West Rand District Municipality

Wetland Strategy and Action Plan
(2017 – 2022)

Local Action for Biodiversity (LAB): Wetlands South Africa

ICLEI Local Governments for Sustainability

LAB Local Action for Biodiversity
AN ICLEI – IUCN PROGRAMME

USAID FROM THE AMERICAN PEOPLE

environmental affairs
Department: Environmental Affairs
REPUBLIC OF SOUTH AFRICA

SOUTH AFRICAN LOCAL GOVERNMENT ASSOCIATION
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Inspiring service delivery

SANBI
Biodiversity for Life
South African National Biodiversity Institute

Working for Wetlands

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WEST RAND DISTRICT MUNICIPALITY
WETLAND STRATEGY AND ACTION PLAN (2017- 2022)

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In addition, ICLEI AS and West Rand District Municipality would like to acknowledge the meaningful contributions from all other stakeholders within West Rand District Municipality, both public and private, which have culminated in the West Rand District Municipality WSAP.

ABBREVIATIONS

AS	Africa Secretariat
CBA	Critical Biodiversity Areas
CARA	Conservation of Agricultural Resources Act, 43 of 1983
CBD	United Nations Convention on Biological Diversity
CEPA	Communication, Education and Public Awareness
DWS	Department of Water and Sanitation
EIA	Environmental Impact Assessment
ESA	Ecological Support Areas
FEPA	Freshwater Ecosystem Priority Areas
ICLEI	ICLEI- Local Governments for Sustainability
ICLEI AS	ICLEI Africa Secretariat
IDP	Integrated Development Plan
LAB	Local Action for Biodiversity
LAB: Wetlands SA	Local Action for Biodiversity: Wetlands South Africa
MTSF	Medium Term Strategic Framework
NBSAP	National Biodiversity Strategy and Action Plan
NBF	National Biodiversity Framework
NBSAPs	National Biodiversity Strategies and Action Plans
NEMA	National Environmental Management Act, 36 of 1998
NEM:BA	National Environmental Management: Biodiversity Act, 10 of 2004
NEM:ICMA	National Environmental Management: Integrated Coastal Management Act, 24 of 2008
NWA	National Water Act, 36 of 1998
NWRS	National Water Resource Strategy
SANBI	South Africa National Biodiversity Institute
SPLUMA	Spatial Planning and Land Use Development Act, 16 of 2013
USAID	United States Agency for International Development
WHCA	World Heritage Convention Act, 49 of 1999
WSAP	Wetlands Strategy and Action Plan

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INTRODUCTION

South Africa is endowed with a rich wealth of biodiversity, which offers an immense opportunity to support the country's development path by providing many goods and services which contribute to municipal service delivery, water and food security, and quality of life, especially under a changing climate.

The West Rand District Municipality is located in the Gauteng Province of South Africa and covers an area of 4,095 km^2. The Municipality falls within the Grassland biome and is home to a disproportionately high percentage of rare and threatened species and threatened ecosystems. The West Rand District Municipality Critical Biodiversity Areas (CBA) covers 27.5% of the District. The Ecological Support Areas (ESA) covers a further 19% of the District. Protected areas cover just over 2% of the Municipality.

Just under two thirds of the District is in a natural or near-natural state (63%), with urban areas (6%), intensive agriculture (28%) and mining (3%) together covering 37% of the District (WRDM Bioregional Plan, 2015). Freshwater is our most limiting natural resource. Industrialization, mining and urbanization as well as rapid population growth have since become the largest water users and heavily affect water management activities. It is imperative that South Africa develops a water-efficient economy as well as a social ethic of water conservation and ultimately a culture of sustainable water resource use.

Currently there is no specific designated management authority or capacity for wetland management within the West Rand District Municipality. Instead, the management of wetlands is a collective effort. Various external local stakeholders play an active role in wetland management through the implementation of local projects, as well as general monitoring and regulation initiatives. Wetlands are also considered in the decision making of the multiple forums, platforms and working groups throughout the West Rand District Municipality.

West Rand District Municipality is implementing the Local Action for Biodiversity: Wetlands South Africa (LAB: Wetlands SA) programme with support from ICLEI Africa Secretariat (ICLEI AS). The USAID funded LAB: Wetlands SA project aims to ensure the protection of priority natural wetland resources, thus enabling the supply of ecosystem services, and promoting resilient communities and sustainable local economies under a changing climate within South African local governments. Through the development of this Wetland Strategy and Action Plan, ICLEI AS assisted the West Rand District Municipality in identifying the gaps in management and assisted with devising new and better wetlands management strategies going forward.

