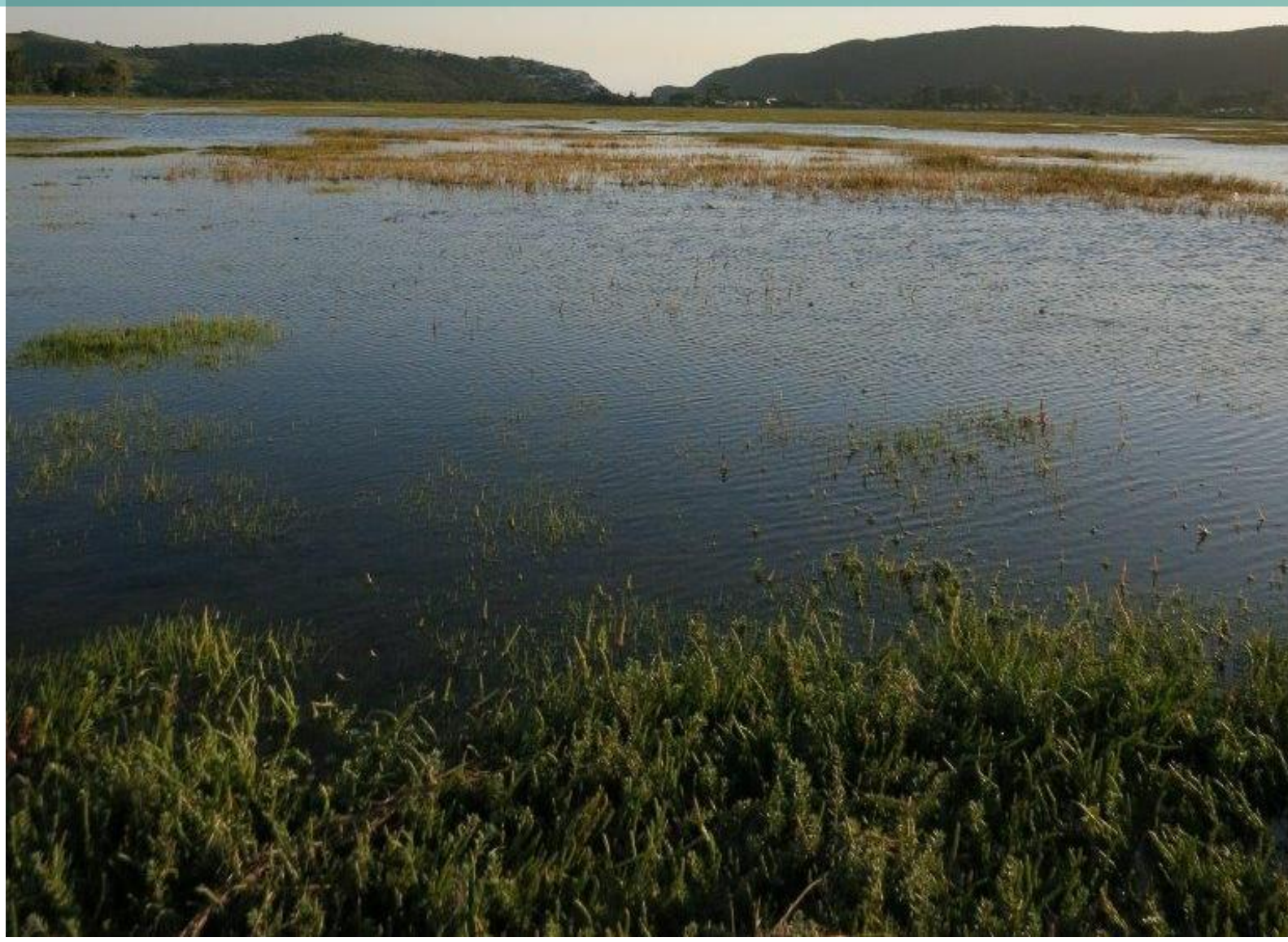
Eden District Municipality

Wetland Strategy and Action Plan

(2017- 2022)

Local Action for Biodiversity (LAB): Wetlands South Africa



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Local Governments for Sustainability

LAB
Local Action for Biodiversity
AN I·C·L·E·I – IUCN PROGRAMME

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Biodiversity for Life
South African National Biodiversity Institute

Working for Wetlands

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Wetland Strategy and Action Plan (2017- 2022)

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The compilation of the Eden District Municipality Wetland Strategy and Action Plan (WSAP) would not have been possible without the significant contribution and support from the many active stakeholders who currently work within the Eden District Municipality.

