

Local Action for Biodiversity (LAB): Wetlands SA Eden District Municipality Workshop

Date: 12th November 2015

Time: 10.00 – 15.00

Venue: Eden District Municipality Roads Conference Centre, Mission Road, George



Workshop Report

SUMMARY:

On 12th November 2015, Eden District Municipality (EDM) and ICLEI – Local Governments for Sustainability (ICLEI Africa) co-hosted the “Wetlands Awareness Raising and Land Use Planning” workshop in George as part of EDM’s involvement in the Local Action for Biodiversity: Wetlands South Africa (LAB: Wetlands SA) project. The workshop aimed to raise awareness about the value of wetlands and highlight the links between land use planning and the management and conservation of wetlands. The workshop was structured and conducted by means of presentations and verbal interactions through informal discussion between speakers and participants.

The workshop was well attended, with approximately 25 participants ranging from environmental officers and town planners through to environmental management and parks management. Presentations emphasised the importance of wetlands; the impacts of climate change in EDM and the role of wetlands in adaptation planning; the role of SPLUMA and LUPA in land-use planning; and wetland management and the role of Working for Wetlands (WfW) in mapping wetlands in the landscape.

From discussion sessions, it was clear that the value of wetlands as ecological infrastructure is broadly understood in EDM, however at present, wetlands are not sufficiently considered in land-use planning. There is a need for an integrated approach and better information to ensure that this occurs moving forward. The workshop highlighted the need for enhanced cooperation and partnerships in supporting biodiversity and wetland conservation in a land use management context.

PARTICIPANTS:

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WORKSHOP OBJECTIVES:

The workshop forms part of the LAB: Wetlands SA project (for background, see *Annex 1*) which aims to improve awareness and management of wetlands at the local level. Based on previous discussions with EDM, the workshop was aimed at raising awareness across spatial and land-use planning departments, both at the district and local municipality level.

The key aims of the workshop were to:

1. Bring together wetland management and land-use planning stakeholders in EDM.
2. Increase knowledge and understanding of the value and importance of wetlands and ecosystems services.
3. Increase knowledge and understanding of climate change and of potential climate change impacts in the EDM as well as highlight how wetlands can play a role in climate change impact adaptation.
4. Increase knowledge and understanding on how to integrate biodiversity and wetlands management with land use planning objectives in the future.
5. Facilitate initial discussions with the stakeholders regarding the information needs and requirements in EDM for mainstreaming biodiversity and wetlands into land use planning and disaster risk management.

The workshop was an open forum for the stakeholders to learn about wetlands as ecological infrastructure and how biodiversity and wetlands management fit in with the current planning legislation as well as the new planning laws, namely, Spatial Planning Land Use Management Act (SPLUMA) and the Land Use Planning Act (LUPA). The workshop also provided a platform for stakeholders to share their areas of expertise as well as discuss the opportunities and constraints relating to the incorporation of wetlands and wetlands management into local land use planning within the EDM.

A copy of the workshop agenda is attached as *Annex 2* of this report.

WELCOME AND INTRODUCTORY SESSION

1. Welcome by the Hosts

Vernon Gibbs-Hall, the Environmental Manager of EDM, opened the workshop with a short speech to welcome the workshop participants. The speech highlighted the current environmental work currently being undertaken in EDM, particularly that relating to biodiversity planning, wetlands management and implementation of climate change adaptation measures. Following this introduction, Liz Metcalfe, Project Manager of LAB: Wetlands SA, gave a brief overview of the aims and objectives of the workshop and outlined that day's proceedings.

2. Introduction to ICLEI and the LAB: Wetlands SA Programme

Liz Metcalfe gave a short presentation which outlined the role of ICLEI and introduced the LAB: Wetlands SA project, and how LAB: Wetlands SA will be implemented in EDM.

Speaking on why wetlands are important at the local government level, Liz emphasised how wetlands are important for local economic development (i.e. improving service delivery and proactive disaster management) and that considering wetlands in spatial planning was a cost effective method that also

furthered biodiversity conservation). Emphasis was placed on the importance of working together across departments, as well as with different organisations and NGOs within EDM.