Supporting Documentation:

This document relies heavily on two supporting documents: The West Rand District Municipality Wetland Report (2017) and the Wetland Strategy and Action Plan Guidelines (2017).

These can be downloaded from **http://cbc.iclei.org/project/lab-wetlands-sa/**

1. Wetlands in the West Rand District Municipality

1.1. What is a Wetland?

"Wetlands are 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".

National Water Act No. 36 of 1998.

In simpler terms, a wetland is a feature in the landscape which is saturated with water for a long enough period that the soil conditions change (mottling as a result of the anaerobic conditions) and the vegetation shifts to respond to these changes.

Figure 1 & 2: Mottled soils indicative of a wetland (left) and specially adapted wetland vegetation (right).

For more detailed information regarding wetlands within the West Rand District Municipality. Please refer to the West Rand District Municipality: Wetland Report (2017) which can be accessed here: **http://cbc.iclei.org/project/lab-wetlands-sa/**

1.2. Importance of wetlands within west rand district municipality

All wetland types can be classified as high value 'ecological infrastructure' due to the large number of ecosystem services that they provide. Wetland ecosystem services can be classified into four separate categories namely 'provisioning services', 'regulating services', 'cultural services' and 'supporting services'. Provisioning services can be described as the products one can physically obtain from wetlands. Regulatory services can be described as the benefits one receives from the wetland. Cultural services are the nonmaterial benefits that one can obtain from wetlands. Lastly supporting services are the services provided that are necessary for the production of all other

ecosystem services. Please refer to **Table 1** below for a detailed description of the ecosystem services that wetlands within West Rand District Municipality provide.

In **Error! Reference source not found.** below is an outline of ecosystem service provided by wetlands in the West Rand District Municipality.

Table 1 Key Ecosystem services identified in the West Rand District Municipality

Provisioning	
Food	Fish, fruits, grain(rice)
Fresh Water	Storage and retention of water; provision of water for drinking and irrigation
Fibre and Fuel	Wood, reeds, peat
Medicinal products	Medicinal plants, extraction of genes for resistance to pathogens
Habitat	Habitat wild life and nesting sites for birds
Regulating	
Climate regulation	Stores greenhouse gasses, influences local and regional temperature, precipitation.
Water regulation (hydrological flows)	Wetlands store storm water much like a sponge and slowly release it over time hence preventing sediment loss and over flooding of areas down stream
Water purification and waste treatment	Retention, recovery and removal of excess nutrients and other pollutants from the water
Erosion control	Retain sediments
Natural hazard regulation	Flood control and storm protection
pollination	Habitat and breeding ground for pollinators
Cultural	
Spiritual	Baptism places, place of worship, collection of water for various religious activities
Recreational	Opportunity for recreational and ecotourism, recreational fishing can create a considerable source of income.
Aesthetic	Beauty or aesthetic value in aspects of wetlands
Educational	Opportunity for indigenous and academic research and learning
Supporting	
Soil formation	Sediment retention and accumulation of organic matter, peat formation
Nutrient cycling	Storage and recycling , processing and acquisition of nutrients
Biodiversity	Habitat for resident and migrating species

It should be noted that the numerous ecosystem services provided by wetlands come at no cost to the municipality and as such, all that needs to be done to ensure continued provision of these services is to protect and maintain local wetlands. However, the inappropriate management of wetlands, can cause a loss of wetland area and subsequent loss of ecosystem services. This results in the municipalities having to invest in expensive infrastructure (e.g. water filtration plants or flood barriers) to ensure the same level of service delivery.

1.3. Threats to Wetlands within West Rand District Municipality

Despite the huge benefits that wetlands provide in terms of ecosystem services, 50% of wetlands in South Africa have already been lost and 48% of the remaining wetlands are critically endangered and/or degraded. This loss is a direct result of deliberate draining of wetlands, development and expansion (both urban and agricultural) and pollution. Damage to wetlands results in increasingly limited functionality and subsequently a decrease in the ability to provide valuable ecosystem services.

Due to the mining activities in the area and the Dolomite dominant geological character of the area, most of the natural wetlands are prevented from being saturated as best as possible. This however does not include heavy rainfall events which may cause dormant wetlands to re-emerge and cause serious problems in developed areas and economically vital land-use regions. Following verbal communications with active stakeholders working in the West Rand District Municipality, it became clear that wetlands face a significant number of threats all of which have the ability to either destroy the wetlands entirely or severely compromise functioning and provisioning of ecosystem services. Wetlands occur in a variety of different land-use zones.

