

DEPARTMENT OF ENVIRONMENT, FORESTRY AND FISHERIES

NO. 107

5 February 2021

**NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998
(ACT NO. 107 OF 1998)****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 adopt as an environmental management instrument, the *Generic Environmental Management Programme for Working for Wetlands Programme (version 0 of October 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 based on the reasons as set out in the Schedule.



**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 October 2020)* (the EMPr), to avoid, manage and mitigate the environmental impacts and risks associated with the activities of the programme including those identified in terms of 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 sections 2, 24(1) and 24N of the Act.
4. The EMPr is therefore 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 management outcomes and actions contained in of Part C of the EMPr and the registration requirements contained in paragraphs 6 and 7 of this Schedule, any activities falling within the scope as provided in paragraph 1.4 of Part A of the EMPr and which is identified in the Environmental Impact Assessment Regulations, Listing Notice 1¹, Listing Notice 2² and Listing Notice 3³ 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 days⁴ 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 impact management outcomes and actions set out for identified activities in Part C of the EMPr, constitutes an 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 Literature Review, Activities and Impacts Document and EMPr template which provided a base on which the EMPrs were prepared can be accessed at https://www.environment.gov.za/projectprogrammes/environmental_management_instruments
12. The *Government Gazette* notice can be accessed at https://www.environment.gov.za/legislation/gazetted_notices and the generic EMPr can be accessed at https://www.environment.gov.za/projectprogrammes/environmental_management_instruments

¹ Published under Government Notice R983 in *Government Gazette* 38282 of 4 December 2014 and amended

² Published under Government Notice R984 in *Government Gazette* 38282 of 4 December 2014 and amended

³ Published under Government Notice R985 in *Government Gazette* 38282 of 4 December 2014 and amended

⁴ Days means calendar days

13. Hard copies of the documents can be viewed in the Department's library located at 473 Steve Biko Road, corner Soutpansberg and Steve Biko Roads, Arcadia, Pretoria or requested from Ms M Masondo at +27 12 399 9277/9280; email mmasondo@environment.gov.za

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

Version 0 of October 2020

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



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

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Contents

Definitions and Terminology	1
Acronyms and abbreviations	5
PART A: BACKGROUND	6
1 INTRODUCTION	6
1.1 Background to the Working for Wetlands Programme	6
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)	7
1.1.3 Compliance and registration	8
1.2 Institutional framework and planning processes	8
1.3 Purpose	10
1.4 Scope	10
1.4.1 Intervention types	10
1.4.2 Extent of application	11
1.4.3 Proponent	11
1.5 Roles and responsibilities for the implementation of the EMPr	11
1.6 Structure and framework of the EMPr	14
PART B: REGISTRATION AND DECLARATION OF COMPLIANCE WITH THE EMPr	18
1 REGISTRATION AND DECLARATION	18
1.1 Registration form	18
1.2 Declaration form	18
1.3 Site plan	18
PART C: ENVIRONMENTAL CONTROLS AND REPORTING	19
1 INTRODUCTION	19
2 MONITORING AND AUDITING	20
2.1 Environmental documentation, monitoring and reporting	20
2.1.1 Document control/Filing system	20
2.1.2 Documentation to be available	20
2.1.3 Required method statements	21
2.1.4 Audit findings	21
2.1.5 Corrective action report	21
2.1.6 Service provider agreement	21
2.1.7 Photographic record	22
2.1.8 Monitoring requirements	22
2.1.9 Monthly environmental audit	22
2.1.10 Environmental closeout report	23
APPENDIX 1 – REGISTRATION FORM	1
APPENDIX 2 – DECLARATION FORM	2
APPENDIX 3 – ENVIRONMENTAL MANAGEMENT PROGRAMME TEMPLATE	2
APPENDIX 4 – METHOD STATEMENTS	69

TABLES

Table 1: Definitions and Terminology	1
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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
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Definitions and Terminology

