	Role: Register the project.  Responsibilities: Within 10 days of receiving the complete and correct information required in terms of Part B and C of the EMPr register the project and provide a registration number.  Keep a record of all registered projects and make this available on the Departmental website.
Competent Authority: Compliance Chief Directorate	Role:  Monitor compliance with the EMPr.  Responsibilities:

Function	Role and Responsibilities			
	<ul> <li>On receipt of the communication noting the date of commencement of the construction activities, monitor compliance to the EMPr.</li> </ul>			

#### 1.6 Structure and framework of the EMPr

The EMPr is structured in three parts as indicated below and illustrated in Figure 1:

#### PART A: BACKGROUND:

This section provides the background and the institutional framework and planning process for the
programme. It includes the purpose and scope of the EMPr as well as the roles and responsibilities
of key persons involved in the planning and implementation of WfWetlands projects.

#### PART B: REGISTRATION AND DECLARATION OF COMPLIANCE WITH THE EMPR:

- This section requires the completion of two forms, being the registration form (Appendix 1) and the declaration of compliance form (Appendix 2) which requires supporting documentation.
- The registration form must be completed by the provincial coordinator and signed and dated by the
  contractor, service provider/implementing agent and the provincial coordinator. It requires the
  provision of relevant contact and project details.
- The declaration of compliance (Appendix 2) must be signed and dated by the provincial coordinator, service provider/implementing agent and contractor to indicate that all of the relevant parties will comply with the contents of the EMPr template contained in Appendix 3 of Part C, and understand that the impact management outcomes and impact management actions are legally binding. The rehabilitation plan, the site plan, the completed EMPr template (Appendix 3) (excluding the method statements) must be appended to this declaration of compliance.
- Part B and the supporting documentation, identified above must be submitted to the competent
  authority before the WfWetlands project commences, to allow the competent authority to register
  the project to facilitate compliance. It is the responsibility of the NDD to submit the declaration as
  well as the supporting documentation to the competent authority for registration.
- At least fourteen days (14) days before the commencement of the WfWetlands project, the
  provincial coordinator must inform the Compliance Chief Directorate of the competent authority of
  the date of commencement of the project, to facilitate compliance inspections.
- If a new contactor or service provider/implementing agent is employed or the provincial coordinator is replaced, the declaration contained in Appendix 2 of Part C of the EMPr must be re-signed by all the relevant parties. A copy of the revised declaration of compliance must be submitted to the competent authority for their information and record keeping purposes and a copy must be filed in the EMPr file. Once re-signed, the declaration of compliance becomes legally binding to the new party.
- If a new service provider/implementer is employed the method statements must be resigned by all relevant parties and a re-signed copy included in the EMPr file.

#### PART C: ENVIRONMENTAL CONTROLS AND REPORTING:

- This section provides the generic environmental controls, auditing and reporting requirements relevant to all WfWetlands projects. Controls in this section reflect minimum and general requirements for avoiding, managing and mitigating impacts of WfWetlands projects during the implementation phase.
- The EMPr template (Appendix 3) must be completed by the provincial coordinator in conjunction with the implementing agent. The provincial coordinator and the service provider/implementing agent are also required to prepare a method statement for each impact management action relevant to the project. Each method statement is to be numbered and the number cross referenced in the last column of the EMPr template. Where an activity or intervention or an impact management outcome is not relevant, the words "not applicable" can be inserted in the template under the "Method Statement" column.
- The method statements (Appendix 4) as well as each page of the EMPr template must be signed and dated by the service provider/implementing agent and the provincial coordinator. Should any method statement change during the course of the project, the method statement must be amended and approved by the provincial coordinator and resigned by all parties. The revised method statements must be filed in the EMPr file.
- This template, once signed and dated, is legally binding. The provincial coordinator and the implementing agent will remain responsible for its implementation.

The method statement must provide the following information for each environmental management action as per Table 4 below: a method statement reference number, the location of the works, plant, materials, labour, method and schedule that will be used to carry out an activity on the development site as well as any permit, licence and authorisation required to carry out the activity. The method statement must include:

- For implementation of the intervention:
  - o a "responsible person";
  - o a method for implementation; and
  - o corrective actions for an audit finding.
- For monitoring:
  - a responsible person;
  - checklist/reports: and
  - o frequency.
- Evidence of compliance.
  - Dated photograph.

Additional information: Implementation procedures; PPE, materials and equipment to be used; getting the equipment to and from site; how the equipment and material will be moved while on site; how and where material will be stored; site layout plan; the containment or action to be taken if containment is not possible of leaks or spills of any liquid or material that may occur, as an emergency plan and a health and safety plan.

Table 4: Format of the Method Statement

Method Statement Ref no. MS xxxxxxx						
Activity or interver	Activity or intervention: PREDEFINED AS PART OF THE EMPr					
Environmental Im	<u>ipact: Pf</u>	REDEFINED AS PART OF THE EMPr				
Impact Managem	ent <u>Out</u>	come: PREDEFINED AS PART OF THE	EMPr			
Location of the wo	Location of the works: Plant (equipment needed):					
Materials: Labour:						
Implementation of intervention				Monitoring		

Impact Management Actions	Responsible Person	Method of Implementation	Timeframe for Implementation	Responsible Person	Frequency	Evidence of Compliance
PREDEFINED AS PART OF THE EMPr	AS PART OF TO BE COMPLETED					
Additional	Additional information:					
			Signatures			
Со	ntractor	Service p	Service provider/Implementing agent Provincial coord		rdinator	
Date Date Date						

Part A – BACKGROUND AND CONTEXT	Part B – REGISTRATION AND DECLARATION OF COMPLIANCE	Part C – ENVIRONMENTAL CONTROLS AND REPORTING
a Dockground and nood.	WITH THE EMPR	a Introduction.
Background and need;		• Introduction;
Institutional framework and	Registration form;	<ul> <li>Monitoring and auditing;</li> </ul>
planning processes;	Declaration form;	<ul> <li>Appendix 1 – Registration form;</li> </ul>
• Purpose;	Site Plan.	<ul> <li>Appendix 2 – Declaration form;</li> </ul>
• Scope;		Appendix 3 - Environmental
• Exclusions;		management programme
<ul> <li>Roles and responsibilities.</li> </ul>		template;
		Appendix 4 – Approved method
		statements.