DRIVER	ACTIVITY	THREAT	POSSIBLE CAUSE
Land use	**Zoning**	Not adhering to the 32m buffer zone	Approval of development plans that infringe environmental legislation
		Development approved within a wetland zone	Economic development at an expense of environmental protection
			Public not commenting during consultation processes
		Developer only meeting minimum requirements for EIA process	Lack of resources for site inspections
		Lack of enforcement	
	Infrastructure development	Encroachment	Informal settlements in or near flood plains
		Sewage pollution due to failing infrastructure	Industrial areas less than 32m from wetland buffer
		Densification such as cluster development on a single Erf.	
	Land conversions	Deliberate drainage to make way for infrastructure	Agricultural areas converted into residential and commercial zones
		Removal of vegetation and hardening of surfaces	Paving of streets increase rate and volume of storm water runoff
	Agriculture and Mining	Deliberate drainage for expansion of production	Deliberate drainage of Wonderfonteinspruit for mining
		Unsustainable agricultural practices	Excessive use of artificial fertilizers result in eutrophication
			Removal of vegetation and cultivation result in sediment removal
			Over extraction of water for irrigation
			Over exploitation
	Industrialisation	Industrial discharges such as oils from industries. Industries releasing effluent containing oil and other pollutants	Industrial areas less than 32m from wetland buffer
			Discharges rich in nutrients
			Unauthorised discharges
			High temperature effluent discharges
			Polluted storm water runoff
			Lack of effluent and storm water treatment facilities on site
	Rapid urbanisation and high population growth	Encroachment	Need for human settlements
		Litter	
	Infrastructure development	Lack of enforcement	
		Encroachment	Informal settlements in or near flood plains
		Sewage pollution due to failing infrastructure	Industrial areas less than 32m from wetland buffer
		Densification such as cluster development on a single	

DRIVER	ACTIVITY	THREAT	POSSIBLE CAUSE
		property	
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			Unauthorised discharges
			High temperature effluent discharges
			Polluted storm water runoff
			Lack of effluent & storm water treatment facilities on site
	Rapid urbanisation and high population growth	Encroachment	Need for human settlements
		Litter	
Invasive species	**Encroachment**	Killing indigenous species	Lack of enforcement of applicable legislation (NEMBA) Contusive environmental conditions
		High water consumption	
Mining	**Radiation**	Radiation impacts on vegetation	
		Mine dump dust	Dust is blown off dumps
			Rain water percolates though unlined mine dumps
		Mine water decant	Radioactive water
		Water discharged post operations	
		Storm water	
	Heavy metals	Heavy metals from mine voids dissolves	Acidic water
	Dewatering	Deliberate drainage of aquatic ecosystems	Diversion of water to prevent percolation in mining shafts
Pollution	**Discharge**	Mining – Predominantly Gold	Industries discharges polluted water into the environment
			Industries do not retain and treat their storm water prior to release in to the environment
			Discharge from treatment plants and attenuation dams

DRIVER	ACTIVITY	THREAT	POSSIBLE CAUSE
		Municipal water and sanitation departments - from waste water treatment plants	Municipal waste water treatment plants discharges water that is reach in nutrients and causes eutrophication
	Storm water runoff	Oils, debris, pesticides, herbicides	Commercial and agricultural activities
	Sediment	Sediment in wetlands	Sediment interfere with wetland function
Municipal governance	**Knowledge base**	Lack of benchmark and baseline data	No monitoring and management inventory
	Management systems	No management systems in place	Physical management system with limited staff Internal affected and impacting department not communicating
	Human resource	Capacity No linkage between different municipal departments e.g. GIS, Disaster Management and Environmental Management	Lack monitoring and enforcement No Grade 2 EMI designated by the minister for West Rand Lack of understanding of relevance between departments
		Resources	No budget for environmental conservation projects Cost of ecosystem services not quantified
Education and Awareness		Lack of education and awareness of wetland services	Municipalities concentrate on waste and water saving
			No educational material
			Not sufficient personnel
		Lack of financial and human resources	

South Africa has an extensive legislative framework concerning the environment and biodiversity is considered in both developments planning as well as national government priorities. This section outlines key legislation and policies as well as the governance structure within the West Rand District Municipality which leads to the current wetland management strategy within the district.

