DEPARTMENT OF ENVIRONMENT, FORESTRY AND FISHERIES

NO. 105

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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 WORKING FOR ECOSYSTEMS 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 Ecosystems Programme (version 0 of June 2020)* and based on compliance with this generic environmental management programme, exclude, in terms of section 24(2)(e) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), identified activities, including the associated activities related to the implementation of the Working for Ecosystems Programme, from the need to obtain environmental authorisation as set out in the Schedule.

BARBARA DALLAS CREECY MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT

SCHEDULE

- Section 24(2)(e) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (the Act) allows 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.
- The Department of Environment, Forestry and Fisheries has prepared a Generic Environmental Management Programme for the Working for Ecosystems 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 activities identified in terms of section 24(2)(a) and (b) of the Act.
- 3. The Working for Ecosystems Programme is implemented by the Department of Environment, Forestry and Fisheries under the National Resource Management Programme specifically or in partnership with State Owned Entities responsible for national parks and protected areas and environments.
- 4. The EMPr, which has been developed by a multi-disciplinary team of specialists based on 17 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.
- 5. The EMPr is therefore, adopted as an environmental management instrument, for the purposes of excluding the identified activities associated with the Working for Ecosystems programme from the need to obtain environmental authorisation prior to commencement, in terms of section 24(2)(e) of the Act.
- 6. Based on compliance with the impact management outcomes and actions contained in of Part C of the EMPr and the registration requirements contained in this paragraph and paragraph 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 or Listing Notice 3³ of 2014, as amended, are hereby excluded from the need to obtain environmental authorisation in terms of section 24(2)(e) of the Act.
- 7. In order for this exclusion to apply, at least 30 days⁴ prior to the commencement of a Working for Ecosystems project, the Regional Deputy Director responsible for the implementation of the Working for Ecosystems 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.
- 8. Within 10 days of receipt of the correctly completed registration form and supporting documentation described in paragraph 7 of this Schedule, the competent authority must register the project and provide the Regional Deputy Director responsible for the implementation of the Working for Ecosystems programme with a registration number.
- The competent authority must maintain a record of all registered projects and provide access to the record through their website.
- 10. Failure to obtain a registration number prior to the 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, constitute an offence in terms of section 49A(1)(d) of the Act.
- 11. Any amendments to the EMPr will be required to be consulted on through publication in the Government Gazette.

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

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

Version 0 of October 2020

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



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

Prepared for: Department of Environment, Forestry and Fisheries

Prepared by: Muvuledzi Consulting

Authors:

Retha Weir	Complete Environmental Services
Antoinette Eyssell Knox	Delima Eco Consulting

With contributions from:

Dee Fischer	Department of Environment, Fisheries and Forestry
Ahmed Khan	Department of Environment, Fisheries and Forestry
Michael Braack	Department of Environment, Fisheries and Forestry
Anel Dannhauser	Onyxia Environmental Management
Barbara Kasl	Independent fauna specialist
Vhalinavho Khavhagali	Muvuledzi Consulting
Judith Fasheun	Muvuledzi Consulting
Lorainmari den Boogert	Iggdrasil Scientific Services
Antoinette Bootsma	Limosella Consulting Pty Ltd

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Figure 1: Framework for the EMPr

Definitions and Terminology

The definitions and terminology used in this EMPRr 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 the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEM:BA) (GNR 864 in Government <i>Gazette</i> 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 <i>Gazette</i> 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 (NEM:BA: GNR598 of Government <i>Gazette</i> 37885 of 1 August 2014 – Alien and Invasive Species Regulations, 2014).
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 <i>Gazette</i> 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.
Ecologist	A person registered with the South African Council for Natural Scientific Professions (SACNASP).
Contractor	The responsible party for implementing WfEco projects.
Endemic species	Plants and animals that exist only in restricted geographic regions.
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.

Term	Definition
Heritage resource	In terms of the National Heritage Resources Act, 1999 (No 25 of 1999), means any place or object of cultural significance.
Important species	Species that help define an entire ecosystem or provide a specific function within the ecosystem which cannot be duplicated 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	The main categories of intervening activities undertaken to correct or improve environmental degradation.
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 provincial project manager in response to this 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.
Non-target plant	Plant species present on or around the project site that is not the target for removal and/ or control.
Park Project Manager	The designated person in the state owned entity responsible for park management or the management of protected areas.
Provincial Project Manager	The designated person in the Department of Environment, Forestry and Fisheries; National Resources Management Programme.
Regional Deputy Director	The designated Regional Deputy Director in the Department of Environment, Forestry and Fisheries: National Resources Management Programme charged with the Working for the Ecosystems Programme.
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. Sediment controls could include brush pack, the placement of filled sausage bags stacked into ground or the preparation of ponding structures.
Sensitive area	Any area that is denoted as sensitive due to its particular attributes, which could include the presence of rare or endangered vegetation, 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, the presence of steep slopes (in excess of 1:4).
Service provider/ implementing agent	The responsible party appointed by the Department to implement a number of WFEco projects within a quaternary catchment.

Term	Definition
Slope	The inclination of a surface expressed as one unit of rise or fall for so many horizontal units.
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 Ecosystems Programme, version 0 of October 2020.
Threatened or protected species	Species listed as threatened or protected under the Threatened and Protected Species Regulations (NEM:BA: GN151 in Government <i>Gazette</i> 29657 of 23 February 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 and any species protected by provincial legislation.
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, estuaries or dam in which, or from which water flows and any collection of water which the Minister may, by notice in the <i>Gazette</i> , declare to be a watercourse as defined in the National Water Act 1998 (Act No. 36 of 1998) and a 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.
Windy conditions	In terms of this EMPr conditions can be considered windy when the wind carries dust or pesticide sprays to neighbouring non-target activity areas or plants.
Works	Works to be executed in terms of the contract.