ICLEI Africa Secretariat (ICLEI AS) and Eden District Municipality would like to specifically thank the United Stated Agency for International Development (USAID), the funders of the Local Action for Biodiversity: Wetlands South Africa (LAB: Wetlands SA) project, without whom the compilation of the WSAP would not have been possible. ICLEI AS and Eden District Municipality would also like to thank the LAB: Wetlands SA Project partners, namely the Department of Environmental Affairs (DEA), South African Local Government Association (SALGA), Working for Wetlands as well as the South African National Biodiversity Institute (SANBI) for the unfailing support received to date for the development of this WSAP.

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

List of Acronyms and Abbreviations

AS	Africa Secretariat
DEA	Department of Environmental Affairs
DEA&DP	Department of Environmental Affairs and Development Planning
EDM	Eden District Municipality
IAP	Invasive Alien Plant
ICLEI	ICLEI- Local Governments for Sustainability
LAB: Wetlands SA	Local Action for Biodiversity: Wetlands South Africa
LM	Local Municipality
SA	South Africa
SALGA	South African Local Governments Association
SANBI	South African National Biodiversity Initiative
USAID	United States Agency for International Development
WFW	Working for Wetlands
WSAP	Wetland 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.

Eden District Municipality is located in the Western Cape Province of South Africa and covers an area of 23 331 km^2.The municipality falls within the Cape Floristic Region (a recognised World Heritage Site and a global biodiversity hotspot with high levels of endemism and floral and faunal diversity). A significant number of wetlands can be found throughout the municipality, including one RAMSAR site of international importance. The wetlands within Eden District Municipality are considered to be high-value 'ecological infrastructure', in that they provide vital habitat for flora and fauna, but also provide critical ecosystem services to the municipality. These include flood attenuation, water filtration, erosion control and water storage (regulatory services) as well as food provision, supply of raw materials and clean drinking water (provisioning services). The wetlands within the municipality also play a pivotal role in disaster risk management as well as reducing the impacts of climate change within the district.

Within Eden District Municipality however, a significant number of the wetlands are under threat or have already been lost. This is largely due to historical degradation, deliberate draining of wetlands to make way for development and agriculture, inappropriate development within the close proximity to the wetlands, poorly regulated agricultural practices, contamination through chemical, sewage, effluent and stormwater seeps, sedimentation, water abstraction and the spread of invasive alien plants. Degraded wetlands are unable to function to the same degree as healthy wetlands and as such ecosystem service provision from these wetlands is severely hindered or even lost altogether.

In light of this, there is an urgent need to increase awareness of wetland importance and to incorporate natural wetland resource considerations into municipal governance mechanisms and planning. Careful management as well as the investment in the maintenance of healthy wetlands and the rehabilitation and restoration of damaged or degraded wetlands is also needed. This will ensure the continued provision of these vital ecosystem services to the municipality.

Eden 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 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 (WSAP), ICLEI AS will assist Eden District Municipality in identifying the gaps in management and support with devising new and better wetlands management strategies going forward.

Supporting Documentation:
This document relies heavily on two supporting documents: The Eden 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 Eden District Municipality

"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.

1.1. What is a Wetland?

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.

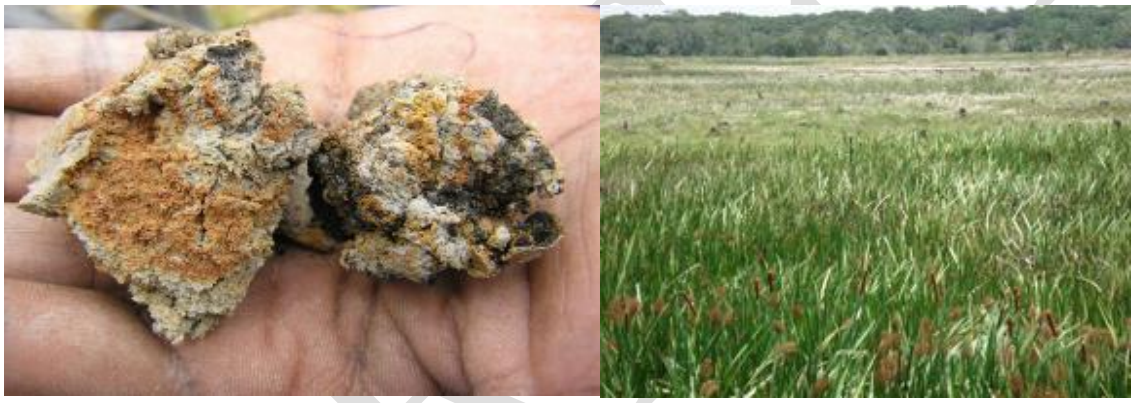

Figure 1&2: Mottled soils indicative of a wetland (left)and specially adapted wetland vegetation (right).