2.1.Policy framework

South Africa has an extensive legislative and policy framework concerning the environment and biodiversity, as well as development planning and priorities. **Error! Reference source not found.** below provides a comprehensive summary of all South African legislation, policies and strategies pertinent for the management of wetlands within the West Rand District Municipality. It is important to note that some of the legislation such as the National Environmental Management Act provides specific instructions regarding wetland management whilst other legislation indirectly supports management of wetlands such as the National Environmental Management: Waste Act.

Table 2 Summary of Legislation governing wetland management in the West Rand District Municipality

LEGISLATION / POLICY / STRATEGY	RELEVANCE FOR WETLAND MANAGEMENT
Constitution of the Republic of South Africa, 1996	Section 24 enshrines a right to an environment (including wetlands) that is not harmful to health or well-being, and requires municipalities to provide services to communities in a sustainable manner and to promote a safe and healthy environment.
National Water Act, 36 of 1998 (NWA)	The NWA regulates water use and protection of water resources, including wetlands. A municipality will require a water use licence or must comply with the general authorisation to alter the bed, banks, course or characteristics of a wetland, The NWA Duty of Care and Emergency Incident provisions will apply to incidents which affect wetlands.
National Environmental Management Act. 36 of 1998 (NEMA)	NEMA is the overarching framework legislation for environmental governance in South Africa. It includes environmental principles which must form an integral part of all decision making, which affects the environment including within the municipal sphere, which affects the environment. NEMA also prescribes a general duty of care not to cause significant pollution or degradation of the environment, and where harm is unavoidable, to take measures to clean up and rehabilitate. Environmental authorisation for listed activities, including specified activities within 32 or 100 metres of a watercourse, depending on the activity. Furthermore, in the event of an emergency which affects a wetland, the response procedures prescribed in NEMA should be complied with.
National Environmental Management:	NEM:BA provides various measures for the protection of

LEGISLATION / POLICY / STRATEGY	RELEVANCE FOR WETLAND MANAGEMENT
Biodiversity Act, 10 of 2004 (NEM:BA)	biodiversity, including the control of activities affecting threatened or protected species and ecosystems and activities involving alien and invasive species. Various planning tools are provided for, including bioregional plans and biodiversity management plans. IDP's must align with national biodiversity framework and bioregional plans. Municipalities are required to prepare invasive species monitoring, control and eradication plans for land under its control and incorporate into IDP's.
National Environmental Management: Integrated Coastal Management Act, 24 of 2008 (NEM:ICMA)	NEM:ICMA provides for various mechanisms to regulate activities in the coastal zone, including coastal wetlands situated within the zone. Where a wetland falls within the coastal protection zone, additional considerations are relevant in making a decision whether to grant an environmental authorisation. Municipalities are required to adopt coastal management programmes, which will include coastal wetlands. Municipalities are responsible for formulating estuary management plans (except estuaries which straddle municipal or provincial boundaries).
National Environmental Management: Waste Act, 59 of 2008	Through the regulation of waste management, including disposal of waste, water resources are protected. Dumping of waste and various other activities which may affect wetlands are prohibited. Municipalities will require waste management licences for their own waste management activities.
Conservation of Agricultural Resources Act, 43 of 1983 (CARA)	Regulations published in terms of CARA regulate the use of wetlands situated on agricultural land in order to protect natural agricultural resources, including the soil, water sources and vegetation. Permission is required to undertake specific activities, including cultivation, which affect wetlands.
Local Government: Municipal Systems Act, 32 of 2000 ("the Municipal Systems Act")	The Municipal Systems Act regulates, amongst other things, the roles and functions of municipalities, and provides for planning tools such as integrated development plans and spatial development frameworks.
Spatial Planning and Land Use Development Act, 16 of 2013 (SPLUMA) and applicable provincial planning legislation and local by-laws.	SPLUMA is the framework legislation regulating land use planning in South Africa, and municipalities will need to plan and grant land use approval in accordance with it. SPLUMA sets out a number of development principles which apply to municipalities when regulating the use and development of land, and must guide a municipality in policy preparation. IDP's are prepared in accordance with SPLUMA and must include specific environmental components identified in environmental legislation.
World Heritage Convention Act, 49 of 1999 (WHCA)	The WHCA provides for the declaration of world heritage sites, which may include wetlands. The development implication will be the restrictions on development imposed in the management plans and Regulations for each site.
National Development Plan and	Through the creation of the MTSF and associated Delivery