3. Defining wetlands and the role of ecosystem services

Heidi Nieuwoudt, Western Cape Provincial Coordinator for Working for Wetlands (WfW), provided a thorough introduction to wetlands. Through the use of pictures, the presentation outlined what a wetland is and illustrated the many different types of wetlands which are landscape and topographically specific. Wetland indicators such as soil and distinctive vegetation types were also highlighted to assist with wetland identification. It was noted that South African wetlands are unique due to the underlying geology in the country.

The presentation emphasised how wetlands are high-value ecological infrastructure due to the diverse amount of regulatory, provisionary and cultural ecosystem services they provide (including flood attenuation, water filtration, a food source, medicine, recreation and animal habitat). In terms of climate change impacts, emphasis was placed on the fact that wetlands can secure and hold a large amount of water at a surface level for a long period of time (and therefore can assist with drought alleviation) and can assist with flood attenuation by reducing the peaks and drops relating to extreme rainfall events (therefore assisting in minimising flood related damage).

Finally it was highlighted that wetlands are under huge threat due to land use change, with an estimated 48% of South Africa's wetlands being lost already. Damage or loss of wetlands respectively limit and remove the wetlands ability to effectively provide ecosystem services. Emphasis was therefore placed on the essential need for better planning to protect wetlands.

WETLANDS AND THE IMPORTANCE OF LAND USE PLANNING

1. Wetlands management at the local level and the role of SPLUMA and LUPA in land use planning.

Following the tea break, Gavin Benjamin, Director of the George Branch of the Department of Environmental Affairs and Development Planning (DEA&DP) gave a presentation which aimed to highlight the role of the new Spatial Planning Land Use Management Act (SPLUMA), the Land Use Planning Act (LUPA) and the Municipal Planning By-Laws (MPBs) in a land use planning and wetlands context.

The presentation highlighted how wetlands are currently managed through the National Environmental Management Act (NEMA) and the National Water Act (NWA) as well as the corresponding subordinate legislation and regulations (e.g. the 2014 Environmental Impact Assessment (EIA) Regulations and local municipal by-laws). With the existing legislation however, natural resources are being mismanaged, degraded and even lost and thus new and better legislation is required.

Gavin advised that SPLUMA, LUPA and the Municipal Planning By-Law (non-compulsory) are the three new pieces of legislation that will be governing natural resource management (including wetlands). Both SPLUMA and LUPA were implemented in July 2015 and are intended to be a framework for national, provincial and municipal planning. Previous legislation (e.g. NEMA and NWA) will remain in place, however if provisions within the previous legislation are not consistent with the new legislation they will fall away.

Gavin highlighted how with the implementation of the new legislature, national and province level government have a duty to support district and local governments to greater degree. The new legislation also supports and facilitates integrated procedures and decisions consistent with national and provincial legislation. At a municipal level, municipalities are now required to plan for their entire area of jurisdiction and the IDPs and SDPs must be consistent throughout the municipality. In addition, a land use zoning scheme must be implemented for the entire area and land use regulations are required to be implemented where they do not already exist.

Gavin also emphasised that the new legislative framework ensures that local municipalities are placed at the centre of spatial planning and land use management and decision making. The legislation allows for flexible approach whereby municipalities can build on what is already known and incrementally respond to new changes.

Finally Gavin concluded his presentation by highlighting that despite the introduction of SPLUMA and LUPA, the legislation system governing land use planning and management is still very complex and fragmented. SPLUMA and LUPA however aim to provide innovative tools to better manage our natural resources and allow for municipalities to “Think Global – Act Local”.

Q&A Session:

The workshop was designed to be an interactive forum. As such, the attending stakeholders were encouraged to ask questions relating to the presentations and also to provide feedback where relevant. As such, at the end of the morning sessions, a Q&A session was held to respond to any queries relating to the presentations. A summary of outcomes of the Q&A session is given in Table 1 below:

Table 1: Summary of the outcomes of the question and answer session following the morning session of the LAB: Wetlands SA Workshop.