Acronyms and Abbreviations

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

Table 2: Acronyms and Abbreviations

	Abbreviations		
AIP	Alien invasive plants		
CA	Competent authority		
CARA	Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)		
EA	Environmental authorisation		
EIA	Environmental impact assessment		
EMPr	Environmental Management Programme		
EPWP	Expanded Public Works Programme		
ERAP	Emergency response action plan		
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		
GPS	Geographical positioning system		
IA	Implementing agent		
M&E	Monitorning and evaluation		
MSDS	Material Safety Data Sheet		
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA)		
NRMP	National Resource Management Programme		
NWA	National Water Act, 1998 (Act No. 36 of 1998)		
OSHA	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)		
PES	Present ecological state		
PPE	Personal protective equipment		
PPM	Provincial project manager		
RDD	Regional Deputy Director		
RI&AP	Registered Interested and Affected Parties		
SAHRA	South African Heritage Resource Agency		
SLA	Service level agreement		
SOE	State owned entity		

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

PART A: BACKGROUND

1 INTRODUCTION

1.1 Background to the Working for Ecosystems Programme

The Working for Ecosystems (WfEco) Programme started in 2003 and operates under the National Resource Management Programmes (NRMP) of the Department of Environment, Forestry and Fisheries (DEFF) specifically, or in partnership with the State Owned Entities under the DEFF involved in managing national parks and protected areas who implement WfWater projects under the EPWP banner. The objective of the programme is to reverse environmental degradation through ecological restoration and maintenance programmes. The WfEco programme aims to regain natural habitat composition, structure and function in degraded land in priority areas; and thereby enhance ecosystem services such as:

- Improving biodiversity;
- Increasing environmental carbon sequestration;
- Enhancing environmental water regulation;
- Enhancing environmental water purification; and
- Increasing the resilience of landscapes to natural disasters.

The WfEco Programme is undertaken through the Expanded Public Works Programme, which is a nationwide programme and one of government's key programmes aimed at providing poverty and income relief by providing temporary work for the unemployed. The programme provides an important avenue for labour absorption and income transfer to poor households in the short to medium-term. Projects under the WfEco Programme are specifically designed to be labour intensive to provide jobs which fall under the Expanded Public Works Programme. The objective of the programme is to reverse environmental degradation through ecological restoration and maintenance programmes which means that projects are often undertaken within ecologically sensitive and aquatic environments. As these areas are regarded as being environmentally sensitive the interventions of the WfEco projects trigger activities which are identified in terms of section 24(2)(a) and (b) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), (hereafter referred to as "the Act") and therefore may not commence without environmental authorisation from the competent authority. The rehabilitation interventions could also be 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). For example, rehabilitation activities could occur on the embankments of rivers as defined by 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 the exclusion of activities from the requirement to obtain an environmental authorisation based on an environmental management instrument, adopted in the prescribed manner.

As the nature of the projects undertaken under the WfEco Programme are rehabilitation orientated, human resource intensive and avoid using heavy machinery, they do not fall within the category of usual development projects which can cause significant detrimental impacts on the environment. In addition, the rehabilitation interventions are similar over all projects and have also been consistently implemented over 17 years, their impacts and mitigation measure are therefore well understood. As such, it is deemed appropriate that projects implemented under the WfEco Programme are excluded from the need to obtain environmental authorisation as provided for in Section 24(2)(e) of the Act based on adherence to this *Generic Environmental Management Programme for the Working for Ecosystems 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 Regulations¹. 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 based on 17 years of experience in implementing the WfEco 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 Working for Ecosystems 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 WfEco projects as identified in the Environmental Impact Assessment Regulations Listing Notice 1, 2 or 3 of 2014, as amended, from the requirement to obtain environmental authorisation from the competent authority as contemplated in section 24(2)(e) of the Act.

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

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

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

In relation to the WfEco programme, which could 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. 509, in Government *Gazette* No. 40229 of 26 August 2016 subject to certain conditions, including the preparation and submission of certain documents for approval and registration prior to commencement.

¹ 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. 509, in Government *Gazette* No. 40229 of 26 August 2016, 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 WfEco systems projects, and the compliance with conditions of the general authorisation, where relevant, are binding on the Department's service provider/implementing agent.

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

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

This EMPr does not exempt the WfEco 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 WfEco Programme operates under the Department of Environment, Forestry and Fisheries: Environmental Programmes Branch, Chief Directorate Natural Resource Management Programmes Programme specifically, or in partnership with the Department's State Owned Entity (SOE) responsible for national parks and protected areas. The NRMP Regional Deputy Directors or the Park Manager in the relevant SOE, are in charge of the WfEco Programme, in their areas of responsibility and as the project proponent is the ultimate responsible party for the development and all aspects and phases of the projects. Reporting to the Regional Deputy Directors, are Provincial Project Managers or Park Manager who take responsibility for day to day activities of the projects within their regions.

The WfEco Programme follows a three-phase annual planning process. Each phase of the process produces information at an ever-progressing level of detail and involves a number of stakeholders. The first two phases straddle the first year of the cycle and involve planning, identification, design and prioritisation of interventions. The third phase is implementation, which takes place during the second year.

Phase 1 commences with a quaternary catchment prioritization process which identifies priority quaternary catchments that are ranked in terms of their functionality and level of degradation. During phase 2, specific projects within the priority catchments are identified, selected and proposed for rehabilitation.

Phase 2 of the process includes site visits attended by the fieldwork team comprising an ecologist, a design engineer and the provincial project manager or in the case of a SOE, the Park Manager. Other interested stakeholders or authorities and landowners may also attend the site visits on some occasions. This allows for a highly collaborative approach, as options are discussed by experts from different scientific disciplines, as well as local inhabitants with deep anecdotal knowledge. While on site, rehabilitation opportunities are investigated. The details of the proposed interventions are discussed, some survey work is undertaken by the engineers, and GPS coordinates and digital photographs are taken for record purposes. Furthermore, appropriate dimensions of the locations are recorded in order to design and calculate bill of quantities for

the interventions. At the end of the site visit the rehabilitation objectives together with the location layout of the proposed interventions are agreed upon by the project team.

At the end of phase 2, a "rehabilitation plan" and the "site plan" are prepared for each project. The rehabilitation plan is prepared by the design engineer and identifies the interventions to be undertaken, includes detailed design drawings and the required specifications. The interventions are designed based on certain criteria and data measurements (water volumes, flow rates, and soil types); the availability of materials such as rock; labour intensive targets; maintenance requirements etc. which were determined though the site visits. Based on the interventions identified, bills of quantity are calculated for the designs and cost estimates made.

Based on the rehabilitation plan, the provincial project manager prepares the site plan which identifies project specific information for the day to day activities of the project. The information contained in the site plan includes the demarcation of food areas, parking and drop off zones, storage areas, areas to be avoided etc.