Figure 1: Framework for the EMPr

# PART B: REGISTRATION AND DECLARATION OF COMPLIANCE WITH THE EMPR

#### 1 REGISTRATION AND DECLARATION

This section of the EMPr is to be completed by the provincial coordinator. The registration form and the declaration of compliance must be signed and submitted to the competent authority to register the project for compliance purposes. The competent authority is required to provide the implementing agent with a registration number within 10 days of receiving the complete and correct information.

#### 1.1 Registration form

The registration form is provided in Appendix 1.

#### 1.2 Declaration form

The declaration form is provided in Appendix 2.

#### 1.3 Site plan

The site plan for the project must be appended to this declaration of compliance. The site plan must include as a minimum the following:

- General map generated from Phase two field data indicating the properties, access points, areas of sensitivity, no-go areas.
- The types of interventions.
- The location of the WfWetlands project.
- The position of the interventions identified in the rehabilitation plan, illustrated at an appropriate resolution. These interventions could include, but not be limited to, bush encroachment control areas, earth works, soil stabilisation areas, rock and concrete interventions.
- Farm portion names and gate access points.
- Areas of specific sensitivity where access must be restricted.
- Eating, parking, smoking, storage, laydown, chemical mixing, cement mixing areas.
- Dated photographs of location area and site.

# PART C: ENVIRONMENTAL CONTROLS AND REPORTING

#### 1 INTRODUCTION

This section captures the different types of WfWetlands interventions or activities and their impacts. It also provides generic impact management actions required to achieve the impact management outcomes for the avoidance, management and mitigation of these impacts and risks.

The EMPr template must be completed by the provincial coordinator in conjunction with the service provider/implementing agent and a method statement for each impact management activity relevant to the project must be prepared. The method statement is to be numbered and the number cross referenced in the last column of the EMPr template. Where an activity or intervention or an impact management outcome is not relevant, the words "not applicable" can be inserted in the template under the "Method Statement" column.

Once the method statements have been approved by the provincial coordinator, and the numbers cross referenced into the EMPr template, each page of the method statement and template must be signed and dated by the provincial coordinator as well as the service provider/implementing agent and contractor. Should any of the method statements or impact management actions change the pages are to be amended and re-signed by the relevant parties. All updates are to be filed in the EMPr file.

Should the PPM be replaced or a new service provider/implementer or contractor be appointed, the EMPr template and method statements must be resigned by all relevant parties and the re-signed document included in the EMPr file.

To allow interested and affected parties access to the EMPr for the project the project coordinator must have a hard copy of the document available at the project site. The competent authority must publish a list of all excluded project on its website.

The provincial coordinator and the service provider/implementing agent are responsible to ensure the implementation of these outcomes and actions for all projects as a minimum requirement, in order to mitigate the impact of such aspects identified for the WfWetlands projects.

#### 2 MONITORING AND AUDITING

#### 2.1 Environmental documentation, monitoring and reporting

To ensure accountability is demonstrated in the implementation of the EMPr, a number of reporting systems, documentation controls and compliance mechanisms shall be in place for all WfWetlands projects as a minimum requirement.

#### 2.1.1 Document control/Filing system

An EMPR file shall be established at the outset of the implementation phase and shall be maintained throughout the lifespan of the project. The provincial coordinator is solely responsible for the upkeep and management of the EMPr file. At a minimum, all documentation detailed below will be stored in the EMPr file. A hard copy of all documentation shall be filed and this file must remain current and up-to-date.

The EMPr file must be made available at all times on request by the national deputy director or other relevant authorities requiring the file for compliance monitoring.

#### 2.1.2 Documentation to be available

At the outset of the project, the following documents shall be placed in the EMPr file and be accessible at all times:

- Copy of the competent authorities' registration number;
- Copy of the EMPr template as well as any amendments thereof, signed and dated as required;
- Copy of the signed declaration of compliance to the requirements of the EMPr;
- All signed method statements and revised statements if relevant;
- A copy of the service provider agreement;
- Copies of any other licenses, permission or permits required;
- Emergency numbers (ambulance, fire, poison control etc.;
- Evidence of occupational health, safety and environmental training undertaken;
- Copies of the accepted monthly environmental audit Reports;
- Weekly environmental checklists;
- A copy of all non-compliance notice issued;
- Monthly audit report;
- A copy of all instructions or directives issued;
- The corrective action response;
- A complaints register; and
- Dated photographs, before, during and after implementation of project; and
- An incident register.

#### 2.1.3 Weekly environmental checklists

The PM is required to complete a weekly environmental monitoring checklist, the format of which is to be agreed prior to commencement of the project. The PPM is required to sign and date the checklist, retain a copy in the EMPr file. The checklists will form the basis for the monthly environmental audit reports compiled by the PPM.

#### 2.1.4 Required method statements

Method statements that set out the equipment, materials, PPE, labour and method(s) the contractor will employ to respond to the environmental outcomes and actions required to avoid, manage or mitigate potential environmental impacts or risks posed by implementing WfWetlands projects. The method statements must be prepared in such detail that the PC is able to assess whether the contractor's proposal will meet the requirements of the generally accepted impact management outcomes and actions required by the EMPr. A copy of the signed and dated method statement must be kept in the EMPr file, including any updates. A copy of the signed and dated method statement, including any updates, must be appended in Appendix 4 and kept in the EMPr file.

The PPM shall ensure that the service provider perform in accordance with these method statements when conducting monthly audits.

#### 2.1.5 Audit findings

Continued and repeated failure to redress the cause of an audit finding could be reported to the relevant Compliance Chief Directorate within the competent authority's structure by the NDD, for them to deal with the finding, as it deems fit.