LEGISLATION / POLICY / STRATEGY	RELEVANCE FOR WETLAND MANAGEMENT
Medium Term Strategic Framework (MTSF)	Outcome Agreements, required outputs and targets are set.
National Biodiversity Framework	Provides biodiversity targets for South Africa, including wetland biodiversity. Municipal IDP's must be aligned with Framework.
National (and Provincial) Biodiversity Strategy and Action Plan (NBSAP & PBSAP)	The NBSAP (together with PBSAPS) is the principal instrument for implementing the CBD, to ensure that biodiversity considerations – including wetland management - are integrated into all strategies and plans, such as poverty eradication strategies and development programmes. Development and land use strategies and plans must be aligned with the Biodiversity Strategy and Action Plans (BSAPs) at national, provincial and local level. Furthermore, the BSAPs must be aligned with one another.
National Water Resource Strategy (NWRS)	One of the core objectives of the NWRS is to ensure that water is protected, used, developed, conserved, managed and controlled sustainably and equitably.

2.2. Wetland management within the municipality

Currently there is no specific designated wetland management authority or wetland management capacity within West Rand District Municipality. Instead, the management of wetlands is a collective effort between the Environmental Management, Fire and Disaster Management, Municipal Health Services, Urban Planning and Water and Sanitation Departments, each of which manage wetlands through their own key mandates and legislative requirements. The local municipalities within the West Rand District Municipality also play a role in wetland management. In 2006, the West Rand District Municipality released their first Environmental Management Framework (EMF) (Revision 1) for the district area.

3. Developing the West Rand Wetland Strategy and Action Plan

Prior to the development of a wetland Strategy and Action Plan (WSAP), it was critical to undertake an extensive and inclusive stakeholder engagement process to gather all relevant information and inputs from key stakeholders for populating the WSAP as well as ensuring critical stakeholder buy-in. To achieve this, as part of the LAB: Wetlands SA project, ICLEI-Local Governments for Sustainability and West Rand District Municipality engaged with key stakeholders (provincial, district and local municipal officials within West Rand District Municipality as well as representatives from local NGOs, private landowners and farmers) in three key ways namely, through a Wetland Awareness Raising Workshop, one on one meetings which facilitated the development of the West Rand District Municipality Wetland Report (2017) and at a WSAP Workshop to gather the required information for inclusion in the WSAP and secure stakeholder buy-in at the local level.

The Wetland Awareness Raising Workshop was undertaken in December 2015. Prior to this workshop, a desktop study was undertaken to ascertain which stakeholders within West Rand District Municipality are working in the planning and biodiversity sectors. All identified stakeholders were invited to the workshop which was then used to not only raise awareness of the value of wetlands but also to identify possible stakeholders who should also be included in the WSAP development process.

After the Wetland Awareness Raising Workshop, ICLEI-Local Governments for Sustainability and West Rand District Municipality co-developed the West Rand District Municipality: Wetland Report throughout the course of 2016. The Wetland Report was a desktop study and aimed to include all the known information on wetlands within the municipality. One on one interviews were undertaken with all stakeholders identified up until that point and resulted in critical information being gathered for the Wetland Report. These engagements also resulted in critical 'gaps' in wetland management being identified that need to be addressed. This set the scene for the final stakeholder engagement – the WSAP Workshop.

On 10th and 11th October 2016, West Rand District Municipality and ICLEI Africa co-hosted the "LAB: Wetlands SA: West Rand District Municipality Wetlands Strategy and Action Planning" Workshop at the West Rand District Municipality in Gauteng as part of WRDM's involvement in the Local Action for Biodiversity: Wetlands South Africa (LAB: Wetlands SA) project.

The workshop aimed to facilitate the development of the West Rand Wetland Strategy and Action Plan (WSAP). To this end, the workshop had two main objectives: (1) identify and prioritise actions for improving wetland management within WRDM and (2) initiate the process for the development of a holistic strategy and action plan for West Rand District Municipality to take forward and implement within the municipality.

West Rand
District Municipality

VISION STATEMENT

"To have clean, healthy, functional wetland systems that are features of significance in WRDM for the environmental, social and economic benefit for all."

VALUES

- ✓ *Alignment and Transparency*
  Alignment of WASP to existing legislation and the promotion of an enabling regulatory environment – speak in one voice under standardized regulatory legislation. Transparency with regards to all wetland management aspects. This includes the sharing of benefits and implementation processes.