The definitions and terminology used in this EMP 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, 2004 (Act No. 10 of 2004) (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, eradication or removal of vegetation cover with chemicals, amongst others, constitutes clearance, 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 <i>Working for Programmes</i> and the <i>Land Care programme</i> , 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.
Wetland Ecologist	A specialist in wetland science with at least five years experience in wetland assessments, surveys and delineation and must be registered with the South

Term	Definition
	African Council for Natural Scientific Professions (SACNASP) under the following fields of practice: <ul style="list-style-type: none"> • Aquatic Science • Botanical Science • Ecological Science • Environmental Science • Water Resources Science.
Endemic species	Plants and animals that exist only in restricted geographic regions.
Environmental impact	An environmental change caused by some human act.
Environmental impact assessment	A study of the environmental consequences of a proposed course of action via 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 any place or object of cultural significance.
Implementing agent	The entity responsible for the construction of WfWets 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 achieves identified objectives within a wetland e.g. raising of the water table within a drainage canal.
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.
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.
Minister	The Minister of Forestry, Fisheries and the Environment.

Term	Definition
Mitigation	Means to anticipate and prevent negative impacts and risks, then to minimise them, rehabilitate or repair impacts to the extent feasible.
National Director: Implementation Deputy	The official responsible for the implementation of the programme within the Department of Environment, Forestry and Fisheries.
National Director: Monitoring and Evaluation Deputy Planning, and	The official responsible for the planning, monitoring and evaluation of the programme within the Department of Environment, Forestry and Fisheries.
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 in each province.
Quaternary catchment	A fourth order catchment in a hierarchal classification system in which a primary 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 and revegetation of existing vegetation.
Sedimentation and erosion prevention	Temporary or permanent measures or devices designed to keep loose or eroded soil within a defined site boundary, preventing runoff into a watercourse and 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 implementing agent.
Slope	The inclination of a surface expressed as one unit of rise or fall for so many horizontal units.
Species of conservation concern	Species of conservation concern listed on the IUCN Red List of Threatened Species ¹ or on South Africa’s National Red List website ² as Critically Endangered, Endangered or Vulnerable according to the IUCN Red List 3.1. Categories and Criteria or listed as Nationally Rare.

¹ <https://www.iucnredlist.org/>

² This category includes the categories Extremely Rare, Critically Rare and Rare

Term	Definition
Stream diversion	The use of a temporary channel or other diversion methodology used to redirect a stream flow.
Storm water management	Management actions implemented to manage surface runoff.
The Act	National Environmental Management Act, 1998 (Act No. 107 of 1998).
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 October 2020.
Threatened or protected species	Species listed as threatened or protected under the Threatened and Protected 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.
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 Gazette, declare to be a watercourse as defined in the National Water Act, 1998 (Act No. 36 of 1998) and a reference to 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.
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
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NDD IMPL	National Deputy Director: Implementation
NDD PM & E	National Deputy Director: Planning, Monitoring and Evaluation
NHRA	National Heritage Resource Agency
NRMP	National Resource Management Programme
NWA	National Water Act, 1998 (Act No. 36 of 1998)
OHSA	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
RI&AP	Registered Interested and Affected Parties
SAHRA	South African Heritage Resource Agency
SLA	Service level agreement
WfWets	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 (WfWets) 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 degrading areas to the more ambitious rehabilitation of wetlands towards a targeted structural and functional condition. The programme also provides a national focal point for wetland research. The WfWets 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 environmentally beneficial activities. Thus the WfWets 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. As these areas are regarded as being environmentally sensitive, the project interventions of the WfWets 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 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 based on an environmental management instrument, adopted in the prescribed manner.

As the projects undertaken by the WfWets 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 WfWets Programme are 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 October 2020), which has been adopted as an environmental management instrument by the Minister.