During **phase 3**, the rehabilitation plan is approved by the RDD or in the case of a SOE, the Park Manager and the declaration which is in Appendix 2 of Part C of the EMPr is signed and submitted to the competent authority for registration purposes.

Upon approval of the rehabilitation plan, the work detailed for the project will be implemented by appointing a service provider/implementing agent, who is appointed to undertake a number of projects. The service provider/implementing agent then appoints a contractor per project who is in turn responsible to appoint the EPWP participants. The PPM in consultation with the service provider/implementing agent is responsible for the preparation of the method statements for approval and signoff by the NRMP RDD. For each project, the declaration which is in Appendix 2 of the EMPr is signed by the PPM, service provider/implementing agent and contractor and submitted with the registration form (Appendix 1) and completed EMPr to the competent authority for registration purposes before the project can commence. The rehabilitation plan, site plan, EMPr template (Appendix 3) and the document required in terms of the general authorisation, where a general authorisation is applicable, are considered to be the primary working documents for the implementation of the project. Ongoing monitoring of the project and compliance with the EMPr template will be undertaken through monthly site audits by the PPM and occasional compliance audits as requested by the RDD or the equivalent person in the relevant SOE.

1.3 Purpose

The purpose of this EMPr is to provide rules which must be complied with when planning and implementing a WfEco 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 actions to ensure that the impacts associated with the WfEco projects are avoided, mitigated and managed;
- c) Provide a template for the management outcomes and activities to avoid, manage and mitigate identified impacts associated with the interventions of a WfEco project; and
- d) Constitute an environmental management instrument which, once adopted, will allow for the exclusion of activities associated with the WfEco Programme, identified in the Environmental Impact Assessment Regulations Listing Notice 1, Listing Notice 2 or Listing Notice 3 of 2014, as amended, from the requirement to obtain environmental authorisation.

1.4 Scope

This EMPr applies to all WfEco projects which range from local, small-scale projects to large, landscape-level interventions. The impacts and mitigation measure identified in this EMPr apply to all interventions undertaken through the WfEco projects in all provinces irrespective of the implementing agent.

1.4.1 Project types

Interventions under the WfEco Programme which are aimed at rehabilitating identified degraded land are often used in combination and are identified as follows:

- <u>Re-vegetation of land:</u> This intervention entails the replanting of vegetation to reduce erosion potential. Revegetation consists of the following tasks:
 - \circ $\,$ Harvesting / collecting seeds and seedlings from areas of natural indigenous flora;
 - Propagating / growing native / indigenous plants and planting degraded areas with seedlings or propagated plants. This is accomplished through the use of seed blankets or physically seeding the area and is generally accompanied by the use of mulch to act as a protective layer for seed establishment; and
 - Fencing revegetated areas to protect the areas from further disturbance until such time as the vegetation has fully established.
- <u>Bush encroachment control:</u> This intervention entails bush thinning and bush clearing of encroacher species which have become unnaturally dominant will be undertaken in the degraded / poorly managed areas. This intervention consists of the following tasks:
 - Selective clearing of indigenous plants. The residue can be used to produce wood related products which can be sold for commercial purposes; and
 - Selective thinning / clearing of indigenous vegetation to improve grazing capacity.
- <u>Earth works:</u> This intervention entails the sloping of land to reduce erosion land and includes the following tasks::
 - Shaping soil to bring the site to a desirable slope. This activity can include cut-and-fill, infilling, grading, contouring and terracing and is especially undertaken along drainage lines or watercourses, along slopes and hills, in areas with high erosion and areas prone to erosion gully formation;
 - Ponding which consists of digging shallow hollows for water retention, seed trapping and to encourage vegetation establishment. This is frequently accompanied by brush packing; and
 - \circ $\,$ Developing earth berms / mounds to direct water and reduce flow velocity.
- Soil stabilisation: This intervention aims to apply various techniques and materials to avoid erosion and settle soils and includes the following tasks:
 - Brush packing is a technique where scrub and bushes are packed / stacked in the landscape to provide protection against wind erosion, trap seeds and protect seedlings. Brush packing can also be used to restrict animal movement across a restored site;
 - o Constructing sediment / silt and sand traps using materials such as geofabric logs or groins;
 - Protecting soil integrity by laying commercial products such as geofabrics (e.g. Bidim), fibre products, blankets and geo-cells to on the soil surface;
 - Developing a silt fence consisting of a geofabric over a wire frame used to reduce streamflow and

act as a sediment trap; and

- Formalising access routes and/or restricting animal and human access to and over degraded areas to prevent further degradation and to protect established interventions.
- <u>Rock interventions</u> these are often perpendicular and across water courses, sometimes angled into water courses depending on the project requirements:
 - o Construction of gabion baskets / reno mattresses to reduce erosion and flow velocity; and
 - o Construction of rock packs, a low-level stream flow reduction and erosion control measure.
- <u>Concrete interventions: This intervention includes erection of structures to direct the flow of water or</u> to reduce water velocity over a particular area and include the following:
 - o Rehabilitation structure made of concrete, e.g. retention wall;
 - o Construction of rock masonry structures using a combination of rock and concrete; and
 - Soilcrete structures which consists of a soil and cement mix to stabilize a foundation or to build a structure.

1.4.2 Spatial extent

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

1.4.3 Proponent

All WFEco projects must utilise and comply with this EMPr to manage the environmental impacts associated with the 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 paragraph 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.

Function	Role and Responsibilities	
Regional Deputy Director	 Role: Register the project with the CA Sign the declaration At least 14 days before the commencement of the WfWater project, notify the Compliance Unit of the competent authority of the commencement date of the project. Coordinate projects on a provincial level. Communicate all issues raised in this EMPr with all personnel undertaking any work on the site. Will ultimately be held liable, should any non-compliance with this EMPr take place. Responsibilities: Capture and assess data at a regional level. 	