An audit finding notice will be issued to the responsible contractor by the PC. The non-compliance notice must be issued in writing and a copy filed in the EMPr file. The notice must as a minimum include the following:

- Time and date of the finding;
- Name of the contractor responsible;
- Nature and description of the finding;
- Recommended/required corrective action; and
- Date by which the corrective action to be completed.

The contractor shall act immediately when a notice of the finding is received and correct whatever is the cause for the issuing of the audit finding notice. The contractor is deemed not to have complied with the EMPr if, inter alia:

• There is a deviation from the environmental impact management outcomes and impact management of the EMPr, and/or the approved method statements, which deviation has, or may cause, an environmental impact.

#### 2.1.6 Corrective action report

For each audit finding notice issued, a documented corrective action must be recorded. On receiving an audit finding notice from the PPM, the contractor must ensure that the corrective actions required is implemented within the stipulated timeframe. On completion of the corrective action the service provider/implementing agent is to issue a corrective action report in writing to the PC. If satisfied that the corrective action has been

completed, the PPM is to sign-off on the audit finding action report, and attach the report to the audit finding in the EMPr file. A corrective action is considered complete once the report is signed off by the PC.

#### 2.1.7 Service provider agreement

Each appointed service provider/implementing agent is required to sign a service provider agreement. This agreement provides for signed acknowledgement by the service provider/implementing agent of the EMPr and the environmental outcomes and actions therein. A signed copy of the service provider agreement is to be filed in the EMPr file. No service provider/implementing agent or their contractors will be allowed to start work without having signed the service provider agreement.

#### 2.1.8 Photographic record

A dated digital photographic record must be kept by the service provider/implementing agent. The photographic record will be used to show before, during and post completion evidence of the project as well as used in cases of damages claims if they arise. Each image must be dated and a brief description note attached with the specific site location. Photographic records must be taken once a week.

The service provider/implementing agent must allow the PC access to take photographs of all areas, activities and actions.

#### 2.1.9 Monitoring requirements

Monitoring and evaluation (M&E) facilitate the dissemination of lessons learnt and provide a means of reporting on the success of specific rehabilitation initiatives. The M&E of an identified rehabilitation project's performance is therefore considered vital to inform the evaluation of rehabilitation success.

The collection of baseline monitoring information is important to allow for the evaluation of the performance of rehabilitation activities. Baseline monitoring needs to be carried out prior to the implementation of rehabilitation activities to provide comparable data for monitoring at a later stage, following the rehabilitation.

Any additional data/information required for the assessment of the potential impacts of the proposed interventions and construction activities should also be collected by the ecologist and the PC to inform the rehabilitation plan and monitoring thereof.

The weekly environmental monitoring checklist and photographic records are part of the monitoring performed during the implementation of the project.

#### 2.1.10 Environmental audits

Internal environmental audits of the activity and implementation of the EMPr must be undertaken by the PPM monthly against the EMPr and method statements. The findings and outcomes of the audit report must be included in the EMPr file and submitted to the NDD Monitoring and Evaluation.

As a minimum, the monthly report is to cover the following:

- Weekly environmental checklists;
- Deviations and non-compliances with the checklists;
- Audit findings issued;
- Completed and reported corrective actions;
- Environmental monitoring;

- General environmental findings and actions; and
- Dated photographic records.

#### 2.1.11 Environmental audit report (EAR)

On final completion of the implementation phase an environmental close-out audit report is to be prepared by the PM and submitted to the NDD. The environmental audit report must be included in the EMPr file.

Acceptance and approval of the close-out environmental audit report by the NDD will end the implementation phase of the EMPr as successful and complete.

### APPENDIX 1 - REGISTRATION FORM

### **Working for Wetlands - Registration Form**

The project manager of a Working for Wetlands project must complete this form for every Working for Wetlands project and submit the correctly signed form, together with the supporting information, to the Director: Integrated Environmental Management Systems and Tools Coordination at the address below. The registration of the project by the competent authority is to allow the activities associated with the project, as identified in the Environmental Impact Assessment Regulations Listing Notice 1, Listing Notice 2 or Listing Notice 3, of 2014, as amended, to be excluded from the requirement to obtain environmental authorisation, based on compliance to an environmental management instrument adopted in the prescribed manner as provided for in section 24(2)(e) of the National Environmental Management Act, 1998 (Act No. 107 of 1998). In this case the environmental management instrument is the Generic Environmental Management Programme for the Working for Wetlands Programme (version 0 of June 2020).

By post at: The Director-General

Attention: Director: Integrated Environmental Management Systems and Tools Coordination

Department of Environment, Forestry and Fisheries

Private Bag X447

PRETORIA

0001

By hand at: 473 Steve Biko Road ARCADIA 0083

#### Description of the project

Project name:
General project location:
Farm name/s:
Farm number/s:
Portion name/s:
Portion number/s:
General description of the interventions to be carried out:
Details of the national deputy director: planning, monitoring and evaluation
Name of national deputy director: planning, monitoring and evaluation:
Tel Number:
E-mail Address:

Generic Environmental Management Programme for the Working for Water Programme (version 0 of June 2020)

Postal Address:	
Physical Address:	
Details of the provincial coordinator	
Name of provincial coordinator:	
Tel Number:	
E-mail Address:	
Postal Address:	
Physical Address:	
Details of the service provider/implementing agent	
Name of service provider/implementing agent:	
Tel Number:	
E-mail Address:	
Postal Address:	
Physical Address:	
Details of the contractor	
Name of contractor	
Tel Number:	
E-mail Address:	
Postal Address:	
Physical Address:	
•	
Signature provincial coordinator	Date:
Signature implementing agent	Date:
Signature contractor	Date:

### APPENDIX 2 – DECLARATION FORM

## **Declaration of Compliance**

The provincial coordinator, the implementing agent and the contractor, in their capacities as identified in paragraph 1.6 Part A, must sign the declaration of compliance as confirmation of understanding of the requirements of the understanding requirements of the EMPr and the need to implement its provisions.