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 Regulations³. 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 WfWets Programme, in executing wetland restoration plans and the various standard operating procedures developed by the WfWets 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 October 2020)*” has been developed as an environmental management instrument which has been adopted to allow for the exclusion of all activities triggered by the WfWets projects as identified in the Environmental Impact Assessment Regulations Listing Notice 1, 2 and 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 waived 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 WfWets 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 is 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 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 and 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.

³ 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 WfWets 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, 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 WfWets Programme from the requirements of other Acts and obtaining other relevant authorisations for example, vegetation clearance in protected areas or control of protected vegetation types (e.g. trees) in terms of the relevant specific environmental management Act.

1.2 Institutional framework and planning processes

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

The WfWets 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 WfWets 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 engineer, and GPS coordinates and digital photographs are taken for record purposes. Furthermore, appropriate dimensions of the problems on site are recorded in order to design and prepare a bill of quantities for the interventions. A maintenance inventory of any existing interventions on or near the same site 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, and corresponding rehabilitation interventions, their locations and layouts are agreed upon by the project team.

The interventions are designed based on certain criteria including the availability of materials such as rock; labour intensive activities; maintenance requirements, etc. and data measurements such as flow volumes, flow rates, and soil types; 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 WfWets project. A rehabilitation plan is prepared by the the wetland ecologist including interventions to be undertaken, their detailed design drawings and other specifications required by the design engineer.

Maintenance requirements for existing interventions in the assessed wetlands are similarly detailed and the costs determined. 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 structural integrity and functionality of the interventions.

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

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 appointment the EPWP participants. A project implementation plan is drawn up by the implementing agent under the supervision of the PC. A project site plan is drawn up by the implementing agent for approval 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.

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 IMPL.

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 IA's 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 WfWets 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 impact management outcomes and activities to ensure that the impacts associated with the WfWets 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 WfWets project; and
- d) Constitute an environmental management instrument which, once adopted, will allow for the exclusion of activities associated with the WfWets Programme, identified in the Environmental Impact Assessment Regulations, Listing Notice 1, Listing Notice 2 and 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 WfWets Programme which primarily aim to address the cause, but also the effects 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 WfWets projects include hard engineering interventions as well as softer more low key 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 erosion control structure, dissipating flow energy thus reducing flow velocity, raising the water table, and re-dispersing flow across previously desiccated wetland areas to re-establish natural flow paths;
- Earth or gabion structure plugs or structures to raise channel floors, reduce water velocity or divert flow of certain parts of the wetland thus promoting more diffuse flow;
- Concrete and/or Reno mattress strips which act as road crossings to address channels and erosion caused by vehicle movement in wetlands;

- 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 interventions which include but are not limited to:

- Small earth berms or gabion structures to block artificial channels to divert water to certain parts 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 plant 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 Extent of application

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

1.4.3 Proponent

All WfWets 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	<p>Role:</p> <ul style="list-style-type: none"> ▪ Coordinate the five-year strategic and rehabilitation planning process. ▪ Can request a compliance audit to be undertaken on the site at any time during the implementation of the project. <p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ May 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. ▪ In conjunction with the NDD IMPL, ensure that all PCs and implementing agents are familiar with the requirements of the EMPr. ▪ Undertake audits of the final rehabilitation as identified in the Branch performance plan. ▪ Approve the rehabilitation plans.
National Deputy Director: Implementation	<p>Role:</p> <ul style="list-style-type: none"> ▪ Ensure that all WfWets projects are registered with the CA.