Table 3: Roles and Responsibilities for the Implementation of the EMPr

Function	Role and Responsibilities
	 Ensure that the need to comply with the EMPr is included as a specific
	condition within any service level agreement (SLA) to be signed between
	the Department and any service provider/implementing agent contracted
	to implement a WfEco project.
	 Ensure that the completed declaration and supporting documents for all
	WfEco projects are available on the Departments website.
	 Coordinate the design team site visit and the development of the
	rehabilitation plan.
	 Ensure that where a general authorisation under the NWA is registered that
	the conditions for that general authorisation are implemented.
	 Approve the rehabilitation plan and facilitate the signing of the service
	provider agreement by the service provider/implementing agent.
	 Take action against any non-compliance with the EMPr by the service
	provider/implementing agent and/or any of his/her sub-contractors
	 Escalate any serious recurring and unresolved issues to the Directorate:
	Compliance Monitoring.
Provincial project manager	Role:
	 Develop the site plan for WfEco projects within their region.
	 Demarcate the target areas and no-go areas prior to any activity
	 commencing. Sign the declaration of compliance to the requirements of the EMPr
	 Sign the declaration of compliance to the requirements of the EMPr. Consider, approve and sign the method statements.
	 Sign each page of the completed EMPr.
	 Conduct monthly site audits of compliance with the requirements of the
	EMPr and prepare audit reports.
	 Liaise with the landowner and any other affected party.
	Responsibilities:
	 Attend the site visit
	 Assist with the development of the rehabilitation plan,
	 Prepare the site layout and mark out areas to be avoided due to high
	environmental sensitivity.
	 Monitor compliance with the EMPr on site.
	 Communicate all aspects of the EMPr to the contractor and RDD or
	equivalent person in the relevant SOE.
	 Manage and keep the EMPr file up to date.
	 Carry out basic environmental awareness training for all participants. Complete the monthly environmental audit against compliance with the
	 Complete the monthly environmental audit against compliance with the EMPr and method statements.
	 EMPr and method statements. Issue audit finding notices as necessary.
	locus duale mang notices as necessary.
	 Sign-off on the corrective action report if satisfied that the corrective action has been completed
	 has been completed. Attach the corrective action report to the audit finding notice in the EMPr file
	 Report any audit finding, which is not correctly rectified to the RDD who in term can escalate to the Directorate: Compliance Monitoring should the
	matter not be resolved.
	 Inspect the intervention site prior to any preparation activities commencing,
	as well as once per week during implementation and on completion of the
	rehabilitation interventions.
	 Assist with the preparation of the method statements with the implementing
	agent/service provider and sign off the method statements.
	 Liaise closely with the contractor and the service provider/implementing
	agent to provide guidance on any environmental management issues,
	incidents or emergencies.
	incidente of emergencies.

Function	Role and Responsibilities
	 Assist in providing recommendations for remedial action in the event of any
	 audit findings. Ensure that there is open communication between the landowner and any affected party throughout the project duration.
Design engineer	 Role: Attend the quaternary site visit and make proposals on interventions Prepare the rehabilitation plan and detailed designed drawing taking into account inputs from the design team. Responsibilities:
	 Provide detailed drawings of the planned rehabilitation works.
Ecologist/aquatic scientist	Role:
where relevant	 Attend the quaternary site visit and make proposals on interventions taking into consideration the sensitivity of the environment and potential impacts. Review and make input into the rehabilitation plan and site plan.
	 Responsibilities: Provide scientific insight into the project activities and bring expert and often local knowledge to the project teams. Provide scientific advice to the team on best practices for the diversions,
	ponding, riverbank stabilization.
Service provider/	Role:
implementing agent	 Sign the service provider agreement. Sign the declaration of compliance to the requirements of the EMPr. Ensure there is compliance to the requirements of the EMPr. Employ a contractor to implement the specific WfEco projects. Ensuring that rehabilitation plans are implemented according to the design drawings and costs of implementation remain within the bills of quantities. Keep a dated digital photographic records of progress of the project, before, during and after the implementation of the interventions. Organise medical assessments for workers.
	 Responsibilities: Ensure the implementation and compliance with environmental management actions and the method statements for the project. Ensure reporting in terms of the EPWP requirements. Ensure all site staff are trained and kept updated in terms of the EMPr and other legal requirements. Ensure environmental health and safety training is undertaken on site. Ensure project delivery and quality control for each project as per SLA.
Contractor	Role:
	 Identify and appoint the EPWP participants. Prepare and sign the method statements to achieve the EMPrs management objectives and actions. Complete the EMPr template and sigh every page. Sign the declaration. Implement the rehabilitation plan. Report on all reportable aspects as determined by the RDD. Engage with local communities and keep a complaints register.
	 Responsibilities: Manage and remunerate the work of the EPWP participants. Provide training on the EMPr as well as health, safety and environmental aspects related to the project. Undertake all activities in compliance to the method statements. Comply with the requirements of the EMPr.

Function	Role and Responsibilities
	 Monitor and report to the PPM on the daily activities on-site during the implementation phase. Ensure qualified first aid attendants are available on the team. Ensure certified Pest Control Operators are available to assist the team. Ensure that safe, environmentally acceptable working methods and practices are implemented and that equipment is properly operated and maintained, to enable any activities to be carried out safely. Undertake environmental awareness training for all staff. Ensure that corrective actions required, take place within the stipulated timeframe. Issue a corrective action report in writing to the PPM, on completion of the corrective action.
Competent Authority: Integrated Environmental	Role: Register the project.
Authorisations Chief Directorate	Responsibilities:
	 Within 10 days of receiving the complete and correct information registration information, register the project and provide a registration number. Keep a record of all registered projects and make this available on the Departmental website.
Competent Authority: Compliance Chief Directorate	Role:Monitor compliance with the EMPr.
	 Monitor compliance with the LMPT. Responsibilities: On receipt of the communication noting the date of commencement of the construction activities, monitor compliance to the EMPr.

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, scope and exclusions of the EMPr as well as the roles and responsibilities of key persons involved in the planning and implementation of WfEco projects.

PART B: REGISTRATION AND DECLARATION OF COMPLIANCE:

- 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 project manager and signed and dated by the contractor, service provider/implementing agent and the provincial project manager. It requires the provision of relevant contact and project details.
- The declaration of compliance must be signed and dated by the provincial project manager, service provider/implementing agent and contractor to indicate that all 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, site plan, and the EMPr template (Appendix 3) (excluding the method statements) prepared as Part C of this EMPr must be appended to this declaration of compliance.