Summary of Comments and Feedback
<p>Clarification was requested regarding whether there are any land uses / activities which could be undertaken within wetlands or wetland areas, or whether all activity should be completely avoided in wetland areas. In response it was noted that the functionality of the wetland influences what can be done (i.e. fishing, bird watching or development right up to the fringes of the wetland). It was noted that ‘No Go’ Areas surrounding wetlands within an urban area are not always considered practical so it is best to work with wetlands and acknowledge and plan for its needs as well as what the development requires on a case by case basis. It was confirmed that the existing legislation does not say that activities within wetlands are not allowed but rather that development activities within wetlands should not negatively impacts wetlands. To this effect, housing developments can be developed on the periphery of the wetlands and be marketed as a wetlands estate. This would ensure that wetlands are preserved but development can still go ahead. It was also noted that managing these ecosystems does incur costs and it can be beneficial to incorporate wetlands into new developments. Emphasis was placed on that fact that development around wetlands should be carefully managed and undertaken in a context to context basis.</p>
<p>The discussion then moved on to gain insight regarding options for recreating/ rehabilitating wetlands that have been lost/ severely degraded. In response, it was noted that it is possible to rehabilitate wetlands though usually not to their previous functionality and funding is normally required. In addition, this should be done with municipal support and ideally done at a municipal scale. The appropriate environmental authorisations should be obtained prior to any work being undertaken.</p>

Finally, the idea of creating artificial wetlands and the options of creating them was raised in order to increase ecosystem services in EDM. In response, it was emphasised that artificial wetlands can never match the high level of ecosystem services that natural wetlands provide and should not replace existing natural systems. However, artificial wetlands can be created to form similar functions and thus supplement existing natural resources. There are already a significant number of natural wetlands already existing within EDM. As such, the aim should be to conserve existing wetlands and restore degraded wetlands and maintain existing functioning wetlands in order to improve functionality.

IMPORTANCE OF WETLANDS & BIODIVERSITY IN A CLIMATE CHANGE CONTEXT

1. Defining climate change and providing an overview of climate change in Eden District Municipality

Kirsty Robinson, Professional Officer from ICLEI – Local Governments for Sustainability, gave a brief presentation on climate change in EDM. The presentation aimed to provide an overview of historical climate patterns and associated impacts compared with projected climate change and anticipated effects in EDM. The presentation was not intended to provide detailed downscaled information but rather to provide an overview of climate impacts in the region in order to better inform land-use planning.

The presentation highlighted that EDM is a climatically sensitive region strongly influenced by the topography of the area. The climate at the coast is moderate and cool whilst the inland climate is overall much warmer and has a greater temperature variation. It was noted that rainfall currently occurs throughout the year throughout the district, although the strongest rainfall events occur in the winter months. The intensity and quantity of rainfall varies from year to year and thus the region is subject to both heavy rainfall as well as very low rainfall events. As a result of the current climate patterns, EDM has historically been hit almost annually with severe climate related disasters resulting in strong floods and drought which have had significant financial related impacts.

In terms of projected changes for EDM, the presentation highlighted that general warming will undoubtedly occur and there will be a definite increase in average monthly temperatures throughout the year. Changes in the current rainfall patterns will also occur however there is no consistent indication in the direction of change. The presentation highlighted that as a result of the increased temperatures and changes in rainfall patterns, there would be an increased likelihood of hot spells and heat waves and changes in rainfall patterns could either mean an increase in the magnitude and frequency of storm events (i.e. more severe storms happening more often) with an associated increased risk of more severe flooding incidents or a decrease in rainfall resulting in an increased number of dry days and an associated increased risk of more intense fire and drought incidences.

Emphasis was placed on the fact that the existing climate related impacts historically occurring in Eden will be exacerbated and that climate adaptation planning should continue to take into account historical climate related impacts as well as for future projected changes (i.e. plan for both an increase in rainfall (and associated flooding) as well as a decrease in rainfall and general drying (and associated increases in droughts)).

Finally, to link the presentation back to Heidi’s presentation earlier in the day, it was highlighted in the closing statements that investment in ecological infrastructure such as wetlands allows for planning for both scenarios due to flood attenuation as well as slow water release capabilities.

2. The prioritisation of wetlands in a changing climate

Heidi Nieuwoudt gave a second presentation which aimed to highlight ‘Working for Wetlands’ process of prioritising wetlands for rehabilitation.

Emphasis was placed on the fact that wetlands are high-value ecological infrastructure, which provide essential ecosystem services. Wetlands however are highly threatened due to human activities (including illegal dumping, inappropriate development, fire, alien vegetation, water diversion and channel modification) and as a result, more than half of the known wetlands in the landscape are critically endangered. In light of this, it was highlighted that the rehabilitation and protection of wetlands is a priority for WfW.