Function	Role and Responsibilities
	<ul style="list-style-type: none"> ▪ At least 14 days before the commencement of the WfWets project, ensure that the Compliance Unit of the competent authority is notified of the commencement date of the project. ▪ Coordinate project implementation at a national level. ▪ Will ultimately be held liable, should any non-compliance with this EMPr take place. ▪ Can request a compliance audit to be undertaken on the site at any time during the implementation phase of the project. ▪ Sign the declaration of compliance together with the IA. <p><u>Responsibilities:</u></p> <ul style="list-style-type: none"> ▪ 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. ▪ Ensure that a general authorisation is registered and that the conditions for that general authorisation are implemented. ▪ In conjunction with NDD: Planning, Monitoring and Evaluation, ensure that all PCs and IA's 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)	<p><u>Role:</u></p> <ul style="list-style-type: none"> ▪ Is responsible to prepare and submit the registration and declaration forms to the competent authority ▪ Is responsible to ensure compliance with the EMPr. ▪ Consider, approve and sign the corrective action report. ▪ Coordinate projects on a provincial level. ▪ Supervise the preparation of the site layout plan by the IA and approve it. ▪ Assist with the preparation, approve and sign the method statements. ▪ Ensure that the EMPr file is set up by the Contractor and kept up to date through the project. <p><u>Responsibilities:</u></p> <ul style="list-style-type: none"> ▪ Form part of the fieldwork team. ▪ Assist with the development of the rehabilitation plan. ▪ 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 EMPr and the consequences of audit findings. ▪ Monitoring and oversight of the EMPr, method statements and monthly audit requirements. ▪ Escalate any serious recurring and unresolved issues to the Chief Directorate: Compliance. ▪ Conduct site inspections and prepare a monthly environmental audit report.
Design engineer	<p><u>Role:</u></p> <ul style="list-style-type: none"> ▪ Form part of the phase two planning team. ▪ Undertake the planning and design components of the project. <p><u>Responsibilities:</u></p> <ul style="list-style-type: none"> ▪ Assess rehabilitation potential.

Function	Role and Responsibilities
	<ul style="list-style-type: none"> ▪ Review and, if necessary, adjust any previously planned interventions that are included into the historical rehabilitation plans. ▪ Undertake 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. ▪ Provide detailed drawings of the planned rehabilitation works.
Wetland ecologist/aquatic scientist where relevant	<p><u>Role:</u></p> <ul style="list-style-type: none"> ▪ Form part of the fieldwork team. ▪ Undertake the specialist studies relating to ecological issues to support the development of the rehabilitation plan. <p><u>Responsibilities:</u></p> <ul style="list-style-type: none"> ▪ Prioritise 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	<p><u>Role:</u></p> <ul style="list-style-type: none"> ▪ Tender on the rehabilitation plan per priority interventions. ▪ Develop project implementation plans. ▪ Employ contractors and their teams (workers) and ensuring that rehabilitation plans are implemented in compliance to the quality measures identified in the SLA. ▪ Implement the project and is accountable for everything taking place on site and must operate within the bounds of the WfWets EMPr and the standard operating procedures. ▪ Develop a site plan that includes the demarcation of the target areas and no-go areas prior to any activity commencing. ▪ Provide an on-site notice board(s), where required. ▪ Provide danger/warning signs on site. ▪ Ensure qualified first aid attendants are available on the team. ▪ Undertake environmental awareness training for all staff. <p><u>Responsibilities:</u></p> <ul style="list-style-type: none"> ▪ Implementation and compliance with environmental management actions of the EMPr, and the method statements for the project; ▪ Ensure all site staff are trained and kept updated in terms of the EMPr and other legal requirements. ▪ Project delivery and quality control for the development services as per appointment. ▪ Monitor and report to the PC on the daily activities on-site during the construction period. ▪ Ensure that safe, environmentally acceptable working methods and practices are implemented and that equipment is properly operated and