Pro_	ject name:		
	, ir	n my capacity as provincial coordinator of this Wf	Wetlands
	ject, and	n my capacity as implementing agent of this Wf	Wetlands
	rms that I:	in my capacity as contractor of this WfWetlands	s project,
•	will abide by and comply with the stipulated in Part C of this EMPr;	e prescribed impact management outcomes and a	ictions as
•	have the understanding that the binding; and	e impact management outcomes and actions a	re legally
•		vide written notice to the competent authority: Cos of the date of commencement of the project in s.	-
 Sigı	 nature provincial coordinator	 Date:	-
 Sigi	nature implementing agent	Date:	
 Sigi	 nature contractor	 Date:	-

# APPENDIX 3 – ENVIRONMENTAL MANAGEMENT PROGRAMME TEMPLATE

#### ENVIRONMENTAL MANAGEMENT PROGRAMME TEMPLATE

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
Infrastructure developme	ent and maintenance	,		
Erecting temporary protective fences to protect rehabilitated areas	May restrict movement of untargeted fauna	Allow untargeted species access to the restricted area	Implement design as per the site- specific rehabilitation plan	
Erecting permanent protective fences to protect conservation areas	Soil compaction and erosion due to trampling	Maintain soil characteristics and prevent the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
	Pollution due to cement and concrete batching  Impacts on fauna and flora	Avoid contamination of the soil and water resulting from cement and concrete batching  Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"  Comply with impact management actions under General interventions section "General activities - Impacts on	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Harm to animals due to excess and discarded material	No excess and discarded material are left behind	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
			Comply with impact management actions under General interventions section "General activities - Waste pollution"	
Road strips constructed	Soil compaction and erosion due to vehicle access	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Soil compaction due to vehicle access"	
	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
	Temporary stream diversion	Maintain viable connectivity and flow for aquatic species movement and migration	Comply with impact management actions under General interventions section "General actions – Temporary stream diversion"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Waste pollution	No waste to remain on site	Comply with impact management actions under General interventions section "General activities - Waste pollution"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Impacts on fauna and flora	Prevent impacts on flora and fauna to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Impeding aquatic species migration and species isolation could lead to habitat fragmentation	Maintain viable connectivity and flow for aquatic species movement and migration	Apply site specific engineer-approved design based on ecologist input in the rehabilitation plan	
Causeways	Soil compaction and erosion due to vehicle access	Maintain soil character and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			usage - Soil compaction due to vehicle access"	
	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
	Soil disturbance and erosion	Minimise soil disturbance and erosion	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
	Erosion, sedimentation and watercourse damming	Reduce impacts to watercourses	Comply with impact management actions under General interventions section "General actions – Erosion, sedimentation and watercourse damming"	
	Temporary stream diversion	Maintain viable connectivity and flow for aquatic species movement and migration	Comply with impact management actions under General interventions section "General actions – Temporary stream diversion"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			section "General activities - Pollution	
			due to fuel, oil or hydrocarbon spills"	
	Pollution due to cement	Avoid contamination of the	Comply with impact management	
	and concrete batching	soil and water resulting from	actions under General interventions	
		cement and concrete	section "General activities - Pollution	
		batching	due to cement and concrete batching"	
	Impeding aquatic species	Maintain viable connectivity	Apply site specific engineer-approved	
	migration and species	and flow for aquatic species	design based on ecologist input in the	
	isolation could lead to	movement and migration	rehabilitation plan	
	habitat fragmentation			
	Disturbance or loss of	Minimal habitat and species	Comply with impact management	
	important species and their	disturbance during and after	actions under General interventions	
	habitat	activity	section "Removal of rock, sand or soil	
			for construction of soil conservation	
			works - Disturbance or loss of important	
			species and their habitat"	
Drifts	Soil compaction and erosion	Maintain soil character and	Comply with impact management	
	due to vehicle access	avoid or minimise the	actions under General interventions	
		degradation of vegetation	section "Access to site and vehicle	
			usage - Soil compaction due to vehicle	
			access"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
	Soil disturbance and erosion	Minimise soil disturbance and erosion	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
	Erosion, sedimentation and watercourse damming	Reduce impacts to watercourses	Comply with impact management actions under General interventions section "General actions – Erosion, sedimentation and watercourse damming"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
			Comply with impact management actions under General interventions	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"  Comply with impact management actions under General interventions section "General activities -	
	Temporary stream diversion	Maintain viable connectivity and flow for aquatic species movement and migration	Downstream siltation"  Comply with impact management actions under General interventions section "General actions – Temporary stream diversion"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Impacts on fauna and flora	Prevent impacts on flora and fauna to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Impeding aquatic species migration and species isolation could lead to habitat fragmentation	Maintain viable connectivity and flow for aquatic species movement and migration	Apply site specific engineer-approved design based on ecologist input in the rehabilitation plan	
	Disturbance or loss of important species and their habitat	Minimal habitat and species disturbance during and after activity	Comply with impact management actions under General interventions section "Removal of rock, sand or soil for construction of soil conservation works - Disturbance or loss of important species and their habitat"	
Board walks for temporary access	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
	Soil disturbance and erosion	Minimise disturbance and erosion of soil	Comply with impact management actions under General interventions	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			section "General activities - Soil	
	Pollution due to cement and concrete batching	Avoid contamination of the soil and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"	
	Impacts on fauna and flora	Prevent impacts on flora and fauna to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Disturbance and destruction of selected/certain fauna and flora species' habitat	Ensure minimal impact to ecologically sensitive environments	Board walk to be designed / planned as specified by the ecologist as included in the site-specific rehabilitation plan  Demarcate the work area as per site plan and ensure activities stay within	
			demarcated areas  Mark sensitive habitats and plant species to avoid detrimental placement of the boardwalk and supports	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Use of hazardous substances (e.g. varnish, COCA treatment, cleaning of brushes, etc.) resulting in	Avoid spillage onto soil or into water	Comply with impact management actions under General interventions section "General activities – Water and soil pollution by chemicals"	
	water and soil pollution by chemicals	Prevent contamination of ecologically sensitive environments	Demarcate the work area as per site plan and ensure activities stay within demarcated areas	