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

1.2 The Value of Wetlands to the Eden 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 Eden District Municipality provide.

Table 1: Ecosystem services identified in the Eden District Municipality.

Ecosystem Service Type	Ecosystem Service	Description/ Case Study
Provisioning	Food	Local communities within the district obtain plants and fish from the wetland systems within the district to support their diets.
	Medicinal plants	Many of the plants growing within and around wetlands have natural medicinal properties. Local communities harvest these plants to maintain/ improve their personal health.
	Raw materials supporting local economies and livelihoods	Local communities living within Eden District Municipality harvest reeds from the wetlands to make baskets and furniture, grasses for thatching and Arum lilies to sell on the side of the road. Fishing of local fish to sell on and bait collecting (small juvenile fish, prawns and blood worms) is also common practice to support the local informal fishing industry.
	Clean drinking water	Local communities living within Eden District Municipality, particularly those located in the more rural areas, use clean water supplied by the wetlands for drinking purposes.
Regulatory	Water storage & stream flow regulation	Wetlands store stormwater runoff and slowly release the water as the water table drops. This contributes to sustained streamflow throughout the year.
	Flood attenuation and control	Wetlands and the associated plants play a crucial role in flood attenuation and control as they have the ability to absorb flood water and reduce the velocity of flood waters moving through the system. This contributes to the protection of agricultural land as well as infrastructure downstream.
	Erosion control	Wetland plants (particularly Palmiet) strengthen the banks of wetlands and thereby contribute to sediment stabilisation and soil retention within the catchment.
	Water filtration and purification	Wetlands & wetland plants contribute substantially to improving water quality by filtering and purifying water as it moves through the system. Wetlands have the ability to modify or trap a wide range of substances commonly considered to be pollutants including suspended sediment, excess nutrients, phosphorus, nitrogen, pesticide residue, industrial effluent, pathogenic bacteria and viruses. As such, high concentrations of the above are prevented from reaching groundwater supplies or surface water downstream thus contributing to clean drinkable water.
	Climate Change Mitigation	Wetlands have been identified as significant storehouses of carbon. Peatlands are estimated to store more than 25 % of the soil carbon pool even though these areas cover only about 3 % of the world's total land area.
	Protection against the impacts of climate change	Wetlands have the ability to protect both coastal and inland areas against the effects of climatic change (e.g. from increasing frequency and intensity of storms, changing rainfall and temperature patterns as well as changes in seasonality).
Cultural	Recreation	The wetlands within Eden District Municipality are used extensively for recreation purposes. Activities undertaken within these wetlands include, amongst other things, boating and kayaking along well known birding routes and picnicking along the banks of the wetland systems. Fishing is also a popular recreational and

		cultural activity in the local wetlands.
	Tourism	Due to their natural beauty and diversity of plant and animal life, the wetlands within Eden District Municipality are also popular tourist destinations.
	Education	Wetlands provide ideal spaces for involving the general public and schoolchildren in hands-on learning experiences and to raise awareness of environmental issues in a recreational atmosphere.
Supporting	Nutrient recycling	Wetlands naturally slow down the flow of water, thereby promoting the deposition and retention of nutrients. These are then utilised by the microbial species living in the wetland habitat which are in turn eaten by larger species such as prawns and blood worms.
	Supporting habitat	A large variety of bird, fish & invertebrate species are dependent on the wetlands within Eden District Municipality for at least part of their lifecycle. Wetlands provide vital breeding and nursery ground for a variety of fish species as well as breeding, courtship and foraging ground for a variety of bird 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 Eden District Municipality

Despite the substantial 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.

Following verbal communications with active stakeholders working in the Eden District Municipality, it became clear that wetlands face a significant number of threats all of which have the ability to either destroy the wetland entirely or severely compromise function and provision of ecosystem services. The key threats identified are summarised in **Table 2**below:

Table 2: Threats to wetlands within Eden District Municipality:

Threat	Description
Historical Degradation	Historically, there has been little understanding of the value of wetlands and as such wetlands within with district have been poorly managed. Early European farmers used wetlands for intensive livestock farming and as access routes for ox wagons and carts. In more recent years, wetlands had also been deliberately filled in so as to 'reclaim the land' for urbanisation and agriculture.
Urban Development & Expansion	Wetlands within Eden District Municipality are at risk from both formal and informal urban development and expansion. Due to population expansion within the district, there is a need for more housing. As such, development

	is being taken right up to, and sometimes beyond, the urban edge threatening wetlands near the vicinity of the urban edge. Due to limited knowledge of where wetlands are on the ground, the development process often entails the accidental draining or infilling of wetlands to make room for these developments. Additionally, due to limited capacity of municipalities to enforce legislated setback lines, wetlands are also negatively impacted from deliberate development within these systems.
Converting & using land for agricultural purposes	Since the 1970s, due to lack of knowledge of the value of wetlands and the importance of the ecosystem services they provide, farmers have been deliberately and actively draining and converting wetland land for agricultural purposes because of the relatively fertile alluvial soils, close proximity to water and level land. The result is that with each flood event, a significant amount of sediment is washed downstream putting downstream infrastructure and livelihoods at risk. In addition, the planting of crops, fruit trees and nut trees as well as converting the land for large scale forestry results in the continuous abstraction of significantly more water than the original indigenous vegetation would have done. Subsequently, this means that there is significant stream-flow reduction as these man-made plantations and forests hold water that would otherwise have been available for downstream users.
Pollution & Effluent Seepage	Dairy farming, particularly in the coastal catchment area, poses a significant threat to wetlands. Irrigation of pastures means that excess pesticides and nitrogen seep into the wetland system whilst cleaning of the dairy farms results in the seepage of effluent directly into wetland areas. This results in eutrophication as well as pollution of the wetlands. This not only poses a risk to the local flora and fauna in terms of habitat contamination, but also poses a health risk to humans in terms of altered water quality. As such, water coming from the wetlands located in close proximity to dairy farms, requires significant treatment before it is safe for human consumption. As a result of expanding urbanization in close vicinity to wetland areas, ageing and failing waste water treatment infrastructure and poor stormwater runoff monitoring and management, the wetlands within Eden District Municipality are also at risk from polluted stormwater runoff as well as from sewerage seeping into wetland areas. The effect of this includes increased nutrient loads as well as E.coli levels within in the wetland and estuarine systems which negatively affects the delicate biodiversity depending on these systems for survival.
Water Abstraction	Eden District Municipality falls within the Breede-Gouritz Catchment Management Area. In the northern inland part of the district, evaporation exceeds rainfall meaning that these are water stressed areas. In contrast, rainfall largely matches evaporation in the southern part of the district meaning that these are generally moister environments. More than half of the water currently used in the drier inland areas of the district is abstracted from groundwater and wetlands in order to meet water needs of the local population, including for agricultural purposes. In light of this, the inland wetlands are under severe pressure. Pressure on all wetlands within the municipality however is only likely to increase. Between 1996 and 2001 the population of the municipality increased by 19.4% and by 2020 it is anticipated to increase by 35%. As such, water provision services across the municipality will have to expand to service this population growth, placing more pressure on the local water resources. In addition, a variety of human settlement projects and

	programmes as implemented by the Department of Human Settlements; together with the National Water and Sanitation Programme; have contributed to additional water demand.
Encroachment of Invasive Alien Plants (IAPs)	Invasive plant and animal species, introduced by human actions either accidentally or intentionally, are proving a major threat to the quality and quantity wetlands, as well as to the biodiversity within Eden District Municipality. IAPs have the ability to alter local water quality, displace indigenous plants (and subsequently the fauna that depends on that vegetation for survival) and ultimately alter the habitat and change ecosystem functioning to suit themselves. IAPs are also 'thirsty' as they draw a far greater amount of water than the local indigenous vegetation resulting in a reduced amount of water moving through the system to downstream users.

2. Governance & Management

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

2.1 Policy framework

Table 3provides a comprehensive summary of all South African legislation, policies and strategies pertinent for the management of wetlands. 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 3: Legislation governing wetland management in the Eden District Municipality

LEGISLATION/ POLICY/ STRATEGY	HOW IT RELATES TO WETLANDS
Legislation	
South African Constitution	Overarching principles of care for the environment.
Environmental Conservation Act and associated By-Laws	Controls access to and activities within coastal and wetland areas.
National Water Act	Water use control, including extraction and construction within the vicinity of a watercourse or wetland.
National Environmental Management Act	Environmental impact assessments (EIAs) for the development of a new or disturbed site within the vicinity of a watercourse or wetland.
National Environmental Management: Biodiversity Act	Protection of biodiversity and the formulation of a number of tools (e.g. bioregional plans and threatened ecosystem lists) that feed into land use planning and EIA procedures.
National Environmental Management:	All matters related to invasive species management (both

