

Local Action for Biodiversity (LAB): Wetlands SA

Amathole District Municipality & Buffalo City Metropolitan Municipality “Wetlands in the Municipal Context: Natural Solutions to Local Issues” Workshop

Date: 3rd December 2015

Time: 09.30 – 16.00

Venue: Blue Lagoon Hotel, Blue Bend Place, Beacon Bay, East London



Workshop Report

SUMMARY:

On 3rd December 2015, Amathole District Municipality (ADM), Buffalo City Metropolitan Municipality (BCMM) and ICLEI – Local Governments for Sustainability (ICLEI) co-hosted the “Wetlands in the municipal context: Natural solutions to local issues” wetlands awareness-raising workshop in East London as part of ADM and BCMM’s involvement in the Local Action for Biodiversity: Wetlands South Africa (LAB: Wetlands SA).

The workshop was aimed at raising awareness about the value of wetlands in the local landscape and aimed to highlight the links between wetlands and disaster management and land use planning with the goal of highlighting the need for the prioritisation of wetland management and preservation within the landscape thereby ensuring the sustained provision of key ecosystem services in the district.

The workshop was structured and conducted by means of presentations and activities as well as discussion between speakers and participants. Presentations emphasised the importance of wetlands and ecosystem services, the impacts of climate change in ADM and BCMM and the role of wetlands in adaptation planning, the role of legislation in land-use planning and wetland management and wetlands education and community awareness strategies.

The workshop was well attended with approximately 40 participants from ADM and BCMM ranging from environmental managers/officers and town planners through to environmental, disaster risk and parks managers. From discussion sessions throughout the workshop, it was clear that there is a need to enhance partnerships moving forward to allow for better collaboration on local initiative and thereby enhance wetlands management and conservation within the district.

PARTICIPANTS:

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WORKSHOP OBJECTIVES:

The workshop forms part of the LAB: Wetlands South Africa programme (for background, see *Annex 1*) which seeks to improve awareness and management of wetlands at the local level. Based on previous discussions with ADM and BCMM, the key aims of the workshop were to:

1. Increase knowledge and understanding of the value and importance of wetlands and ecosystems services and why this is important at a local government level.
2. Increase knowledge and understanding of climate change and of potential climate change impacts in the ADM and BCMM and highlight the role of wetlands in climate change impact adaptation.
3. Initiate discussions on the nexus between wetlands and disaster risk management and land use planning.
4. Facilitate initial discussions with the stakeholders regarding the information needs and requirements in ADM and BCMM for wetland 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 environmental legislation and the new planning laws. The workshop also provided a platform for stakeholders to discuss the opportunities and constraints relating to wetlands management within the ADM and BCMM.

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

WORKSHOP PRESENTATIONS & AWARENESS RAISING ACTIVITIES

INTRODUCTION AND WELCOME BY THE HOSTS

Mr. Luyanda Mafumbu and Ms. Nomthandazo Hanise, the environmental managers of ADM and BCMM respectively, opened the workshop with a short speech to welcome the participants to the workshop. The speech highlighted that ADM and BCMM have entered into a partnership with ICLEI to implement the LAB: Wetlands SA project. It was noted that the support and intervention by ICLEI is appreciated by ADM and BCMM as it will assist with the implementation of tangible and measurable activities on the ground within the district.

Liz Metcalfe, Project Manager of LAB: Wetlands SA, gave a brief introduction to ICLEI and highlighted how ICLEI assists with the implementation of concrete actions on the ground through the forming of partnerships and the implementation of projects such as LAB: Wetlands SA. Liz then gave a brief overview of the objective and aims of the project and provided a brief summary of the workshop agenda for the day.

Following the overview of the agenda, the workshop participants were invited to introduce themselves and role within ADM/BCMM.

The workshop thereon was structured and conducted by means of presentations, interactive awareness raising activities as well as discussions between speakers and participants. A summary of these are provided below.

ACTIVITY: Unpacking understanding of what a wetland is

Prior to commencing with the first presentation of the day (“What is a Wetland?”), the workshop participants were invited to share their knowledge of what they perceived a wetland to be. The purpose of this was establish a baseline of collective knowledge regarding wetlands.