			Comply with impact management actions under General interventions section "General activities – Water and soil pollution by chemicals"	
Water diversion and imp	peding		T	
Impeding water flow	Soil compaction due to vehicle access	Maintain soil character and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Soil compaction and erosion due to vehicle access"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
	Soil disturbance and erosion	Minimise disturbance and erosion of soil	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
	Erosion, sedimentation and watercourse damming	Reduce impacts to watercourses	Comply with impact management actions under General interventions section "General actions – Erosion, sedimentation and watercourse damming"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Temporary stream diversion	Maintain viable connectivity and flow for aquatic species movement and migration	Comply with impact management actions under General interventions	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			section "General actions – Temporary stream diversion"	
	Waste pollution	No waste to remain on site	Comply with impact management actions under General interventions section "General activities - Waste pollution"	
	Impacts on fauna and flora	Prevent impacts on flora and fauna to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Impeding aquatic species migration and species isolation could lead to localised extinctions during the rehabilitation period	Maintain viable connectivity and flow for aquatic species movement and migration	Ensure that migratory connectivity and stream continuity is maintained in diversion and constructed intervention designs	
Rock packs	Soil compaction and erosion due to trampling	Maintain soil characteristics and prevent the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage resources	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to palaeontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to paleontological resources"	
	Disturbance or loss of important species and their habitat	Minimal habitat and species disturbance during and after activity	Comply with impact management actions under General interventions section "Removal of rock, sand or soil for construction of soil conservation works - Disturbance or loss of important species and their habitat"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
Brush packing	Vegetation debris accumulation that may cause a fire hazard	Prevent fire risks	Debris from the invasive vegetation clearing must be stockpiled in the demarcated areas for further action by the landowner	
			Comply with impact management actions under General interventions section "General activities - Fire damage to surrounding environment"	
	Biomass being washed into watercourses causing channel blockages and erosion	Prevent debris washing into the river	Stack debris away from watercourse	
	Introduction of alien invasive species	Prevent seeding of alien invasive vegetation through brush packing	Do brush packing according to rehabilitation plan and engineering instruction	
CCA Poles	Disturbance and erosion of soil	Minimise disturbance and erosion of soil	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
		Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	CCA leaching resulting in potential pollution	Prevent / minimise leachate into water	Use correct CCA class pole – H5 for freshwater	
Plugs	Erosion, sedimentation and watercourse damming	Reduce impacts to watercourses	Comply with impact management actions under General interventions section "General actions – Erosion, sedimentation and watercourse damming"	
	Soil disturbance and erosion	Minimise disturbance and erosion of soil	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Disturbance or loss of important species and their habitat	Minimal habitat and species disturbance during and after activity	Comply with impact management actions under General interventions section "Removal of rock, sand or soil for construction of soil conservation works - Disturbance or loss of important species and their habitat"	
Erosion control structure	s			
Concrete weirs	Downstream siltation	Prevent downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Temporary stream diversion	Maintain viable connectivity and flow for aquatic species movement and migration	Comply with impact management actions under General interventions section "General actions – Temporary stream diversion"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"	
		Reduce dust generation and dispersal	Comply with impact management actions under General interventions	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			section "General activities - Pollution due to cement and concrete batching"	
			Comply with impact management actions under General interventions section "Access to site and vehicle usage - Dust generation"	
		Prevent contamination of ecologically sensitive environments	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"	
	Erosion and undercutting	Stable soils and weir	Prevent sliding, tilting, slumping or overturning of the structure	
			Ensure the apron is adequate and wider than overflow to prevent scouring downstream	
			Follow engineering designs and rehabilitation plan	
Silt fencing	Soil disturbance and erosion	Minimise disturbance and erosion of soil and watercourses	Comply with impact management actions under General interventions	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			section "General activities - Soil disturbance and erosion"	
	Impacts on fauna and flora	Prevent impacts on flora and fauna to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
Gabion weirs	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
			All activities, including laydown areas, remain strictly within demarcated routes and areas as per site plan	
	Soil disturbance and erosion	Minimise disturbance and erosion of soil	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
	Erosion, sedimentation and watercourse damming	Reduce impacts to watercourses	Comply with impact management actions under General interventions section "General actions – Erosion,	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			sedimentation and watercourse damming"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Temporary stream diversion	Maintain viable connectivity and flow for aquatic species movement and migration	Comply with impact management actions under General interventions section "General actions – Temporary stream diversion"	
	Offcuts / remaining materials	No waste to remain on site	Comply with impact management actions under General interventions section "General activities - Waste pollution"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil, air and water resulting	Comply with impact management actions under General interventions	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
		from cement and concrete batching	section "General activities - Pollution due to cement and concrete batching"	
	Impacts on fauna and flora	Prevent impacts on flora and fauna to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Damage to infrastructure	Protect man-made infrastructure	Mark all existing infrastructure on the site plan	
			Demarcate no-go areas according to the site plan	
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage resources	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to palaeontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to paleontological resources"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Disturbance or loss of important species and their habitat	Minimal habitat and species disturbance during and after rock collection	Comply with impact management actions under General interventions section "Removal of rock, sand or soil for construction of soil conservation works - Disturbance or loss of important species and their habitat"	
Rock masonry structures	Soil compaction due to vehicle access	Maintain soil character and avoid or minimise the squalor of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Soil compaction and erosion due to vehicle access"	
	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
	Soil disturbance and erosion	Minimise disturbance and erosion of soil	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Erosion, sedimentation and watercourse damming	Reduce impacts to watercourses	Comply with impact management actions under General interventions section "General actions – Erosion, sedimentation and watercourse damming"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Waste pollution	No waste to remain on site	Comply with impact management actions under General interventions section "General activities – Waste pollution"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil, air and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"	