- Part B and the supporting documentation required in terms of Part C of the EMPr, must be submitted to the competent authority before the WfEco project commences to allow the competent authority to register the project for the purposes of facilitating compliance.
- At least fourteen days (14) days before the commencement of the WfEco Project, the provincial project manager must inform the Compliance Chief Directorate of the competent authority of the date of commencement of the project, to facilitate compliance inspections.
- If a new contactor or service provider/implementing agent is employed or the provincial project manager is replaced, Appendix 2 of Part C must be re-signed by all 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, auditing and reporting requirements relevant to all WfEco projects. Controls in this section reflect minimum and general requirements for avoiding, managing and mitigating impacts of WfEco projects during the implementation phase.
- The EMPr template (Appendix 3) must be completed by the provincial project manager in conjunction with the service provider/implementing agent. The provincial project manager and the service provider/implementing agent are also required to prepare a method statement for each impact management action relevant to 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 as well as each page of the EMPr template must be signed and dated by the service provider/implementing agent, the contactor and provincial project manager. Should any method statement change during the course of the project, the amended method statement must be approved by the provincial project manager and re-signed by all parties. The revised method statements must be filed in the EMPr file.
- This template, once signed and dated, is legally binding. The regional deputy director, provincial project manager and the service provider/implementing agent will remain responsible for the implementation of the EMPr.

The method statement must provide the following information for each environmental management action as per the format in 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 project site as well as any permit, licence and authorisation required to carry out the activity. The method statement must include:

- For implementation of the intervention:
 - o a "responsible person"; and

- \circ a method for implementation.
- For monitoring:
 - a responsible person;
 - o checklist/reports as appropriate: and
 - \circ 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 lay-out 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; an emergency plan and a health and safety plan..

Table 4: Format of a sample Method Statement

Method Statement Ref no. MS xxxxxxx									
Activity or interv	Activity or intervention: PREDEFINED AS PART OF THE EMPr								
Environmental Impact: PREDEFINED AS PART OF THE EMPr									
Impact Manage	ement <u>Out</u>	come: PRE	DEFINED AS PA	NRT OF TH	E EMPr				
Location of the	works:				Plant (e	quipment ne	eded):		
Materials:					Labour:				
Impact		•	ntation of inter	vention			Monitori	ing of interve	ntion
Management	Respon	sible	Method of	Timefra	ame for	Responsit	ble F	requency	Evidence of
Actions	Pers	on Im	olementation	Implem	entation	Person	· ·	requericy	Compliance
PREDEFINED				т	O BE CON				
AS PART OF				•	O DE OON				
THE EMPr									
Additional	information	on:							
				Signa	atures				
Contractor Service provider/Implementing agent Provincial project manager									
	Date Date Date								

Part A – BACKGROUND AND	Part B – REGISTRATION AND	Part C – ENVIRONMENTAL
CONTEXT	DECLARATION OF COMPLIANCE	CONTROLS AND REPORTING
 Background to the Working for Ecosystems programme; Institutional framework and planning processes; Purpose; Scope; Roles and responsibilities; Structure and framework. 	 Registration form; Declaration form; Site Plan. 	 Introduction; Monitoring and auditing; Appendix 1 – Registration form; Appendix 2 – Declaration form; Appendix 3 - Environmental management programme template; Appendix 4 – Approved method statements.

Figure 1: Framework for the EMPr

PART B: REGISTRATION AND DECLARATION OF COMPLIANCE WITH THE EMPR

1 REGISTRATION AND DECLARATION

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

- The location of the WfEco project,
- The position of the interventions identified in the rehabilitation plan illustrated at an appropriate resolution. These interventions could include, but not be limited to, bush encroachment control areas, earth works, soil stabilisation areas, rock and concrete interventions.
- The coordinates of the interventions (centre point).
- Farm portion names and gate access points.
- Areas of specific sensitivity where access must be restricted.
- Eating, parking, smoking, storage, laydown, chemical mixing, cement mixing areas etc.
- Dated photographs of location area and site.

PART C: ENVIRONMENTAL CONTROLS AND REPORTING

1 INTRODUCTION

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

The EMPr template (Appendix 3) must be completed by the PPM in collaboration with the service provider/implementing agent contractor and a method statement responding to each impact management activity relevant to the project as per the format in Table 4 must be compiled. 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 PPM, and the numbers cross referenced into the EMPr template (Appendix 3), each page of the method statement and template must be signed and dated by the PPM 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 PPM as well as the service provider/implementing agent and contractor. All updates are to be filed in the EMPr file. Should the PPM be replaced or a new service provider/implementor 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 PPM must have a hard copy of the document available on the project site, and the RDD must ensure that the completed EMPrs and declaration of compliance for all WfEco projects are available on the Department's website.

The PPM 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 WfEco projects. It is important to re-iterate that the mitigation hierarchy must be implemented during all phases of the development.

2 MONITORING 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 WfEco projects as a minimum requirement.

2.1.1 Document control/Filing system

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

The EMPr file must be made available at all times on request by the regional deputy director 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;
- Contact details of the landowner;
- Evidence of occupational health, safety and environmental training undertaken;
- A fire control officer and certified first aider must be appointed and the names documented with a copy of the certification;
- Monthly audit report;
- A copy of audit finding where relevant;
- The corrective action report if relevant;
- A complaints register;
- The closeout report;
- Dated photographs, before, during and after implementation of project; and
- An incident register.

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 WfEco projects, must be compiled in accordance with the format in Table 4. The method statements must be prepared in such detail that the PPM 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, including any updates, must be appended in Appendix 4 (EMPr).

The PPM shall ensure that the service provider/implementing agent and contractor 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 PPM. 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 RDD, 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 PPM, the contractor must ensure that the corrective actions required is implemented within the stipulated timeframe. On completion of the corrective action the implementing agent is to issue a corrective action report in writing to the PPM. If satisfied that the corrective action has been completed, the PPM is to sign-off on the corrective action report, and attach the report to the audit finding notice in the EMPr file. A corrective action is considered complete once the report is signed off by the PPM.

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 digital dated and GPS tagged 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 PPM access to take photographs of all areas, activities and actions.

2.1.8 Monitoring requirements

Monitoring and evaluation (M&E) facilitates 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 PPM 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 audits

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

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

- Month of audit;
- Name of PC conducting the compliance inspection;
- Project site details and contract number;
- Compliance with the EMPr actions and outcomes;
- Compliance with the method statements;
- Audit finding issued;
- Completed and reported corrective actions;
- Environmental monitoring;
- General environmental findings and actions; 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 PPM and and shared with the landowner before being submitted to the RDD for sign off. The environmental closeout report must be included in the EMPr file.