The participants were divided into groups and asked to have a brief discussion surrounding what they perceived wetlands to be and then anonymously write down key features/ functions of a wetland for discussion with the rest of the room.

The discussion revealed that knowledge and understanding of wetlands was highly varied. Some participants indicated a clear understanding of wetlands and associated key ecosystem services such as water storage, water filtration and flood attenuation capabilities, whilst others indicated that wetlands were areas of land which were simply any low-lying valley, no-go areas or areas not considered suitable for building. The discussion set the scene for the opening presentation.



Figure 1: Participants of the ADM/ BCMM workshop discussing the key features of wetlands.

PRESENTATION: What is a wetland?

Japie Buckle from Working for Wetlands (WfW), gave an introductory presentation on wetlands. The presentation opened with the definition of a wetland as per the National Water Act (Act No. 36 of 1998). This definition was further unpacked through the extensive use of informative pictures to highlight the key features of wetlands, namely mottled soils, distinctive plants (e.g. bulrush, palmiet etc.) and required water saturation levels, to further assist with wetland identification.

The presentation showed that there are many different types of wetlands worldwide however, South African wetlands are considered to be unique due to the steep local topography which forms very specific types of wetland systems. The presentation then went on to highlight that wetlands are high-value ecological infrastructure due to the key ecosystem services which wetlands provide (e.g. water filtration, steady and regulated water supply, flood regulation and drought relief) which can assist local municipalities in meeting their service delivery requirements.

In closing, emphasis was placed on the fact that due to historic mismanagement of wetlands and deliberate draining of these systems, wetlands are highly threatened and critically endangered ecosystems. Damage or loss of wetlands respectively limit and remove the wetlands ability to effectively provide ecosystem services. Therefore it is essential that the remaining wetlands are protected.

PRESENTATION: Defining climate change and the role of wetlands in climate change adaptation

Kirsty Robinson, Professional Officer from ICLEI, followed the introductory speaker with a presentation on the impacts of climate change in the Amathole Region and the role of wetlands in climate change adaptation. 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 adaptation planning.

The presentation opened with a brief definition of climate change, its causes and the role of human activities in accelerating the process. Through the use of graphs and pictures, the current climate patterns in the region were also illustrated in order to set the scene.

In terms of climate change and associated impacts in ADM, the presentation highlighted that general warming will undoubtedly occur and whilst rainfall quantity is likely to remain the same, there will be definite changes in rainfall patterns including a shift in seasonal timing and changes in intensity of rainfall. The presentation illustrated that the consequences of climate change in ADM would most likely result in an increased risk of periodic drought in the winter months and more severe flooding in the late summer months. Emphasis was therefore placed on the fact that the existing climate related impacts historically occurring in ADM will be exacerbated and that climate adaptation planning should take into account historical climate related impacts as well as future projected changes (i.e. plan for an increase flooding and/or droughts).

With regards to the role of wetlands in climate change adaptation, the presentation highlighted that healthy wetlands perform key ecosystem services such as flood attenuation and water storage and flow regulation which can assist the municipality with reducing the anticipated impact of climate change. Emphasis was placed on the fact that only healthy wetlands can perform these services and as such investing in the maintenance of healthy wetlands and the rehabilitation and restoration of damaged or degraded wetlands can ensure that wetlands perform their ecosystem services to the maximum of their capabilities in order to increase resilience to climate change in the Amathole region.

TEA BREAK

ACTIVITY: Identifying the nexus between wetlands, disaster risk, land use planning and agriculture.

Following the tea break, the workshop participants worked in groups to identify the links between disaster management, land use planning, agriculture and wetlands and ecosystem services.

Each group was given 4 sheets of coloured paper (blue, red, orange and yellow). On the blue piece of paper, groups were asked to write down the key threats to wetlands on one side and the ecosystem services of wetlands on the other. On the red, orange and yellow papers, participants were requested to highlight the main issues and concerns within ADM pertaining to disaster management, land use planning and agriculture respectively. The participants were then asked to indicate on these pages

where threats and issues and concerns overlapped using pink dots and indicate where ecosystem services of wetlands could assist with these issues and concerns using green dots.