Function	Role and Responsibilities
	<p>maintained, to facilitate proper access and enable any operation to be carried out safely.</p> <ul style="list-style-type: none"> ▪ Sign the EMPr template and the compliance declaration. ▪ Ensure that the contractor and participants understand the contract. ▪ Keep a digital dated photographic record of the progress of the project. ▪ Organise medical assessments for workers. ▪ Ensure that corrective actions required, take place within the stipulated timeframe. ▪ 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.
Contractor	<p>Role:</p> <ul style="list-style-type: none"> ▪ Appoint and remunerate the EPWP participants. ▪ Set up the EMPr file and keep it updated through the duration of the project. ▪ Construct the interventions detailed in each of the rehabilitation plans with their teams (workers). <p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ Engage with local communities and keep a complaints register. ▪ Ensure that the mitigation measure in the EMPr are implemented. ▪ Address any non-compliances identified. ▪ Ensure that the work remains within the demarcated areas. ▪ Ensure adherence to the site plan. ▪ Comply with the requirements of the EMPr. ▪ Monitor and report to the PC on the daily activities on-site during the implementation phase. ▪ Ensure qualified first aid attendants are available on the team. ▪ 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. ▪ Undertake environmental awareness training for all staff.
Competent Authority: Integrated Environmental Authorisations	<p>Role:</p> <ul style="list-style-type: none"> ▪ Register the project. <p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ 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	<p>Role:</p> <ul style="list-style-type: none"> ▪ Monitor compliance with the EMPr. ▪ Provide support to the NDD PM&E and the PC. <p>Responsibilities:</p> <ul style="list-style-type: none"> ▪ On receipt of the communication noting the date of commencement of the construction activities, monitor compliance to the EMPr. ▪ Investigate and take action accordingly if and when a non-compliance or an incident is escalated to the Directorate.

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 WfWets 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 WfWets project commences, to allow the competent authority to register the project to facilitate compliance. It is the responsibility of the NDD IMP 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 WfWets project, the NDD IMP must inform the Chief Directorate: Compliance 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/implementing agent 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, compliance monitoring, auditing and reporting requirements relevant to all WfWets projects. Controls in this section reflect minimum and general requirements for avoiding, managing and mitigating impacts of WfWets 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:
 - a “responsible person”; and
 - a method for implementation.
- For monitoring:
 - a responsible person;
 - checklist/reports as appropriate: and
 - 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 a sample Method Statement

Method Statement Ref no. MS xxxxxx						
Activity or intervention: PREDEFINED AS PART OF THE EMPr						
Environmental Impact: PREDEFINED AS PART OF THE EMPr						
Impact Management Outcome: PREDEFINED AS PART OF THE EMPr						
Location of the works:			Plant (equipment needed):			
Materials:			Labour:			
Impact Management Actions	Implementation of intervention			Monitoring		
	Responsible Person	Method of Implementation	Timeframe for Implementation	Responsible Person	Frequency	Evidence of Compliance
PREDEFINED AS PART OF THE EMPr	TO BE COMPLETED					
Additional information:						
Signatures						

Contractor	Service provider/Implementing agent	Provincial coordinator
Date	Date	Date

<p>Part A – BACKGROUND AND CONTEXT</p> <ul style="list-style-type: none"> • Background to the Working for Wetlands programme; • Institutional framework and planning processes; • Purpose; • Scope; • Roles and responsibilities; • Structure and framework. 	<p>Part B – REGISTRATION AND DECLARATION OF COMPLIANCE WITH THE EMPR</p> <ul style="list-style-type: none"> • Registration form; • Declaration form; • Site Plan. 	<p>Part C – ENVIRONMENTAL CONTROLS AND REPORTING</p> <ul style="list-style-type: none"> • Introduction; • Monitoring and auditing; • Appendix 1 – Registration form; • Appendix 2 – Declaration form; • Appendix 3 - Environmental management programme template; • Appendix 4 – Approved method statements.
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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 annotated map generated from Phase two field data indicating the farm portion names and gate access points, areas of sensitivity, no-go areas.
- The location of the WfWets project.
- The types and 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.
- 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 WfWets 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/implementing agent 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 projects 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 WfWets 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 WfWets 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 Contractor and IA are responsible and will keep the EMPr file up to date and the PC will check compliance. 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 NDD PM&E or other relevant authorities requiring the file for compliance monitoring.