Acceptance and approval of the environmental closeout report by the PC will end the implementation phase of the EMPr as successful and completed.

APPENDIX 1 – REGISTRATION FORM

Working for Ecosystems - Registration Form

The project manager of a Working for Ecosystems project must complete this form for every Working for Ecosystems project and submit the correctly signed form, together with the supporting information, to the Director: Integrated Environmental Authorisations at address below. The registration of the project by the competent authority is to allow the activities associated with the project, as identified in the Environmental Impact Assessment Regulations Listing Notice 1, Listing Notice 2 or Listing Notice 3, of 2014, as amended, to be excluded from the requirement to obtain environmental authorisation, based on compliance to an environmental management intendment 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 Ecosystems 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

Project description

Project name: _____

General project location: ____

Quaternary catchment: _____

Farm name/s: ______

Farm number/s: _____

Portion name/s: ____

Portion number/s: _____

General description of the interventions to be carried out:

Details of the Regional Deputy director

Name of Regional Deputy Director: ______

Generic Environmental Management Programme for the Working for Ecosystems Programme (version 0 of October 2020)

Tel Number:	
E-mail Address:	
Postal Address:	
Physical Address:	
Details of the provincial project manager	
Name of provincial project manager:	
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 project manager	Date:
Signature implementing agent	Date:

Date:

Signature contractor

APPENDIX 2 – DECLARATION FORM

Declaration of Compliance

The provincial project manager, 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, project,	, in my capacity as provincial project manager of this WfEco
l, and	, in my capacity as implementing agent of this WfEco project,
I, that I:	, in my capacity as contractor of this WfEco project, affirms
 will abide by an 	d comply with the prescribed impact management outcomes and actions as

- 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 project manager

Signature implementing agent

Signature contractor

Date:

Date:

Date:

3

APPENDIX 3 – ENVIRONMENTAL MANAGEMENT PROGRAMME TEMPLATE

ENVIRONMENTAL MANAGEMENT PROGRAMME TEMPLATE

Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
Erecting protective fences	Soil compaction and erosion due to vehicle	Maintain soil character and avoid or minimise the degradation of	Use existing roads	
		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 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"	
	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under general interventions section "Access to site and vehicle usage - Dust generation"	
	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"	

1

Signature provincial project manager

Date:

Signature service provider/implementing agent

Signature contractor

Date:

Date:

Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	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"	
	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"	
	May restrict movement of untargeted fauna	Allow untargeted species access to the restricted area	Implement design as per the site-specific rehabilitation plan	
	Prevention of access	Provide for community access through area as needed	Provide for gates as shown on site plan	

Signature provincial project manager

2

Signature service provider/implementing agent

Signature contractor

Date:

Date:

Date:

Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
Concrete structures (Concrete weirs, masonry weirs)	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 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"	
	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under general interventions section "Access to site and vehicle usage - Dust generation"	
	Loss of topsoil	Conserve topsoil for use during re-vegetation and rehabilitation	Comply with impact management actions under general interventions section "General activities - Loss of topsoil"	
	Soil 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 project manager

Signature service provider/implementing agent

Signature contractor

Date:

Date:

Date:

3

Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	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 fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under general interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil, air and water resulting 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 fauna and flora to minimise disturbance	Comply with impact management actions under general interventions section "General activities - Impacts on fauna and flora"	

4

nager

Date:

ementing agent

Date:

Date:

Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Disturbance of cultural and archaeological heritage	Prevent the disturbance of any cultural and archaeological heritage sites	Comply with impact management actions under general interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to paleontological 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"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under general interventions section "General activities - Occupational health and safety"	
Erosion control structure	es			
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 / Standard Operating Procedures
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under general interventions section "General activities - Occupational health and safety"	
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage resources	Comply with impact management actions under general interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to palaeontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under general interventions section "General activities - Disturbance or damage to paleontological resources"	
	Disturbance or loss of important species and their habitat	Minimal habitat and species disturbance during and after activity	Comply with impact management actions under general interventions section "Removal of rock, sand or soil for construction of soil conservation works - Disturbance or loss of important species and their habitat"	
Brush packing	Introduction of alien invasive species	Prevent seeding of alien invasive vegetation through brush packing	Pack in the area as identified in the site plan and the approved method statement provided by the service provider/implementing agent	
			Only use vegetation endemic to the area.	

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Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Comply with impact management actions under general interventions section "General activities - Fire damage to surrounding environment"	
Silt fencing / silt trap / Bio-engineering structure	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"	
	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 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"	
	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"	

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Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	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"	
Earthen berms	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 erosion	Prevent soil erosion	Follow construction and spacing specifications as indicated by the engineering drawings	
			Ensure soil on berms is well compacted during construction	
			Ensure runoff water freely drains into non-sensitive areas	
			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 / Standard Operating Procedures
Concrete weirs	Downstream siltation	Prevent downstream siltation	Comply with impact management actions under general interventions section "General activities - Downstream siltation"	
	Temporary stream diversion	Maintain viable connectivity and flow for aquatic species movement and migration	Comply with impact management actions under general interventions section "General actions – Temporary stream diversion"	
	The environmental audit report must be included in the EMPr file.	The environmental audit report must be included in the EMPr file.	The environmental audit report must be included in the EMPr file.	
		Reduce dust generation and dispersal	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	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Ensure the apron is adequate and wider than overflow to prevent scouring downstream	
			Follow engineering designs and rehabilitation plan	
Gabion weirs	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under general interventions section "Access to site and vehicle usage – Soil compaction and erosion due to trampling"	
			All activities, including laydown areas, remain strictly within demarcated routes and areas as per site plan	
	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 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 / Standard Operating Procedures
	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"	
	Pollution due to offcuts / remaining materials	No waste to remain on site	Comply with impact management actions under general interventions section "General activities - Waste pollution"	
	Pollution due to fuel, oil or hydrocarbon spills	No fuel, oil or hydrocarbon spills on site	Comply with impact management actions under general interventions section "General activities - Pollution due to fuel, oil or hydrocarbon spills"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil, air and water resulting from cement and concrete batching	Comply with impact management actions under general interventions section "General activities - Pollution due to cement and concrete batching"	