Information was then provided on the role of WfW and how it responds to wetland degradation. The presentation illustrated that the prioritising of wetlands for rehabilitation is done at a quaternary catchment level. A map reflecting the priority catchments across the country assists in refining strategic priority areas. Wetlands within these strategic priority areas are then grouped into carefully selected and consistent themes namely biodiversity value, functional value, rehabilitation potential, opportunities for partnerships and social upliftment. Wetlands which meet each of the criteria are earmarked for rehabilitation intervention.

The presentation highlighted how the process for intervention is broken down into three phases. Phase 1 entails the identification of the suitable wetland as noted above. Phase 2 entails site visits, gathering of engineering data and obtaining the necessary environmental authorisations and Phase 3 entails the implementation of the intervention measures ensuring wetland rehabilitation.

The presentation concluded with photographs of several examples of successful wetlands rehabilitation projects throughout the country.

Discussion Session:

As noted above, the workshop was designed to be an interactive forum. Following the afternoon presentations and prior to concluding the workshop, there was a lengthy discussion session to ascertain the information needs and requirements in EDM for mainstreaming biodiversity and wetlands into land use planning and disaster risk management. A summary of feedback and comments resulting from the discussion session is given in Table 2 below:

Table 2: Summary of feedback and comments received during the breakaway discussion session of the LAB: Wetlands SA Workshop.

Summary of Comments and Feedback
It was noted in the discussion that land-use planning in each of the local municipalities within EDM is undertaken using the local SDFs. It was highlighted however, that there is no continuity between these SDFs, as each SDF includes different information and as such each local municipality works from a different dataset.
Emphasis was placed on the fact that one of the key requirements to ensure cohesive land use planning within EDM therefore would be to ensure that each of the local municipal SDFs include

standardised Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) layers/ maps as well as the National FEPA maps as a starting point and that each SDF includes the same planning related information to ensure continuity in land use planning decision making. It was also suggested that additional tools such as the SANBI BGIS and SANBI LUDS decision making tool as well as Google Earth and Google Pro are used in conjunction with the local SDFs to give key 'on the ground' information.

It was noted that a greater awareness amongst town planners (and other departments within local municipalities) regarding the importance of biodiversity and ecological infrastructure is required and a support group would be useful for the planners to make better decisions. To this end it was noted that the Southern Cape Development Forum exists and meets twice a year. It was suggested that this is used as a platform for information sharing. It was also suggested that external parties (e.g. local NGOs, SANParks, WfW and local freshwater specialists) who have knowledge on wetlands in the area should be invited to participate and provide context specific wetland management information and expertise. Including external parties would also assist with working together and with the combination of resources and funding.

It was also noted that other existing programmes are also being run in EDM which could assist with planning decisions. These include the 'Adopt a River' Programme and the 'Blue Drop Green Drop' Programme.

Going forward it was suggested that in order to improve land use planning in a wetlands management context, the following requirements were suggested:

- Full wetland map for the EDM including a 'No-Go' overlay where development definitely may not occur due to the presence of pristine wetlands and a second overlay for degraded or damaged wetlands where some development may occur. It was suggested that the initial map could be undertaken using the SANBI BGIS and Google Earth tools with the assistance of a freshwater specialist. This could be ground truthed at a later stage when funds become available.
- Guidelines/ rules on what activities are allowed in wetlands and what is not.
- Guidelines/ rules on wetlands management procedures.
- High quality aerial photographs of key areas.
- Contact list of key people to assist with planning related queries (e.g. freshwater specialists, environmental planning and authorisation specialists) shared with the planning departments.

It was suggested that all information received is disseminated to other departments within the local and district municipalities to ensure cohesive action.

MOVING FORWARD

Following the discussion session, Liz highlighted that the next step for EDM in the LAB Wetlands SA project is the compilation and development of a Wetland Report in the early part of 2016. The EDM Wetland Report will pull together all the existing information pertaining to wetlands in the district, and provide an overview of wetland resources in the area, as well as a gap-analysis of information required. It was highlighted that this, along the outcomes of this workshop and future engagements with other stakeholders in EDM, will feed into the next phase of the project which entails the development of Wetland Strategy and Action Plan. Vernon and Liz thanked the speakers and participants for attending and closed the workshop.