2.1.2 Documentation to be available

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;
- Monthly environmental audit report;
- A copy of any audit findings if relevant
- A copy of the corrective action report if relevant;
- A complaints register;
- An incident register and copies of incident reports (if relevant);
- Site plan layout;
- Waste generation and disposal records (solid waste and servicing of portable toilets); and
- Pre-construction site inspection and photo record.

2.1.3 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 WfWets 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. The method statements must be signed off prior to the commencement of construction activities, including the pegging out of the area. 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 (EMPr template).

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

2.1.4 Audit findings

Minor and first time compliance findings must be listed at the end of the compliance report. However at the next audit if the issues are not resolved, an audit finding notice will be issued to the responsible contractor by the PC. The audit finding notice will 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 an audit finding notice is received and correct whatever is the cause for the issuing of the notice. The contractor is deemed not to have complied with the EMPr if:

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

Continued and repeated failure to redress the cause of an audit finding may be reported to the relevant Compliance Chief Directorate within the competent authority's structure by the NDD PM&E, for them to deal with the finding, as deemed appropriate.

2.1.5 Corrective action report

For each audit finding notice issued, a documented corrective action must be recorded. On receiving an audit finding notice from the PC, 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 PC 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.

2.1.6 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.

2.1.7 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.

2.1.8 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 monthly environmental audit and photographic records are part of the monitoring performed during the implementation of the project.

2.1.9 Monthly environmental audit

Internal environmental audit of the activity and implementation of the EMPr must be undertaken by the PC monthly against the EMPr and method statements. The findings and outcomes of the audit report must be included in the EMPr file and a summary of the project's compliance submitted to the NDD PM&E on an annual basis.

As a minimum, the monthly environmental audit must cover the following:

- Month of audit;
- Name of PC conducting the compliance inspection;
- Project site details and contract number;
- Compliance with the EMPr outcomes and actions;
- Compliance with the method statements;
- Audit findings issued;
- Completed and reported corrective actions;
- General environmental findings and actions;
- The closeout report: and

- Dated photographic records.

2.1.10 Environmental closeout report

On final completion of the implementation phase an environmental closeout report is to be prepared by the PC and submitted to the NDD PM&E. The environmental closeout report must be included in the EMPr file.

Acceptance and approval of the environmental closeout environmental 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 Authorisations 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 and 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 October 2020).

By post at:
The Director-General
Attention: Director – Integrated Environmental Authorisations
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: _____

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 EMPr and the need to implement its provisions.

Project name: _____

I, _____, in my capacity as provincial coordinator of this WfWets project,

I, _____, in my capacity as implementing agent of this WfWets project, and

I, _____, in my capacity as contractor of this WfWets project, affirms that I:

- will abide by and comply with the prescribed impact management outcomes and actions as stipulated in Part C of this EMPr;
- have the understanding that the impact management outcomes and actions are legally binding; and
- I as implementing agent will provide written notice to the competent authority: Compliance Chief Directorate within 14 days of the date of commencement of the project in order to facilitate compliance inspections.

Signature provincial coordinator

Date:

Signature implementing agent

Date:

Signature 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
<i>Infrastructure development and maintenance</i>				
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	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"	

Signature provincial coordinator

Date:

Signature service provider/implementing agent

Date:

Signature contractor

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Impacts on fauna and flora	Prevent impacts on fauna and flora to minimise disturbance	Comply with impact management actions under general interventions section “general activities - Impacts on fauna and flora”	
	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	Comply with impact management actions under general interventions	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
		or minimise the degradation of vegetation	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"	
	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	Comply with impact management actions under general interventions	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
		resulting from cement and concrete batching	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”	
	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under general interventions section “Access to site and vehicle usage - Dust generation”	
	Impeding aquatic species migration and species	Maintain viable connectivity and flow for	Apply site specific engineer-approved design based on ecologist input in the rehabilitation plan	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	isolation could lead to habitat fragmentation	aquatic species movement and migration		
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 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"	