LEGISLATION/ POLICY/ STRATEGY	HOW IT RELATES TO WETLANDS
Biodiversity Act - Alien and Invasive Species Regulations	fauna and flora).
National Environmental Management: Integrated Coastal Management Act	Protection of coastal landscapes and sensitive areas, which often include wetlands.
National Environmental Management: Protected Areas Act	Protection of national parks, protected areas and conservation sites. This includes the protection of wetland site.
National Environmental Management: Waste Act	Regulation of illegal dumping
Conservation of Agricultural Resources Act	Protect the utilization of the natural agricultural resources to promote the conservation of the soil, the water sources and the vegetation and the combating of weeds and invasive plants.
Western Cape Land Use Planning Act (LUPA), 2014 (Act 3 of 2014)	To consolidate, regulate, support and monitor the municipal planning and regulation of development within public places and municipal roads.
Municipal Systems Act	Role of local governments and the requirements for IDPs, SDFs and Disaster Management Plans
Municipal Structures Act	Promotion of regional planning and spatial planning categories.
Municipal Health Act	Monitoring of WWTW discharge
Policies	
National Development Plan, and associated Medium Term Strategic Framework.	Sets out measures to protect natural resources in South Africa. Through the creation of the MTSF and associated 'Delivery Agreements', required outputs and targets are set.
Municipal Planning	
Integrated Development Plan (IDP)	Overall strategy document for the municipality.
Provincial Strategic Development Framework (SDF)	Overarching spatial planning guidelines for the province.
District SDF	Broad spatial planning guidelines for the district (including a map of land use within the district)
Local Municipal SDFs	Strategic plans to manage municipal land at the local level.
Open Space Framework	Demarcation of Open Space Areas.
Environmental Management Framework	Map and land use guidelines for areas of environmental importance.
Sector Plans	This includes the Disaster Management Plan
By-Laws	Boating By-Law which regulates recreational activities on the Keurbooms River.
Strategies	
The National Biodiversity Framework	Provides biodiversity targets for South Africa.
National Water Resource Strategy	Speaks to protection and rehabilitation of wetlands.
Other	
Bioregional plans (draft or gazetted)	Maps Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs).
Spatial Planning and Land Use Management Act	Provides a framework for spatial planning and land use management in South Africa. It also stipulates that municipal planning is primarily the executive function of the local sphere of government and requires that biodiversity is adequately considered in spatial planning.
Disaster Management Amendment Bill	Outlines how ecosystems should be considered in the updated Disaster Management Act.

2.2 Wetland management within the municipality

Currently there is no specific designated wetland management authority within Eden District Municipality. Instead, the management of wetlands is a collective effort between the various departments of Eden District Municipality, the six local municipalities with Eden District Municipality, parastatals such as CapeNature and SANParks and private stakeholders, each of which manage wetlands through their own key mandates and legislative requirements and capacity.

The local municipalities have different capacity levels for effective environmental management. Within Bitou and George Local Municipalities for example, there are currently no dedicated environmental officers and as such there is no capacity for any environmental management within these municipalities. Knysna Local Municipality is highly active in terms of their environmental management, however at this stage there is no capacity for enforcement, which limits their effectiveness on the ground.

Parastatals such as SANParks and CapeNature are highly effective in terms of the land that they manage however these entities only cover certain sections of land within the municipality. SANParks exclusively manages the national parks areas whilst CapeNature manages land where Working for Wetlands is working on wetland rehabilitation projects. Private land, which is interspersed between state and municipal owned land located in between, is managed as is seen fit by the separate municipalities and individual landowners. As such, there is no holistic management of wetlands and due to differences in agendas of each entity, there is little to no cooperative action between parties which puts wetlands at risk from mismanagement.

Various forums also inform wetland management and include the Southern Cape Wetlands Forum (SCWF), which is required to provide input towards prioritising wetlands for funding and rehabilitation, as well as the Plett Environmental Forum, the SANParks Forum, the Fynbos Forum, the Knysna Catchment Management Forum and the Wilderness Lakes Catchment Management Forum.

2.3 Local and regional partnerships and programmes managing wetlands within Eden District Municipality

In addition to the collective municipal work that is being undertaken at both the district and local level to monitor and manage wetlands within Eden District Municipality, there are numerous projects and activities currently being implemented within and around wetlands by both the public and private sector as well as several NGOs. The projects currently underway within Eden District Municipality are summarised in the Eden District Municipality: Wetland Report (pg. 41- 42). The report can be downloaded at: **http://cbc.iclei.org/project/lab-wetlands-sa/**

3. Developing the Eden 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 Eden District Municipality engaged with key stakeholders (provincial, district and local municipal

officials within Eden 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 Eden 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 George in November 2015. Prior to this workshop, a desktop study was undertaken to ascertain which stakeholders within Eden 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 Eden District Municipality co-developed the Eden 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.