Annex 1: Project background

Wetlands are high-value ecological infrastructure, providing essential ecosystem services such as clean water, clean air, food, medicines, flood regulation, water storage and habitat for biodiversity. Wetlands also play a role in disaster risk reduction, and their effective governance could lessen the negative effects of climate change through, for example, flood risk reduction, temperature regulation and water and food security for communities.

However, wetlands are South Africa's most threatened ecosystems, with 48% of wetland ecosystems critically endangered, resulting in an urgent need to increase awareness of wetland importance; and to develop the capacity of local governments to incorporate natural wetland resource objectives into municipal governance mechanisms and Integrated Development Planning, as well as to implement and fund projects on the ground.

In South Africa, there is a wealth of national environmental policies, however, mechanisms for mainstreaming biodiversity through all spheres of government needs to be strengthened. Lack of staff capacity, budget constraints, absence of participatory governance, lack of political leadership and public awareness and support, as well as deficiencies in relevant guidance, tools and resources, make wetland biodiversity planning and management a neglected component of our country's municipal governance.

The Local Action for Biodiversity: Wetlands South Africa (LAB: Wetlands SA) programme's key goal is to protect 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.

The key objectives of the LAB Wetlands SA programme are as follows:

1. To improve local government and citizen knowledge and understanding (at the individual, organisation and policy levels) of the value of biodiversity and wetlands.
2. To initiate the process of integrating ecosystem services and biodiversity into local government planning and decision-making in a coordinated, multi-sectoral, gender-sensitive and participatory way.
3. To implement and pilot on-the-ground wetland projects and promote the development of bankable project proposals.

The LAB: Wetlands SA programme is implemented by ICLEI – Local Governments for Sustainability – Africa Secretariat (ICLEI Africa), and funded by the USAID. This programme works in partnership with 9 District Municipalities and 2 Metropolitan Municipalities throughout South Africa.

Annex 2: Agenda

EDEN DISTRICT MUNICIPALITY

WETLANDS AWARENESS RAISING & LAND USE PLANNING WORKSHOP AGENDA

Date: 12th November 2015
Venue: Eden District Municipality Roads Conference Hall, Mission Road, George.
Facilitator: Liz Metcalfe (*ICLEI – Local Governments for Sustainability*)

09.30 – 10.00	<i>Registration (Signing of the Attendance Register and Tea & Coffee)</i>
Welcome & Introduction	
10.00 – 10.10	Welcome by the hosts (10 mins) Mr. Vernon Gibbs-Hall - <i>Eden District Municipality</i>
10.10 – 10.30	Introduction to ICLEI and the LAB: Wetlands SA Project (20 mins) Ms. Liz Metcalfe -- <i>ICLEI – Local Governments for Sustainability</i>
10.30 – 10.45	Defining wetlands and the role of ecosystem services (15 mins) Heidi Nieuwoudt – <i>Working for Wetlands: Western Cape and Northern Cape</i>
10.45- 11.15	Tea
Wetlands and the Importance of Land Use Planning	
11.15- 11.50	Wetlands management at a local level and the role of SPLUMA and LUPA in land use planning (35 mins) Gavin Benjamin- <i>DEA&DP- Land Use Planning</i>
11.50- 12.00	Q & A session (10 mins)
12.00 -13.00	<i>Lunch</i>
Importance of Wetlands & Biodiversity in a Climate Change Context	
13.00 – 13.15	Defining climate change & providing an overview of climate change in Eden (15 mins) Ms. Kirsty Robinson – <i>ICLEI – Local Governments for Sustainability</i>
13.15 – 13.40	The prioritisation of wetlands in a changing climate (25 mins) Heidi Nieuwoudt – <i>Working for Wetlands: Western Cape and Northern Cape</i>
13.40- 14.15	Breakaway group discussion session (35 mins): Information needs and requirements in Eden for mainstreaming biodiversity and wetlands into land use planning and disaster risk management.
14.15- 14.30	Wrap up and moving forward (15 mins) Ms. Liz Metcalfe -- <i>ICLEI – Local Governments for Sustainability</i>
14.30 – 15.00	<i>Signing of the Feedback Questionnaire</i>