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Signature contractor

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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”	
	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 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	Comply with impact management actions under general interventions	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
		resulting from cement and concrete batching	section “general activities - Pollution due to cement and concrete batching”	
	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	
	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 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”	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
Drifts	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 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"	

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Date:

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 “Access to site and vehicle usage – Soil compaction and erosion due to trampling”	
			Comply with impact management actions under general interventions section “Access to site and vehicle usage – Soil compaction and erosion due to trampling”	

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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 - 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 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	Comply with impact management actions under general interventions	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
		resulting 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”	
	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”	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
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 section “general activities - Soil disturbance and erosion”	
	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”	

Signature provincial coordinator

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Signature contractor

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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”	
	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	

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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 water and soil pollution by chemicals	Avoid spillage onto soil or into water	Comply with impact management actions under general interventions section “general activities – 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”	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
<i>Water diversion and impeding</i>				
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"	
	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"	

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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”	
	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”	
	Waste pollution	No waste to remain on site	Comply with impact management actions under general interventions	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			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”	

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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”	
	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	

Signature provincial coordinator

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			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”	
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”	

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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	
	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”	
		Minimise downstream siltation	Comply with impact management actions under general interventions section “general activities - Downstream siltation”	

Signature provincial coordinator

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	CCA leaching resulting in potential pollution	Prevent / minimise leachate into water or soil	Use correct CCA class pole – H5 for freshwater	
			Painting/treatment using hazardous chemicals e.g. CCA, creosote, should be done off site where possible to avoid any risk of water or soil contamination	
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”	

Signature provincial coordinator

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under general interventions section “general activities - Downstream siltation”	
	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 structures				
Concrete weirs	Downstream siltation	Prevent downstream siltation	Comply with impact management actions under general interventions section “general activities - Downstream siltation”	

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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”	
	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	

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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	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			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 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”	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			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, sedimentation and watercourse damming”	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under general interventions	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			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”	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	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”	
	Damage to infrastructure	Protect man-made infrastructure	Mark all existing infrastructure on the site plan	
			Demarcate no-go areas according to the site plan	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	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 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”	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
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"	

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Date:

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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	Comply with impact management actions under general interventions	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
		resulting 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”	
	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 management				
Control of alien invasive plants (AIP)	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	

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Date:

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Signature contractor

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
- Mechanical AIP control (e.g. large machinery, chain saws, brush cutters)			- 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"	
	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"	
	Biomass causing re-infestation	Reduce re-infestation potential	Manage the debris according to the site-specific plan per species and the site instruction	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			Do not stack removed plants on top of indigenous flora	
	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under general interventions section "Access to site and vehicle usage - Dust generation"	
	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"	

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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”	
	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	Correctly identify targeted species and orientate the team	
			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 section “general activities - Impacts on fauna and flora”	

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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”	
	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”	

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Date:

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Signature contractor

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	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	
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under general interventions section “general activities - Downstream siltation”	
	Loss of biodiversity and non-targeted plant species (damage to indigenous trees)	Minimise loss of biodiversity and prevent impacts on natural resources including flora	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	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
		and fauna to minimise disturbance	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”	

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Date:

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Date:

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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)	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			Demarcate areas for mixing and ensure ground cover	
			Use Working for Water guidelines for approved herbicides	
			Comply with impact management actions under general interventions section “general activities - Waste pollution”	
			Comply with impact management actions under general interventions section “general activities - Impacts on fauna and flora”	
		Prevent fire risks	Debris from the invasive vegetation clearing must be stockpiled in the	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	Vegetation debris accumulation that may cause a fire hazard		demarcated areas for further action by the landowner	
			Comply with impact management actions under general interventions section “general activities - Fire damage to surrounding environment”	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under general interventions section “general activities - Occupational health and safety”	
	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	

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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				

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
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"	
	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	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			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”	
	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”	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
	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”	