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Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	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"	
	Damage to infrastructure	Protect man-made infrastructure	Mark all existing infrastructure on the site plan	
			Demarcate no-go areas according to the site plan	
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage resources	Comply with impact management actions under general interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to palaeontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under general interventions section "General activities - Disturbance or damage to paleontological resources"	
	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 / Standard Operating Procedures
Rock masonry structures	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 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"	
	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under general interventions section "Access to site and vehicle usage - Dust generation"	
	Loss of topsoil	Conserve topsoil for use during re-vegetation and rehabilitation	Comply with impact management actions under general interventions section "General activities - Loss of topsoil"	
	Soil 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"	

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Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under general interventions section "General activities - Downstream siltation"	
	Waste pollution	No waste to remain on site	Comply with impact management actions under general interventions section "General activities – Waste pollution"	
	Pollution due to cement and concrete batching	Avoid contamination of the soil, air and water resulting from cement and concrete batching	Comply with impact management actions under general interventions section "General activities - Pollution due to cement and concrete batching"	
	Impacts on fauna and flora	Prevent impacts on fauna and flora 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"	
Chute construction			Construct as per the engineering drawings	

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Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Erosion due to undercutting or scouring	Stabilise soils and prevent further erosion and soil mobilisation	Construct in the area as identified in the site plan	
Gabion structures (large scale slope erosion and deep or	Soil compaction and erosion due to vehicle access	Maintain soil characteristics and avoid or minimise the degradation of vegetation	Comply with impact management actions under general interventions section "Access to site and vehicle usage - Soil compaction and erosion due to vehicle access"	
large gullies)	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"	
	Dust generation	Reduce dust generation and dispersal	Comply with impact management actions under general interventions section "Access to site and vehicle usage - Dust generation"	
	Waste pollution	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 / Standard Operating Procedures
	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"	
	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 paleontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under general interventions section "General activities - disturbance or damage to paleontological resources"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under general interventions section "General activities - Occupational health and safety"	
Vegetation Managemen	nt		·	
Manual vegetation management	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 / Standard Operating Procedures
	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 disturbance and erosion	Minimise soil disturbance and erosion	The project is implemented according to the pre- compiled site plan	
			Comply with impact management actions under general interventions section "General activities - Soil disturbance and erosion"	
	non-targeted plant species	Minimise loss of biodiversity and prevent impacts on natural resources including flora and	The service provider/implementeing agent must ensure all participants are able to correctly identify targeted species	
Injury to workers		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 / Standard Operating Procedures
Chemical vegetation management (Discuss herbicide	Water and soil pollution by chemicals	Minimise 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"	
landowner) non-targeted plant	Loss of biodiversity and non-targeted plant species (damage to indigenous	Minimise loss of biodiversity and prevent impacts on natural resources including flora and fauna to minimise disturbance	Do not apply foliar chemical applications under conditions where chemical drift may impact non-targeted species	
	trees)		Mix and apply herbicides according to manufacturer's instruction	
			Only use herbicides and arboricides registered for a specific target species under the FFFARSR Act	
			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 – Water and soil pollution by chemicals"	

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Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Use approved and provided PPE	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under general interventions section "General activities - Occupational health and safety"	
	Vegetation debris	Prevent fire risks	Debris is managed according to the site plan	
	accumulation that may cause a fire hazard		Comply with impact management actions under general interventions section "General activities - Fire damage to surrounding environment"	
Collecting cuttings	Disturbance and destruction of	Preserve the parent plants	Cuttings are only to be taken from areas as identified on the site plan	
species	selected/certain flora species		When harvesting ensure not to denude the parent plant	
Harvesting of seeds	Deplete the natural seedbank	Preserve and maintain the natural seedbank	Seeds are only to be taken from areas as identified on the site plan	

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Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
			Seeds must be collected, stored, handled and managed according to the approved method statement provided by the service provider/implementing agent	
			Store, handle and manage harvested sods as per work method statement and use before drying out	
Revegetation	Failed rehabilitation	Establish indigenous vegetation cover	Revegetate as per revegetation method statements	
	Introduction of alien invasive vegetation	No alien invasive vegetation is introduced during intervention	Live plants of only locally adapted non-invasive species are used	
	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"	_
Earthworks			1	
			Construct as per the engineering drawings	
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Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
Cut and fill (for	Soil degradation and increased erosion	Intended function of intervention is achieved and landscaped area is stable	Construct in the area as identified in the site plan	
excavations, narrow or shallow erosion gullies)	Expansion of gully formation and downstream sedimentation	Avoid further erosion through cut and fill	Cut and fill gullies as per engineered design and work method statement	
	seamentation		Rehabilitate and revegetate surrounds as per engineered design and work method statement	
Sloping	Soil degradation and	Intended function of intervention	Construct as per the engineering drawings	
	increased erosion is achieved ar is stable	is achieved and landscaped area is stable	Construct in the area as identified in the site plan	
	Expansion of gully formation and downstream sedimentation	Avoid further erosion through cut and fill	Cut and fill gullies as per engineered design and work method statement	
	scumentation		Rehabilitate and revegetate surrounds as per engineered design and work method statement	
Ponding	Erosion and siltation	No silt movement, erosion, sedimentation	Apply rehabilitation plan/engineer-approved design	

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Activity/ Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement / Standard Operating Procedures
	Downstream siltation	Minimise downstream siltation	Comply with impact management actions under general interventions section "General activities - Downstream siltation"	
	Injury to workers	No injuries or deaths occur	Comply with impact management actions under general interventions section "General activities - Occupational health and safety"	
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage resources	Comply with impact management actions under general interventions section "General activities - Disturbance or damage to archaeological and heritage resources"	
	Disturbance or damage to palaeontological resources	Prevent the disturbance of any fossils	Comply with impact management actions under general interventions section "General activities - Disturbance 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	Method Statement/Standard Operating Procedure
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	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
	Soil compaction and erosion due to trampling	Maintain soil characteristics and avoid or minimise the	Identify no-go areas or areas sensitive to compaction on the site plan	
			Demarcate no-go areas on site and restrict access ²	
			All activities remain strictly within demarcated routes and areas	
			Once the intervention has been completed, break the crust on bare compacted areas to enhance vegetation establishment	
	Dust generation	Reduce dust generation and dispersal	Restrict access to demarcated access routes and working areas as indicated in the site plan	