The Eden WSAP Workshop was held in George in August 2016. All stakeholders identified during previous engagements were invited to attend. During the workshop feedback on the findings of the Eden District Municipality: Wetland Report were presented to the stakeholders, namely the critical ecosystem services the wetlands within Eden provide, the threats to these wetlands and the gaps in wetland management. This set the scene for the development of the WSAP.

The WSAP is outlined below and includes all identified issues as well as proposed solutions as developed by all stakeholders present at the WSAP workshop as well as those that contributed to the Eden District Municipality Wetland Report. The WSAP was developed with close reference to the ICLEI – Local Governments for Sustainability Wetland Strategy and Action Guidelines which are freely available for download: **http://cbc.iclei.org/project/lab-wetlands-sa/**

4. Eden District Municipality Wetland Strategy and Action Plan (2017- 2022)

VISION STATEMENT
"Eden District Municipality has ecologically healthy wetland systems that are valued for the diversity of life they support and the benefits they provide to their communities" .

VALUES

- ✓ *Information:*

  To provide credible information that is accessible to all and that is used to inform wetland management.

- ✓ *Partnerships and Collaboration:*

  To create partnerships that will assist in effective wetland management and to share information and ideas.

- ✓ *Open Communications:*

  To facilitate community feedback mechanisms and build knowledge, awareness and appreciation of wetlands within the community as a whole.

- ✓ *Ecological Integrity:*

  To promote wetland conservation and restoration so that ecosystem services are maintained in the long- term.

- ✓ *Sustainable Livelihoods:*
  To recognise the inter-dependence between communities and wetland resources in all the work undertaken by Eden District Municipality.

FOCUS AREAS (3 – 6 strategic interventions / priorities):
1. *Conservation and protection of wetlands*
2. *Research and mapping of wetlands throughout Eden District Municipality*
3. *Awareness raising and education*
4. *Coordination of wetland management between multiple stakeholders*
5. *Mainstreaming wetland conservation into land use planning*
6. *Sustainable use of wetland ecosystem services within EDM.*

(S.M.A.R.T.)*GOALS FOR EACH FOCUS AREA *(Action, Detail, Measure, Unit, Deadline)	
FOCUS AREA 1:	*Goal 1.1* Compile guiding principles and objectives for wetland systems management within EDM – for best practice.

Conservation and protection of wetlands	*Goal 1.2* Identify and prioritise pilot projects for inclusion in the IDP.
	Goal 1.3 Include objectives for wetland management in the IDP.
FOCUS AREA 2: *Research and mapping of wetlands throughout Eden District Municipality*	*Goal 2.1* Obtain information from Working for Wetlands, Department of Agriculture and local municipalities regarding wetlands in need to rehabilitation.
	Goal 2.2 Compile the best available spatial information into a map for inclusion in the SDF as well as to facilitate a clearer understanding of current status quo of wetlands within EDM.
FOCUS AREA 3: *Awareness raising and education*	*Goal 3.1* Develop/ package material for municipal departments to raise awareness (and subsequently build buy-in).
	Goal 3.2 Sourcing of funding and potential funding opportunities
FOCUS AREA 4: *Coordination of wetland management between multiple stakeholders*	Goal 4.1 Contact the coordinator of the EDM SDF development unit to gain a clear understanding of timelines for including information into the SDF.
	Goal 4.2 Ensure wetlands are addressed / represented on existing coordination platforms.
	Goal 4.3 Ensure Sector Plans take wetlands into consideration.
FOCUS AREA 5: *Mainstreaming wetland conservation into land use planning*	Goal 5.1 Compile the best available spatial information into a map for inclusion in the SDF as well as to facilitate a clearer understanding of current status quo of wetlands within EDM.
	Goal 5.2 Include wetland management in the IDP.
	Goal 5.3 Identify and prioritise pilot projects for inclusion in the SDF.
	Goal 5.4 Review the legal home/ rational for the Wetland Management Plan to give it weight.
FOCUS AREA 6: *Sustainable use of wetland ecosystem services within EDM*	Goal 6.1 Identify and prioritise pilot projects for inclusion in the SDF.