	Impacts on fauna and flora	Prevent impacts on flora and fauna to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Disturbance or loss of important species and their habitat	Minimal habitat and species disturbance during and after rock collection	Comply with impact management actions under General interventions section "Removal of rock, sand or soil for construction of soil conservation works - Disturbance or loss of important species and their habitat"	
Vegetation managemen	t			
Control of alien invasive plants (AIP) - Mechanical AIP control (e.g. large machinery, chain	Soil compaction due to vehicle access	Maintain soil character and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Soil compaction and erosion due to vehicle access"	
saws, brush cutters)	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Dust generation"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Soil disturbance and erosion	Minimise disturbance and erosion of soil	Comply with impact management actions under General interventions section "General activities - Soil disturbance and erosion"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Loss of biodiversity and non-targeted plant species (damage to indigenous	Minimise loss of biodiversity and prevent impacts on natural resources including	Correctly identify targeted species and orientate the team	
	trees)	flora and fauna to minimise disturbance	Demarcate the project area to work in  The supervision to ensure non-targeted species are not removed	
			Comply with impact management actions under General interventions	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			section "General activities - Impacts on fauna and flora"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities – Noise pollution"	
- Manual AIP control	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Loss of biodiversity and non-targeted plant species (damage to indigenous trees)	Minimise loss of biodiversity and prevent impacts on natural resources including flora and fauna to minimise disturbance	The approved contractor must ensure all operators are able to correctly identify targeted and protected species  The operator shall supply supervision to ensure non-targeted species are not controlled or to stop operations during unfavourable weather conditions  Comply with impact management actions under General interventions	
			section "General activities - Impacts on fauna and flora"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
- Chemical AIP control: Herbicide application to prevent re-coppicing /regrowth	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Water and soil pollution by chemicals	Avoid spillage onto soil or into water while mixing or using chemicals	Comply with impact management actions under General interventions section "General activities – Water and soil pollution by chemicals"	
		Prevent contamination of ecologically sensitive environments	Comply with impact management actions under General interventions section "General activities – Water and soil pollution by chemicals"	
	Spillage or drift during mixing of chemicals	Prevent loss of biodiversity and non-targeted plant species (damage to indigenous trees)	Do not apply foliar hand spray chemical applications under conditions where chemical drift may impact non-targeted species (as indicated on the manufacturer's directions for use on the herbicide label)	
			Demarcate areas for mixing and ensure ground cover	
			Use Working for Water guidelines for approved herbicides	
			Comply with impact management actions under General interventions	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			section "General activities - Waste pollution"	
			Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Vegetation debris accumulation that may cause a fire hazard	Prevent fire risks	Debris from the invasive vegetation clearing must be stockpiled in the demarcated areas for further action by the landowner	
			Comply with impact management actions under General interventions section "General activities - Fire damage to surrounding environment"	
	Biomass causing re- infestation	Reduce re-infestation potential	Manage the debris according to the site-specific plan per species and the site instruction	
			Do not stack removed plants on top of indigenous flora	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Biomass being washed into watercourses causing channel blockages and erosion	Prevent debris washing into the river	Stack debris away from watercourse	
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage resources	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to palaeontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to paleontological resources"	
Landscaping/Earthworks	5			
Chute construction	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Dust generation"	
	Erosion during construction	Prevent erosion	Schedule work outside predicted rainy days (consider weather conditions)  Secure excavations by shuttering as required	
			Follow design drawing and site instructions	
	Erosion, sedimentation and watercourse damming	Reduce impacts to watercourses	Comply with impact management actions under General interventions section "General actions – Erosion, sedimentation and watercourse damming"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under General interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil and water resulting from cement and concrete batching	Comply with impact management actions under General interventions section "General activities - Pollution due to cement and concrete batching"	
	Loss of biodiversity and non-targeted plant species (damage to indigenous trees)	Minimise loss of biodiversity and prevent impacts on natural resources including flora and fauna to minimise disturbance	Comply with impact management actions under General interventions section "General activities - Impacts on fauna and flora"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under General interventions section "General activities – Noise pollution"	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
Cut and fill (for excavations, narrow or shallow erosion gullies)	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under General interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under General interventions section "Access to site and vehicle usage - Dust generation"	
	Loss of topsoil	Conserve topsoil for use during re-vegetation and rehabilitation	Comply with impact management actions under General interventions section "General activities - Loss of topsoil"	
	Soil degradation and increased erosion	Intended function of intervention is achieved and landscaped area is stable	Cut and fill as per engineered design, rehabilitations plan and engineering drawings	
			Stabilize and revegetation as per rehabilitation plan	
	Expansion of gully extent	Ensure Landscaped area is stable	Cut and fill gullies as per engineering design	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			Do not work in wet weather	
			Rehabilitate and revegetate surrounds	
	Erosion, sedimentation and watercourse damming	Reduce impacts to watercourses	Comply with impact management actions under General interventions section "General actions – Erosion, sedimentation and watercourse damming"	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
Sloping	Erosion and sedimentation	Stable slopes	According to Engineering design	
Ponding	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under General interventions	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			section "Access to site and vehicle usage - Dust generation"	
	Erosion and siltation	No silt movement, erosion, sedimentation	Apply rehabilitation plan/engineer- approved design	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under General interventions section "General activities - Downstream siltation"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under General interventions section "General activities - Occupational health and safety"	
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage resources	Comply with impact management actions under General interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to palaeontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under General interventions section "General activities - Disturbance	