The activity illustrated that some threats to wetlands are linked to issues and concerns pertaining to disaster risk management, agriculture and land use planning. The activity also highlighted how wetlands' ecosystem services can play a strong role in assisting in the alleviation of some of these issues. A summary of the outcomes of the activity are presented in Table 1, 2 and 3 as contained in *Annex 3*.



Figure 2: Participants of the ADM/BCMM workshop discussing the nexus between wetlands and disaster risk management, land use planning and agriculture.

LUNCH BREAK

PRESENTATION: Wetlands policy and legislation: wetlands and the national water act

Unathi Tshayingca-Makati of the Department of Water and Sanitation (DWS) gave a brief overview of the management of wetlands in the context of the National Water Act (Act No. 36 of 1998) (NWA).

It was emphasised that the key aim of the NWA is to ensure that the nation's water resources are protected, used, controlled, managed, conserved and developed in a sustainable and equitable manner, for the benefit of all.

The presentation highlighted that in order to achieve this mandate, any proposed activity listed in Chapter 4, Section 21 of the NWA, requires a 'Water Use License' prior to commencement. Emphasis was placed on the fact that, proceeding with any activity falling within Section 21 of the NWA prior to obtaining a license is illegal and consequences involve monetary fines and/or imprisonment.

PRESENTATION: Wetlands policy and legislation: wetlands and national environmental management act

Following the presentation on the NWA's role in the management of wetlands, Kirsty Robinson from ICLEI gave a brief presentation on the role of the National Environmental Management Act (NEMA) (Act No. 107 of 1998) in the management of wetlands.

The presentation highlighted that, as per the NWA, NEMA also contains a list of activities/developments which require an environmental authorisation (EA) prior to commencement. Obtaining the EA involves undertaking an environmental impact assessment (EIA) process.

It was noted that NEMA includes wetlands under the definition of a "watercourse". The presentation highlighted that, within NEMA any development/ activity occurring within a watercourse or within 32 metres of a watercourse (if no development setback line exists), or any development or activity occurring within 100 metres of a watercourse outside of urban areas would require an EIA process to be undertaken and the issuing of an EA prior to proceeding.

As with the NWA, commencement of an activity/ development listed in NEMA without the required EA could result in a steep monetary fine and/ or imprisonment.

PRESENTATION: Biodiversity and land use planning: systematic land use planning

Siya Kuse from the South African National Biodiversity Institute (SANBI) gave a presentation outlining how biodiversity is factored into municipal planning and development.

The presentation opened with an overview of biodiversity and ecological process and why these are important in a municipal context (ecosystem services, contribution to economic growth etc.). The presentation then moved on to give an overview of the complicated array of legislation currently guiding spatial development and the management of biodiversity; namely the Constitution, the Municipal Systems Act (Act No. 32 of 2000), the Development Facilitation Act (Act No. 67 of 1995), NEMA, the National Environmental Management: Biodiversity Act (NEMBA) (Act No. 10 of 2004) and the various local Biodiversity Sector Plans, Spatial Development Frameworks and Integrated Development Plans. The concept of Critical Biodiversity Areas (CBAs), and how they can guide land use planning and development, was also unpacked through the extensive use of maps.

Thereafter, the presentation moved on to discuss the recently promulgated Spatial Planning Land Use Management Act (SPLUMA). It was highlighted that SPLUMA seeks to create a new streamlined, uncomplicated and uniform way of addressing land use management and spatial planning in the country and to also specify the relationship between spatial planning and land-use management systems. It was also noted that SPLUMA makes local municipalities the authority in the first instance in land development applications. In closing it was emphasised that whilst SPLUMA will not replace all previous land use management legislation: where the previous legislation does not align with SPLUMA, it would fall away.

PRESENTATION: Wetlands education and community awareness raising

Kerry McClean from WESSA gave a short presentation showcasing the education work WESSA has undertaken to date with respect to wetlands and some tried and tested successful methodologies pertaining to social learning.