- ✓ *Protection and Enforcement*
  Protection of wetlands and enforcement of strategy and action plan. Holistic approach

- ✓ *Rehabilitation, Restoration & Maintenance*
  Rehabilitation and restoration of degraded wetlands. Maintain or improve the current functionality of wetlands and enhance the interconnectivity of wetland management across basin. Maintain or improve the current functionality of wetlands and enhance the interconnectivity of wetland management across basin.

- ✓ *Collaboration*
  Fostering and establishment of strategic partnerships for improved collaboration and cooperation.

- ✓ *Sustainability*
  Sustainable utilization and management of wetland resources.

- ✓ *Education and awareness*
  Improved wetland education and awareness rising regarding wetland ecosystem services, sustainable wetland utilization and wetland identification for increased capacity.

- ✓ *Commitment*
  Political and public support to foster a sense of ownership and commitment.

4. West Rand District Municipality Wetland Strategy and Action Plan

FOCUS AREAS (3 – 6 strategic interventions / priorities):
1. *Training and Awareness Raising.*
2. *Roles and Responsibilities.*
3. *Monitoring and Research.*
4. *Policy and Commitment.*
5. *Wetland Financing.*
6. *Wetland Rehabilitation.*

(S.M.A.R.T.) GOALS FOR EACH FOCUS AREA **(Action, Detail, Measure, Unit, Deadline)*	
FOCUS AREA 1: *Training and Awareness Raising.*	**Goal 1.1** Continuous community engagement and identifying training needs.
	Goal 1.2 Training of identified leaders and continued training of the rest of the communities.
	Goal 1.3 Development of an awareness plan on how the training should be completed by December 2018.
	Goal 1.4 Development of a Road-show implementation plan/strategy by July 2018.
FOCUS AREA 2: *Roles and Responsibilities.*	**Goal 2.1** Establish a dedicated wetland unit by July 2018.
	Goal 2.2 Assign different roles and responsibilities to officials, politicians, community leaders and all other relevant stakeholders by December 2017.

	Goal 2.3 Implementation of roles assigned with continued communication between different stakeholders.
	Goal 2.4 Monitoring of responsibilities and roles which should be an ongoing process.
FOCUS AREA 3: *Monitoring and Research.*	**Goal 3.1** Gap analysis of all possible resources and identification of wetlands within West Rand District Municipality completed by December 2017.
	Goal 3.2 Mapping of wetlands with classification of functionality and type of wetland completed/initiated by December 2017.
	Goal 3.3 Establish an integrated monitoring plan for the entire wetland ecosystem in West Rand District Municipality by July 2019.
	Goal 3.4 Set up a data-base to consolidate all fragmented results from stakeholders to enable data analyzation and trend monitoring and prediction by July 2019
FOCUS AREA 4: *Policy and Commitment.*	**Goal 4.1** Desktop study of existing policies in local municipalities pertaining to wetland management system by July 2019.
	Goal 4.2 Work with existing management forums to ensure information sharing and identify relevant people to attend the forum meetings.
	Goal 4.3 Roll out biodiversity EMI's in West Rand District Municipality with enabling policy framework for local government by July 2019.
	Goal 4.4 Adopt policies and guidelines that speak to land-use management applications affected and or impacted by wetlands (SPLUMA) by December 2019.
FOCUS AREA 5: *Wetland Financing.*	**Goal 5.1** WRDM Wetland Unit to tack and identify potential internal and external sources of funding on an ongoing basis.
	Goal 5.2 Develop business plans for projects and actions aligned with this WSAP on an ongoing basis.
	Goal 5.3 Develop a guideline for environmental offsetting (social contributions) by July 2019.
FOCUS AREA 6: *Wetland Rehabilitation.*	**Goal 6.1** Categorize and prioritize wetlands in West Rand District Municipality by December 2017.
	Goal 6.2 Conduct a feasibility study for the selected 4 important wetlands in West Rand District Municipality by July 2018.
	Goal 6.3 Determine relevant human, financial and other necessary resources required for wetland rehabilitation by July 2018.
	Goal 6.4 Implementation of wetland rehabilitation and restoration in West Rand District Municipality on an ongoing basis.