Generic Environmental Management Programme for the Working for Water Programme (version 0 of June 2020)

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			or damage to paleontological	
			resources"	

## General interventions: impacts, impact management outcomes and impact management actions

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
Access to site and vehicle usage	Soil compaction and erosion due to vehicle access	Maintain soil character and avoid or minimise the degradation of vegetation	Access roads, parking areas and turning circles are pre- planned to be located as per site plan
			The access roads are physically marked on site
			Vehicle movement is restricted to demarcated routes and turning areas
			In the location of routes ensure the optimal use of already disturbed areas to minimise vegetation destruction and soil compaction
			Routing of access roads to follow contours in hilly areas
	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Identify and avoid no-go areas or areas sensitive to compaction on the site plan
			Demarcate no-go areas on site and restrict access

		40
Signature provincial coordinator	Date:	
Signature service provider/implementing agent	Date:	
Signature contractor	 Date:	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			All activities remain strictly within demarcated routes and areas
			Once the intervention has been completed, break the crust on bare compacted areas to enhance vegetation establishment
	Degradation and destruction of surrounding areas	Reduce damage to ecologically sensitive environments	Restrict access to demarcated access routes and working areas as indicated in the site plan
	Dust generation	Reduce dust generation and dispersal	Restrict access to demarcated access routes and working areas as indicated in the site plan)
			Implementing the speed limit on dirt roads
			Reduce speed where activities and roads are close to buildings and/or dwellings
	Impacts to landowner(s) and property	Minimise impacts to landowner and property	Use existing routes as per site plan
		Minimise impacts to conservation areas	Work within identified areas as specified in the rehabilitation plan

		41
Signature provincial coordinator	Date:	
Signature service provider/implementing agent	Date:	
Signature contractor	Date:	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
Painting or primining of structures	Water pollution	Ensure no water pollution from painting or priming of structures	All painting and priming to be done off-site
General activities within the working area	Loss of topsoil	Conserve topsoil for use during revegetation and rehabilitation	Remove topsoil and store separately from subsoil layers  Cover topsoil if it is going to be stored for extended periods
			Cover revegetated area with topsoil that was removed and stored prior to rehabilitation
	Soil disturbance and erosion	Minimise disturbance and erosion of soil	All activities remain strictly within demarcated routes and areas
			Rehabilitate disturbed soil according to the rehabilitation plan
			The intervention strictly follows instructions as indicated in the rehabilitation plan
			Do not work during wet weather
	Erosion, sedimentation and watercourse damming	Reduce impacts to watercourses	Install temporary erosion protection measures
			Reinstate areas eroded due to work undertaken

42

Signature provincial coordinator	Date:
Signature service provider/implementing agent	Date:
Signature contractor	 Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			Remove cut AIP material (biomass) at least 30m away from a flood zone to prevent damming and secondary erosion  Apply stream diversion according to the engineering drawings and work instructions if any work will be conducted in the river-stream bed with surface flow present
			Deactivate diversion channels after implementation
	Downstream siltation	Minimise downstream siltation	Do not work during wet weather
			Secure excavations by shuttering as required
			Construct temporary berms up-slope to divert runoff around work site and temporary sediment traps (sandbags / hay-bales / bio-engineered structures)
			Construct temporary berms immediately downstream of work area to trap the sediment collected from the work area
			Excavated soil must not be stored in the watercourse
			Exposed and/or compacted soil is re-vegetated/covered as indicated on the rehabilitation plan

Signature provincial coordinator	Date:
Signature service provider/implementing agent	Date:
Signature contractor	 Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			Where applicable, remove sediment traps after intervention has been constructed and work area is stabilised
	Temporary stream diversion	Plan construction to minimize the time needed for the temporary stream diversion	Rehabilitation interventions such as gabions, Reno mattresses, concrete road strips are constructed in situ
		Maintain downstream PES and river condition	Implement and complete intervention activities as soon as diversion is implemented
			Implement water diversion before conducting work in the main river / stream bed
		Ensure intended function of temporary stream diversion is achieved	Apply stream diversion according to the engineering drawings and work instructions if any work will be conducted in the river-stream bed with surface flow present
	Water and soil pollution by chemicals	Avoid spillage onto soil or into water while mixing or using chemicals	Staff using chemicals are trained and aware of the risks of using chemicals
			Chemicals are mixed on impermeable and level surfaces as per the manufacturer's instructions
			All waste material and containers are safely and properly removed after use

44

Date:
Date:
 Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
		Prevent contamination of ecologically sensitive environments	Chemicals are stored, mixed and used in demarcated areas
	Waste pollution	No waste to remain on site	Provide waste containment
			The site is cleaned of litter daily
			No burying or burning of waste on site
			Remove all residual waste / material on completion of work
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Only vehicles and machinery without fluid leaks are to be used on site
			Daily demarcate an area for storage equipment, ensure ground protection is provided
			Vehicles and machinery are checked for fluid leaks daily and leaking equipment is removed from site to facilitate repair
			Provide temporary drip trays where fluid leaks are detected and/or emergency repairs need to be undertaken

		45
Signature provincial coordinator	Date:	
Signature service provider/implementing agent	Date:	
Signature contractor	 Date:	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			Use a mobile refuelling unit and ground protection such as drip trays if on-site refuelling is required in emergency situations
			No scheduled maintenance may take place on site
	Pollution due to cement and	Avoid contamination of the soil, air and	Store sand, stone and cement in demarcated areas
	concrete batching	water resulting from cement and concrete batching	Do not handle dry material during extremely windy conditions
			Mix cement on a level impermeable surface (e.g. shutter board)
			Mix cement on the day of intended use
			Mixing of cement or concrete batching to be undertaken at specifically identified areas outside of drainage lines
			The mixing of cement or concrete is to be done at specifically selected sites outside drainage lines from riparian areas, to contain run-off
			Water use to clean of cement mixing and handling equipment is to be contained and reused for mixing where possible

Signature provincial coordinator	Date:
Signature service provider/implementing agent	Date:
Signature contractor	 Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			Secure empty cement bags to prevent spread of cement dust prior to disposal
			All empty cement packaging is stored in a dedicated area and removed from the site for disposal at an appropriate waste facility
			Do not construct with, or lay, concrete when extended rain periods is expected
			Do not leave any cement spills or unused hardened cement at the work location
	Impacts on natural fauna and flora	Prevent impacts on natural fauna and flora to minimise disturbance	Demarcate the work area as per site plan and ensure activities stay within demarcated areas
			Ensure that activities avoid large trees and endangered plant species
			Activities to avoid drainage lines, where they cannot be avoided, they should be marked on the site plan
			Ensure the optimal use of already disturbed areas to minimise vegetation destruction and soil compaction