HIGH LEVEL ACTION PLAN			
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME
Focus Area 1: *Conservation and protection of wetlands*			

Goal 1.1: Compile guiding principles and objectives for wetland systems management within EDM – for best practice.	• (Review and consult on below draft objectives and management principles)
	• Objective 1 – Ensuring wetland protection
	• Objective 2 - Ensuring long-term sustainable wetland use
	• Objective 3 - Research and monitoring
	• Objective 4 - Climate change mitigation and adaptation
	• Objective 5 - Ensuring up to date spatial information and mapping
	  • Management Principle 1 – Maintenance of connectivity
	  • Management Principle 2 – Maintenance of landscape heterogeneity
	  • Management Principle 3 – Maintenance of biodiversity & complexity
	  • Management Principle 4 – Maintenance of intact aquatic ecosystems
	  • Management Principle 5 – Disturbance identification to guide management
	  • Management Principle 6 – Maintenance of important
		District municipality, local municipalities and key stakeholders/organisations	2017 - 2020

HIGH LEVEL ACTION PLAN			
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME
	wetland functioning		
Goal 1.2: Identify and prioritise pilot projects for inclusion in the IDP.	• Identify priority pilot projects and technical, human and financial resource requirements: o Alien invasive species management & control o Fire management o Water and solid waste pollution identification o Identification of remedial action o Retention, stabilisation and rehabilitation structures o Water quality monitoring o Clean-ups o Identification of upstream/catchment disturbance/activities	District municipality, local municipalities and key stakeholders/organisations	2017 - 2020
Goal 1.3 Include objectives for wetland management in the IDP.	• Stakeholder consultation and IDP inclusion	District municipality and local municipalities (IDP developers, coordinators and managers)	2017 (Eden DM IDP) Next IDP' s reviewing period (local municipalities)
Focus Area 2: *Research and mapping of wetlands throughout Eden District Municipality*			

HIGH LEVEL ACTION PLAN			
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME
Goal 2.1 Obtain information from Working for Wetlands, Department of Agriculture and local municipalities regarding wetlands in need to rehabilitation.	• Maintain regular stakeholder participation • Identify priority wetlands in need of rehabilitation within the Eden District • Identify degree of rehabilitation/techniques and action needed. • Identify available funding and funding opportunities	District municipality, local municipalities and key stakeholders/organisations	2017 - 2019
Goal 2.2 Compile the best available spatial information into a map for inclusion in the SDF as well as to facilitate a clearer understanding of current status quo of wetlands within EDM.	• Collaborate with stakeholders and similar key projects to gather the most up-to-date spatial information on wetland location & wetland boundaries • Obtain historical spatial information to identify: o Wetland disappearance; o Decreasing wetland/boundary size; o Changing structures/profiles: o Stakeholder engagement and inclusion in SDF.	District municipality and local municipalities (SDF developers, coordinators and managers)	2017 (Eden DM SDF) Next SDF' s reviewing period (local municipalities)
Focus Area 3: *Awareness raising and education*			
Goal 3.1 Develop/ package material for municipal departments to raise awareness (and subsequently build buy-in).	• Identify and prioritise information gaps and needs; • Conduct knowledge and perspectives survey to facilitate above; • Identify priority threatened wetlands and conduct/coordinate	District municipality, local municipalities and key stakeholders/organisations	2017 -2022 (ongoing)

HIGH LEVEL ACTION PLAN			
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME
	campaigns; • Educating the local communities regarding the important role that wetland systems plays within the environment; • Identify and establish "Select and Protect" programmes to be implemented within the communities that have wetland systems in their surrounding environment; • Highlighting the role and responsibility of every local Municipality in safeguarding these systems and ensuring pollution free run-off into river systems and other important water courses.		
Goal 3.2 Sourcing of funding and potential funding opportunities	• Stakeholder collaboration and sourcing of funding/funding opportunities	District municipality and local municipalities (IDP developers, coordinators and managers)	2017 – 2022 (ongoing)
Focus Area 4: *Coordination of wetland management between multiple stakeholders*			
Goal 4.1 Contact the coordinator of the EDM SDF development unit to gain a clear understanding of timelines for including information	• Stakeholder consultation and rehabilitation; • Conduct and coordinate and roadshows in collaboration with local municipalities; • Media messages and notices.	District municipality and local municipalities (SDF developers, coordinators and managers)	2017 (Eden DM SDF) Next SDF' s reviewing