HIGH LEVEL ACTION PLAN				
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME	Resources
Focus Area 1: *Training and Awareness Raising.*				
Goal 1.1: *Continuous community engagement and identifying training needs.*	• Community analysis (Tribal chiefs and HR Officers). • Training analysis and equipment needed • Assist facilitators and monitor them (Technology)	WRDM Officials Manager: Environmental Management and Green IQ WRDM Officials Manager: Environmental Management and Green IQ WRDM Officials and Ward Councillors Manager (Human settlements, GIS, Water and sanitation, Roads and storm water, disaster management/public safety)	Continuously 6 Months (basics) Continuously	
Goal 1.2: *Training of identified leaders and continued training of the rest of the communities.*	• Train leaders on how to "Lead by example" • Take cultural differences into consideration in training identified leaders • Train identified leaders on the use of technology with latest information (Social media; Facebook, Internet, Video etc.)	WRDM Officials WRDM Officials WRDM Officials	Continuous Continuous Continuous	
Goal 1.3: *Development of an awareness plan on how the training should be done.*	• Develop an awareness plan in consultation with all relevant stakeholders (NGO's, Partners, and Funders etc.) • Implementation of the awareness plan which is guided by specific targets and deadlines	WRDM Officials Manager: Environmental Management and Green IQ will be responsible for development of Awareness Plan	By 2017 (1 Year) By 2018 and Ongoing	
Goal 1.4: *Development of a Road-show implementation plan/strategy.*	• Development (planning) of a Road-Show plan through stakeholder engagement • Implementation of Road-Show (launch	WRDM Officials Manager: Environmental Management and Green IQ WRDM Officials identified in Goal 1.3 and	By 2017 (1 Year) 2018	

HIGH LEVEL ACTION PLAN				
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME	Resources
	roadshow on World Wetlands Day) involving the Mayor, Councillors, community and all relevant stakeholders	the MMC of Environment		
Focus Area 2: *Roles and Responsibilities.*				
Goal 2.1: *Establish a dedicated wetland unit.*	• Motivation Report to council for approval • Monitor functionality of the unit and adjust as needed	WRDM Council and MMC Committees WRDM Officials and appointed person/s WRDM Officials	By 2018 (1 Year)	Need source of funding for establishment, recruitment, overheads etc.
Goal 2.2: *Assign different roles and responsibilities to officials, politicians, community leaders and all other relevant stakeholders.*	• Assign Officials tasks • Assign Stakeholders tasks • Political will	Officials All Stakeholders Government	By 2017 By 2017 (1 Year) By 2017 (1 Year)	Will also need to develop Succession Plan.
Goal 2.3: *Implementation of roles assigned with continued communication between different stakeholders.*	• Code of Practice • Channel of communication • Standardisation and risk-assessment	Officials Officials Officials and Community Newly developed wetlands unit	By 2017 By 2017 (1 Year) By 2017 (1 Year)	
Goal 2.4: *Monitoring of responsibilities and roles which should be an ongoing process.*	• Set achievable targets • Targets not achieved – Reprimand and take action • Portfolio of evidence	Officials Officials and community leaders Officials Newly developed wetland unit	Quarterly (3 Monthly) By 2017 and ongoing Quarterly (3	

HIGH LEVEL ACTION PLAN				
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME	Resources
			Monthly)	
Focus Area 3: *Monitoring and Research.*				
Goal 3.1: *Gap analysis of all possible resources and identification of wetlands within West Rand District.*	• WRDM to compile a ToR and closed tender quotation in line with supply chain procedure and appointment • Focus meetings with key stakeholders (SANBI, mines, consultants, GOARi, NSS etc.)	MoU between local municipalities	3 Months 3 Months (over 2 years)	External funding for physical, delineation, classification and documentation of wetlands and wetland data annually.
Goal 3.2: *Mapping of wetlands with classification of functionality and type of wetland.*	• Service provider to start with mapping and classification of wetlands which includes their functionality and wetland type classification • Service provider to provide and conduct ground trothing and high level desktop assessment	WRDM WRDM	1 Year 1 Year (over 2 years)	GIS software update, dedicated wetland unit, a server.
Goal 3.3: *Establish an integrated monitoring plan for the entire wetland ecosystem in West Rand District.*	• Compile ToR for IWMP • Conduct focus meetings • Align monitoring with impact and climate change mitigation and adaptation • FILL	WRDM	2 Years	External funding for specialist.
Goal 3.4: *Set up a data-base to consolidate all fragmented results from stakeholders to enable data analyzation and*	• Update data base with information obtained from EIA comments and other verified information sources • Align monitoring programme to address gaps	WRDM IT Section with assistance of Manager: Environmental Management and Green IQ	By Dec 2018	Human resources, operational Budget.