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² Where the demarcation of areas is required, the landowner should provide input should they wish to do so

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			Implementing the speed limit on dirt roads	
			Reduce speed where activities and roads are close to buildings and/or dwellings	
General activities within the working area	Loss of topsoil	Conserve topsoil for use during re-vegetation and	Remove topsoil and store separately from other soil	
		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	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			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	Reduce impacts to watercourses	Install temporary erosion protection measures	
	damming		Reinstate areas eroded due to work undertaken	
			No washing of clothes or bathing in rivers or wetlands	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			Remove cut AIP material (biomass) at least 30m away from a flood zone to prevent damming and secondary erosion	
			Apply stream diversion according to the engineering drawings and work instructions if any work will be conducted in the river-stream bed with surface flow present	
			Deactivate diversion channels after implementation	
	Downstream siltation	Minimise downstream	Do not work during wet weather	
		siltation Secure excavations by shuttering as required		
			Construct temporary berms up-slope to divert runoff around work site and	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			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	Rehabilitation interventions such as gabions, reno mattresses, concrete road strips are constructed in situ	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
		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	Minimise spillage onto soil or into water while mixing or	Staff using chemicals are trained and aware of the risks of using chemicals	
		using chemicals	Chemicals are mixed on impermeable and level surfaces as per the manufacturer's instructions	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			All waste material and containers are safely and properly removed after use	
		Prevent contamination of ecologically sensitive environments	Chemicals are stored and mixed 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	
			Waste is to be disposed of to a landfill as identified by the local municipality	
			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	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			Daily demarcate an area for equipment storage, 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	
			Where drip trays have been used and oils or hydrocarbons have been captured, the spilt lubricants must be captured in	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			containers and disposed of at a landfill or treatment site licenced to manage that waste type	
			No scheduled maintenance may take place on site	
	Pollution due to cement and concrete batching	ete batching soil, air and water resulting	Store sand, stone and cement in demarcated areas	
		from cement and concrete batching	Do not handle dry material during extremely windy conditions	
			Mix cement on a level impermeable surface (e.g. shutter board)	
			Mix cement on the day of intended use	
			The mixing of cement or concrete is to be done at specifically selected sites outside	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			drainage lines from riparian areas, to contain run-off	
			Water used to clean of cement mixing and handling equipment is to be contained and reused for cement mixing where the quality is acceptable	
			Secure empty cement bags to prevent spread of cement dust prior to disposal	
			All empty cement packaging is stored in a dedicated area and removed from the site for disposal at an appropriate waste facility	
			Do not construct with, or lay, concrete when extended rain periods is expected	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			Equipment or implements used for cement mixing may not be cleaned in rivers or wetlands	
			Do not leave any cement spills or unused hardened cement at the work location	
	Impacts on fauna and flora	Prevent impacts on 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 endangered and indigenous plant species	
			Activities to avoid drainage lines, where they cannot be avoided, they should be marked on the site plan	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			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	
			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, including hygiene purposes	
			Check excavations daily for trapped animals and release them	
			Fill open excavations as soon as possible after excavation	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			Health and safety representative must inspect the site and notify the workers if there are dangerous or problem animals	
			Record sightings and encounters of 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	
			Do not disturb nests or roosts	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			Do not leave residual material on site	
	Fire damage to surrounding environment	No fire damage to take place on site due to project-related	Set up and enforce use of designated smoking area(s)	
		activities	No cooking or other fires allowed on site	
			Develop an emergency evacuation plan and communicate it to workers	
			Maintain basic firefighting equipment at the work site and ensure that personnel are trained in the use of such equipment	
			All workers are aware of the risk of run- away fires and informed on the actions needed to prevent and control run-away fires as per the training	
		No injuries or death occur	Comply with the HIRA	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
	Occupational health and safety		 Before work commences, induction training must be provided to all staff according to the training matrix and must include: The content of the EMPr Emergency and response procedures Orientation to any specific aspects related to the site 	
			Document training sessions and maintain a training register	
			A first aid kit must be accessible on site at all times and must include the number of the local emergency service	
			A fire control officer and certified first aider must be appointed and the names	

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Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			documented in the EMPr file with a copy of the certification	
			A designated eating area must be identified with access to a refuse containment	
			A temporary toilet facilities or pit latrines must be provided and maintained throughout the clearing period	
			No temporary toilet facility must be placed within 100m from any watercourse	
			Drinking water must be available to the workforce on site at all times	
			Implement the following restrictions on all staff operating on the site:	

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			 No work may be done without the use of relevant PPE No alcohol or illegal substance use on site No firearms permitted on site No excessive noise 	
	Noise pollution	Noise generation is minimised	Minimise noise impacts by operating in working hours (6h30 to 17h00)	
			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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Date:
Date:
Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
	Disturbance of cultural and archaeological heritage resources	Prevent the disturbance of any cultural and archaeological heritage	Demarcate declared and potential heritage resources as indicated on the rehabilitation plan before activities start	
		resources	Report any finds of human remains to the nearest police station and cease work immediately	
			Should any archaeological artefacts be exposed during construction activities, work in the area where the artefacts were found must cease immediately and the local SAHRA authorities informed within 24 hours	
			Do not apply herbicides within any of the demarcated heritage resources, burial grounds or rock art sites	

	Date:
:	Date:
	Date:

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
			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 resource	
	Disturbance or damage to palaeontological	Prevent the disturbance of any fossils	Demarcate known fossil sites and prevent all staff from accessing this area	
resources		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	

Date: Date:
Date.

Activity/Intervention	Impact	Impact Management Outcome	Impact Management Action	Method Statement/Standard Operating Procedure
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 removal through spreading the extent of collection area	
		Minimise the removal of rocks from the environment	Allow the collection of rocks only where there has been prior agreement between the ecologists, the engineer and landowner	
		Minimise disturbance of soil	Only collect loose rocks	

Other permits and licences required:

Signature provincial project manager

Date:

Signature service provider/implementing agent

Signature contractor

Date:

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Signature provincial project manager

Date:

Signature service provider/implementing agent

Signature contractor

Date:

Date:

APPENDIX 4 – METHOD STATEMENTS