Signature provincial coordinator	Date:
Signature service provider/implementing agent	Date:
Signature contractor	Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
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			Collection of indigenous plants, for rehabilitation may only
			take place where identified within the site plan
			Do not deface natural features (e.g. don't paint on rock faces,
			or carve trees)
			Do not use watercourses or no-go areas for recreational or
			other personal purposes
			Check excavations daily for trapped animals and release them
			Fill open excavations as soon as possible after excavation
			This open executations as soon as possible after executation
			Health and safety representative must inspect the site and
			notify the workers if there are dangerous or problem animals
			Record sightings and encounters with dangerous or problem animals
			aiiiiiais
			No collection of firewood
			No littering on the site or surrounding areas
			Keep food and rubbish out of reach of scavengers, e.g.
			monkeys and birds
	1	48	

Signature provincial coordinator	Date:
Signature service provider/implementing agent	Date:
Signature contractor	Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
	·		Poaching/hunting/intentional killing of any animal is strictly forbidden as is trapping of animals
			Do not disturb nests or roosts
			Do not leave residual material on site
	Fire damage to surrounding	No fire damage to take place on site due to	Set up and enforce use of designated smoking area(s)
	environment	project-related activities	No cooking or other fires allowed on site
			Develop an emergency evacuation plan and communicate it to workers
			Maintain basic firefighting equipment at the work site and ensure that personnel are trained in the use of such equipment
			All workers are aware of the risk of run-away fires and informed on the actions needed to prevent and control run-away fires as per the training
	Occupational health and safety	No injuries or death occur	Comply with the Occupational Health and Safety Act

Signature provincial coordinator	Date:
Signature service provider/implementing agent	Date:
Signature contractor	 Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			Before construction takes place, induction training must be provided to all staff working on the site which covers the following:
			Description of the environment;
			Responsibility of all people to the environment;
			<ul> <li>how construction activities can impact on the environment, and what measures can be taken to mitigate against these impacts</li> </ul>
			<ul> <li>measures to prevent pollution and litter control</li> </ul>
			<ul> <li>social responsibility (no excessive noise, a "clean site" policy, no alcohol / drugs and no firearms permitted on site, no harvesting of fruit or firewood from the site or from areas adjacent to it)</li> </ul>
			<ul> <li>procedure to be followed should heritage resources be uncovered during all phases of the development</li> </ul>

Signature provincial coordinator	Date:
Signature service provider/implementing agent	Date:
Signature contractor	 Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			Details of the EMPr
			Use of relevant PPE
			Use of the necessary safety equipment e.g. when climbing ladders, fuel operated equipment and chainsaws etc.
			Handling herbicides and hazardous substances for the safe use of the substance and awareness of the potential impacts and follow safety measures
			Basic fire safety
			Emergency and response procedures
			First aid
			Snake awareness training as well as any other dangerous animals
			General health and safety
			Document training sessions and maintain a training register
			All unattended open excavations are to be demarcated

Signature provincial coordinator	Date:
Signature service provider/implementing agent	Date:
Signature contractor	 Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			A first aid kit must always be accessible on site and must include the number of the local emergency service
			A fire control officer and certified first aider must be appointed and the names document in the site file with a copy of their certification
			A designated eating area must be identified with access to a refuse containment
			A temporary toilet facility must be provided and maintained throughout the construction period
			No temporary toilet facility must be placed within 100m from any watercourse
			Drinking water must always be available to the workforce on site

		52
Signature provincial coordinator	Date:	
Signature service provider/implementing agent	Date:	
Signature contractor	 Date:	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			Implement the following restrictions on all staff operating on the site:  • No work may be done without the use of PPE
			<ul> <li>No alcohol or illegal substance use on site</li> <li>No firearms permitted on site</li> <li>No excessive noise</li> </ul>
	Noise pollution	Noise generation is minimised	Minimise noise impacts through keeping operations to working hours
			Machinery to have mufflers
			Limit unnecessary noise, especially loud talking, shouting or whistling, radios, sirens or hooters and motor revving
			Maintain all vehicles and machinery in a good working order to reduce noise pollution

Signature provincial coordinator	Date:
Signature service provider/implementing agent	Date:
Signature contractor	 Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
	Disturbance of cultural and archaeological heritage	Prevent the disturbance of any cultural and archaeological heritage resources	Demarcate declared and potential heritage resources as indicated on the rehabilitation plan before activities start
	resources		Report any finds of human remains to the nearest police station and cease work immediately
			Should any archaeological artefacts be exposed during construction activities, work in the area where the artefacts were found must cease immediately and the local SAHRA authorities informed within 24 hours
			Do not apply herbicides within any of the demarcated heritage resources burial grounds or rock art sites
			Under no circumstances must archaeological artefacts be destroyed or interfered with
			Where relevant, obtain permits from SAHRA / the PHA prior to commencing an intervention action within a heritage resources

		54
Signature provincial coordinator	Date:	
Signature service provider/implementing agent	Date:	
Signature contractor	Date:	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
	Disturbance or damage to palaeontological resources	Prevent the disturbance of any fossils	Demarcate known fossil sites and prevent all staff from accessing this area
			Under no circumstances must a fossil be destroyed or interfered with
			Should a fossil be found, all construction activities in the vicinity must be stopped, contact SAHRA within 24 hours
General removal of rock, sand or soil for	Disturbance or loss of important species and their habitat	Minimal habitat and species disturbance during and after activity	Minimise impact of rock, sand or soil removal through spreading the extent of collection area
construction of soil conservation works		Minimise disturbance of soil	Only collect loose rocks

		55
Signature provincial coordinator	Date:	_
Signature service provider/implementing agent	Date:	-
Signature contractor	Date:	_

## APPENDIX 4 – METHOD STATEMENTS