The presentation highlighted, with the use of examples, that interactive approaches such as discussions building on previous knowledge, picture building games, information packs with pictures and modelling have been shown to have a far greater educational impact than the traditional lecture style methodologies of the past. As such, WESSA are moving towards this style in their educational programmes.

Kerry closed off the presentation, by informing the audience of the education tools and courses, particularly those pertaining to wetlands and wetland management, made available by WESSA.

WRAP UP & WAY FORWARD

In closing, Liz Metcalfe summarised the presentations and emphasised how wetlands need to be considered in decision-making moving forward in a manner that speaks to local economic development (i.e. improving service delivery and proactive disaster management in a cost effective manner whilst improving biodiversity and wetlands management and planning). Emphasis was placed on the importance of working together both across departments as well as with different organisations and NGOs within ADM and BCMM. It was highlighted that creating and maintaining a strong partnership with ADM, BCMM and ICLEI is key to the LAB: Wetlands SA project moving forward.

Liz advised that the next steps for ADM and BCMM in the LAB Wetlands SA project is the compilation and development of a Wetland Assessment Report which will pull together all the existing information pertaining to wetlands in the municipalities. It was highlighted that this, along the outcomes of this workshop and future engagements with other stakeholders in ADM and BCMM, will feed into the next phase of the project which entails the development of Wetlands Strategy and Action Plan. Liz thanked the speakers and participants for attending and, following a closing prayer by Mr. Luyanda Mafumbu, 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.

**AMATHOLE DISTRICT MUNICIPALITY & BUFFALO CITY
METROPOLITAN MUNICIPALITY**

WETLANDS AWARENESS RAISING WORKSHOP AGENDA
“Wetlands in the municipal context: Natural solutions to local issues”

Date: 3rd December 2015
Time: 10.00 – 16.00
Venue: Blue Lagoon Hotel, Blue Bend Place, Beacon Bay, East London.
Facilitator: Liz Metcalfe (*ICLEI – Local Governments for Sustainability*)

| | |
|---------------|--|
| 09.30 – 10.00 | <i>Registration (Tea & Coffee on arrival)</i> |
| 10.00 – 10.10 | Welcome by the hosts (10 mins) |
| 10.10 – 10.30 | Introduction to the day (30 mins) <i>Liz Metcalfe – ICLEI – Local Governments for Sustainability</i> |
| 10.30- 10.40 | Activity: What is a wetland? (10mins) |
| 10.40 – 11.05 | What is a wetland? (15 mins & 10 mins Q&A) <i>Japie Buckle – Working for Wetlands: Eastern Cape</i> |
| 11.05 – 11.30 | Defining climate change and the role of (15 mins & 10 mins Q&A) <i>Kirsty Robinson: ICLEI – Local Governments for Sustainability</i> |
| 11.30 – 11.45 | <i>Tea break</i> |
| 11.45 – 12.30 | Activity: Identifying the nexus between wetlands, disaster and land use planning and agriculture (45 mins) |
| 12.30 – 13.00 | Wetland policy and legislation (20 mins & 10 mins Q&A) Wetlands and the Water Act <i>Unathi Tshayingca-Makati: Department of Water and Sanitation (10 mins)</i> Wetlands and NEMA <i>Kirsty Robinson: ICLEI – Local Governments for Sustainability (10 mins)</i> |
| 13.00 – 14.00 | <i>Lunch</i> |
| 14.00 – 14.25 | Biodiversity and land-use planning: Systematic biodiversity planning <i>Siya Kuse – SANBI (15 mins & 10 mins Q&A)</i> |
| 14.25 – 14.50 | Wetlands education and community awareness (15 mins & 10 mins Q&A) <i>Kerry McLean – WESSA</i> |
| 14.50 – 15.30 | Discussion/Activity: wetland management (40 mins) |
| 15.30 – 15.45 | Wrap up and moving forward LAB: Wetlands SA Project (15 mins) <i>Liz Metcalfe – ICLEI – Local Governments for Sustainability</i> |
| 15.45 – 16.00 | Feedback questionnaires and close. |