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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”	
	Noise pollution	Noise generation is minimised	Comply with impact management actions under general interventions section “general activities – Noise pollution”	
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	

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Date:

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Date:

Signature contractor

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			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	
			Do not work in wet weather	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Applicable Operational Standard
			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”	
	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”	

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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”	
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 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	

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Date:

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Date:

Signature contractor

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

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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
			All activities remain strictly within demarcated routes and areas

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Date:

Signature contractor

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			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
Painting or priming of structures	Water pollution	Ensure no water pollution from painting or priming of structures	All painting and priming to be done off-site
	Loss of topsoil		Remove topsoil and store separately from subsoil layers

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Date:

Identifier/implementing agent

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
General activities within the working area		Conserve topsoil for use during re-vegetation and rehabilitation	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
			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

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Date:

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Date:

Signature contractor

Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
	Downstream siltation	Minimise downstream siltation	Deactivate diversion channels after implementation
			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
			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	Planning input by wetland ecologist
			Rehabilitation interventions such as gabions, Reno mattresses, concrete road strips are constructed in situ

Coordinator

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Identifier/Implementing agent

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
		Ensure continued stream functioning and connectivity	Plan stream diversions at times when the flow is low
		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

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Identifier/Implementing agent

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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
			Use a mobile refuelling unit and ground protection such as drip trays if on-site refuelling is required in emergency situations

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
	Pollution due to cement and concrete batching	Avoid contamination of the soil, air and water resulting from cement and concrete batching	No scheduled maintenance may take place on site
			Store sand, stone and cement in demarcated areas
			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
			Secure empty cement bags to prevent spread of cement dust prior to disposal

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Identifier/Implementing agent

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			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
			Collection of indigenous plants, for rehabilitation may only take place where identified within the site plan

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Date:

Identifier/implementing agent

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			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
			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
			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
			Poaching/hunting/intentional killing of any animal is strictly forbidden as is trapping of animals

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			Do not disturb nests or roosts
			If work is to be undertaken in the vicinity of nest or roosts of species of conservation concern the scheduling of work must be planned outside of the breeding season of the nesting bird
			Do not leave residual material on site
	Fire damage to surrounding environment	No fire damage to take place on site due to project-related activities	Set up and enforce use of designated smoking area(s)
			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

Coordinator

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Identifier/implementing agent

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			<p>Before construction takes place, induction training must be provided to all staff working on the site which covers the following:</p> <ul style="list-style-type: none"> • Description of the environment; • Responsibility of all people to the environment; <ul style="list-style-type: none"> ○ how construction activities can impact on the environment, and what measures can be taken to mitigate against these impacts ○ measures to prevent pollution and litter control ○ 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) ○ procedure to be followed should heritage resources be uncovered during all phases of the development • Details of the EMP • Use of relevant PPE

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Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			<ul style="list-style-type: none"> • Use of the necessary safety equipment e.g. when climbing ladders, fuel operated equipment and chainsaws etc. • Demonstration on the handling of 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 • Role play to respond calmly and quickly in emergency situations; • First aid • Snake awareness training as well as any other locally dangerous animals • General health and safety <p>Document training sessions and maintain a training register</p> <p>All unattended open excavations are to be demarcated</p>

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

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
	Noise pollution	Noise generation is minimised	Implement the following restrictions on all staff operating on the site: <ul style="list-style-type: none"> • No work may be done without the use of PPE • No alcohol or illegal substance use on site • No firearms permitted on site • No excessive noise
			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

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
	Disturbance of cultural and archaeological heritage resources	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
			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
	Disturbance or damage to palaeontological resources	Prevent the disturbance of any fossils	Demarcate known fossil sites and prevent all staff from accessing this area

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Date:

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action
			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 construction of soil conservation works	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
		Minimise disturbance of soil	Only collect loose rocks

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APPENDIX 4 – METHOD STATEMENTS