HIGH LEVEL ACTION PLAN			
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME
into the SDF.			period (local municipalities)
Goal 4.2 Ensure wetlands are addressed / represented on existing coordination platforms.	• Stakeholder collaboration and consultation; • Identification of wetland management champions within the Eden District.	District municipality, local municipalities and key stakeholders/organisations	2017 – 2022 (ongoing)
Goal 4.3 Ensure Sector Plans take wetlands into consideration.	• Consultation and collaboration with sector plan managers, developers and coordinators; • Awareness and educational workshops to sensitize and inform Sectoral Plan managers, developers and coordinators.	District municipality, local municipalities and key stakeholders/organisations	2017 – 2022 (ongoing)
Focus Area 5: *Mainstreaming wetland conservation into land use planning*			
Goal 5.1 Compile the best available spatial information into a map for inclusion in the SDF as well as to facilitate a clearer understanding of current status quo of wetlands within the Eden District.	• Identify what spatial information is available currently; • Identify who is currently undertaking mapping, the process undertaken to do this and to what extent they are mapping etc. (key people who do the on the ground main streaming); • Identify the gaps in mapping and spatial data as well as status of wetlands (based on above points); • Identify best available method (based on municipality) to develop required spatial data and best method for	District municipality and local municipalities (SDF developers, coordinators and managers)	2017 (Eden DM SDF) Next SDF' s reviewing period (local municipalities)

HIGH LEVEL ACTION PLAN			
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME
	mainstreaming; • Develop spatial information map (and/or associated tools informed by above points); • Contact the coordinator of the EDM SDF development unit to gain a clear understanding of timelines for including information into the SDF; • Attend SDF planning meeting and present argument for inclusion of wetland map/spatial layer in SDF; • When SDF goes out for public participation, encourage DM and LMs as well as local communities to comment in favour of wetland inclusion in SDF; • Once map is included in SDF, in order to mainstream, capacity building and training with key decision makers and land use planners on spatial data and maps.		
Goal 5.2 Include wetland management in the IDP.	• Establish to what degree wetlands are addressed in the current IDP; • Identify where wetlands can be inserted into the IDP; • Develop sentence/ clause for inclusion of IDP based on IDP guiding methodology;	District municipality and local municipalities (IDP developers, coordinators and managers)	2017 (Eden DM IDP) Next IDP' s reviewing period (local

HIGH LEVEL ACTION PLAN			
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME
	• Contact the coordinator of the EDM IDP development unit to gain a clear understanding of timelines for including information into the IDP; • Attend IDP planning meeting and present argument for inclusion of wetlands in IDP –focus on how wetlands can assist municipality to save money through utilising "ecological infrastructure" ; When IDP goes out for public participation, encourage DM and LMs as well as local communities to comment in favour of wetland inclusion in IDP.		municipalities)
Goal 5.3 Identify and prioritise pilot projects for inclusion in the SDF/IDP.	• In addition to above mapping, to inform the development of projects, map ; 1) Status of wetlands (e.g. degraded, pristine etc.); 2) Wetlands which are threatened by climate change and anthropogenic impacts which are subsequently at risk from losing their ecosystem service delivery to municipalities (flood attenuation, water filtration etc.); • Workshop the map(s) with key stakeholders in order to prioritise work that needs to be done; identify focus area within	District municipality and local municipalities (SDF/IDP developers, coordinators and managers)	2017 (Eden DM SDF/IDP) Next SDF/IDP' s reviewing period (local municipalities)

HIGH LEVEL ACTION PLAN			
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME
	the municipality and develop projects; establish roles and responsibilities for project implementation as well departmental focus area and capacity; • Contact the coordinator of the EDM SDF development unit to gain a clear understanding of timelines for including information into the SDF; • Attend SDF planning meeting and present argument for inclusion of pilot project into SDF; When SDF goes out for public participation, encourage DM and LMs who will be implementing pilot projects to comment in favour of inclusion of pilot projects in SDF.		
Goal 5.4 Review the legal home/ rational for the Wetland Management Plan to give it weight.	• Eden District Municipality • Establish Eden Wetland Management Authority	Define the mandates, roles, responsibilities and expected inputs of Eden DM, DEA&DP, Local Municipalities, SANParks, Cape Nature, SCWF, and other relevant stakeholders to ensure holistic management of wetlands	

HIGH LEVEL ACTION PLAN			
FOCUS AREA & GOALS	KEY ACTIONS	RESPONSIBILITY	TIME FRAME
		within the District.	
Focus Area 6: *Sustainable use of wetland ecosystem services within EDM.*			
Goal 6.1 Identify and prioritise pilot projects for inclusion in the IDP.	• Monitor and regulate new environmental authorization applications that will affect wetlands; • Identify sustainability projects that will benefit the neighbouring communities; • Identify community upliftment opportunities and products/services for sustainable wetland use; • Prioritise wetlands of tourism and conservation value.	District municipality and local municipalities (IDP developers, coordinators and managers)	2017 (Eden DM IDP) Next IDP' s reviewing period (local municipalities)