ANNEX 3: Summary of the nexus between wetlands and disaster risk management, agriculture and land use planning

Table 1: Summary of the identified key threats to wetlands:

| Identified key threats to wetlands |
|---|
| Poor land use planning and mismanagement of wetland areas |
| In appropriate development (e.g. housing, roads etc.) within a wetland/ within close proximity to a wetland |
| Alien invasive plants |
| Agriculture and plantations |
| Overgrazing in wetland areas |
| Climate change and global warming |
| Pollution |
| Uncontrolled fires |
| Encroaching urbanisation |
| Over-utilisation of resources |
| Lack of knowledge and general awareness on the value of wetlands |
| Lack of capacity and expertise to manage wetlands |
| Lack of enforcement of existing legislation (e.g. NEMA and NWA) to protect wetlands |
| Lack of availability of a wetland inventory and mapping |

Table 2: Summary of the identified key ecosystem services pertaining to wetlands:

| Identified key ecosystem services provided by wetlands |
|---|
| Flood regulation and control |
| Water filtration and purification with associated water quality improvement |
| Regulation of water supply |
| Food source |
| Medicine source |
| Habitat for a variety of plant and animal species |
| Veld fire control |
| Grazing land for subsistence farmers |
| Cultural significance for some communities |
| Recreation and tourism |
| Aesthetic beauty |

Table 3: Summary of the identified nexus between wetlands and disaster risk management, agriculture and land use planning issues:

| Identified issue / Concern | Overlap of identified threats (pink dots) | Identified wetland ecosystem services can assist with issue (green dots) |
|---------------------------------|---|--|
| Disaster Risk Management | | |
| Drought | | |
| Water scarcity | | |
| Floods | | |
| Climate change | | |
| Lack of knowledge and awareness | | |

| Identified issue / Concern | Overlap of identified threats (pink dots) | Identified wetland ecosystem services can assist with issue (green dots) |
|---|---|--|
| Illegal dumping and discharges | | |
| Poor infrastructure planning | | |
| Unsustainable development | | |
| Uncontrolled fires | | |
| No clear set of management roles and responsibilities within municipality | | |
| Lack of resources and capacity | | |
| Lack of integration and enforcement of legislation, policies and plans | | |
| Lack of compliance of local legislation | | |
| Lack of early warning systems being put in place | | |
| Lack of wetland rehabilitation and maintenance | | |
| Land use planning | | |
| Uncontrolled and poor land use planning | | |
| Lack of enforcement of by-laws | | |
| SDPs and SDFs not fully utilised | | |
| Mismanagement of surface/ stormwater runoff | | |
| Lack of suitable land for appropriate development | | |
| Lack of knowledge on land use | | |
| Unclear roles of different stakeholders | | |
| Regulations ignored at the expense of development | | |
| Lack of clear management guidelines | | |
| Densification | | |
| Competition between environmental conservation and development needs | | |
| Lack of capacity and understanding | | |
| Lack of political will and political interference | | |
| Informal settlement development | | |
| Land ownership and dispute claims | | |
| Land tenure systems on communal land | | |
| Poverty and unemployment | | |
| Delay on the implementation of new legislation (e.g. SPLUMA) | | |
| Environmental Impact Assessments | | |
| Flooding | | |
| Agriculture | | |
| Overgrazing | | |
| Water pollution | | |
| Ploughing of sensitive areas | | |

| Identified issue / Concern | Overlap of identified threats (pink dots) | Identified wetland ecosystem services can assist with issue (green dots) |
|----------------------------------|---|--|
| Drought | | |
| Soil erosion | | |
| Floods | | |
| Veld fires | | |
| Disease | | |
| Land degradation (e.g. dongas) | | |
| Alien invasive plants | | |
| Scarce water supply | | |
| Lack of knowledge | | |
| Poor production | | |
| Lack of skills | | |
| Pollution | | |
| Lack of resources and funds | | |
| Draining of wetlands | | |
| Poverty and unemployment | | |
| Land reform | | |
| Communal farming | | |
| Political interference | | |
| Perception of wetland importance | | |