HIGH LEVEL ACTION PLAN				
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME	Resources
trend monitoring and prediction.	• Present IWMP to Exco and Maycom for approval and implementation • Implementation of monitoring programme *Note: Local municipalities to implement recommendations if no resources to subcontract via MoU/SLA	WRDM and Local Municipalities if not outsourced/subcontracted		
Focus Area 4: *Policy and Commitment.*				
Goal 4.1: *Desktop study of existing policies in local municipalities pertaining to wetland management system.*	• Letter to all local municipalities and external stakeholders requesting existing policies • Update and align policies to enable consistent policy application/implementation to whole District Municipality • Develop new policies where gaps are identified (internal/outsourced) • Ensure all policies align	Manager: Environmental Management and Green IQ will request and update policies with assistance of Environmental Management Unit and inputs from Local Municipalities Environmental Management Units	2 Years	
Goal 4.2: *Work with existing management forums to ensure information sharing and identify relevant people to attend the forum meetings.*	• Municipal officials to attend and participate at district water management forums • Officials from: Town-planning, Infrastructure, Environment and Agriculture are designated to attend scheduled quarterly meetings • Provide feedback and action outcomes to sector managers through Section 80 reports.	Environmentalist of WRDM to attend water management forums	Continuous Quarterly Continuous	

HIGH LEVEL ACTION PLAN				
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME	Resources
Goal 4.3: *Roll out biodiversity EMI's in West Rand District Municipality with enabling policy framework for local government.*	• Officials to be identified and undergo training arranged by DEA • Follow approval process • MEC to designate EMI at local government level • Compliance monitoring and enforcement done by EMI's	HR of WRDM and Local Municipalities must ensure that officials within WRDM Environmental Management Unit as well as Local Municipalities Environmental Management Units are trained in terms of wetland management	2 years	
Goal 4.4: *Adopt policies and guidelines that speak to land-use management applications affected and or impacted by wetlands (SPLUMA).*	• Informed by Goal 4.1 Actions: Integrate wetland policies into land-use management e.g. SPLUMA	Section 80 Environmental Management Committee, Maycom and Council	2017/2018, In process	
Focus Area 5: *Wetland Financing.*				
Goal 5.1: *WRDM Wetland Unit to tack and identify potential internal and external sources of funding on an ongoing basis.*	• Establish strategic partnerships (MoU)	WRDM and WRDA	Ongoing	
Goal 5.2: *Develop business plans for projects and actions aligned with this WSAP on an ongoing basis.*	• Developing a business plan • Present plan to council for approval	WRDM and WRDA	2 years and ongoing	

HIGH LEVEL ACTION PLAN				
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME	Resources
Goal 5.3: *Develop a guideline for environmental offsetting (social contributions).*	• Develop a guideline for environmental offsetting in WRDM (Adopt a wetland programme and stakeholder engagement)	WRDM and WRDA	2 years and ongoing	
Focus Area 6: *Wetland Rehabilitation.*				
Goal 6.1: *Categorize and prioritize wetlands in West Rand District Municipality.*	• Conduct a selection process in terms of the internationally and nationally recognised wetland prioritization standards (SANBI, RANSAR etc.) to identify the most significant degraded wetlands in WRDM offering the most vital services to communities • Select top 4 wetlands from this prioritised list	WRDM (with the assistance/recommendations from skilled external specialists) and guidance from standardized guidelines	3-6 months following the completion of Goal 3.1 and Goal 3.2	Funding.
Goal 6.2: *Conduct a feasibility study for the selected 4 important wetlands in West Rand District Municipality.*	• Do in depth assessment of the ecological functioning and economic value of the services provided • Ascertain which 4 wetlands require urgent attention • Stakeholder engagement and bottom-up approach which includes communities and role players in and around the wetland	WRDM, wetland specialist and/or ecological consultants with experience in wetland rehabilitation	1 year following Goal 6.1	Funding.
Goal 6.3: *Determine relevant human, financial and other necessary resources required for wetland*	• Determine which skills, how much finances and which protocol would be required to rehabilitate the wetlands • Develop a wetland rehabilitation plan and proposal/business plan/financial projection report to determine the	WRDM and outsourced specialists	3 - 6 Months following Goal 6.1	Funding.

HIGH LEVEL ACTION PLAN				
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME	Resources
rehabilitation.	resources needed to rehabilitate the wetlands			
Goal 6.4: *Implementation of wetland rehabilitation and restoration in West Rand District Municipality on an ongoing basis.*	• Implement the wetland rehabilitation plan • Conduct continuous monitoring and evaluate of the implementation plan	WRDM and relevant external parties	2 Years and beyond following the successful completion of Goal 6.3	External funding.