



URBAN HYDROLOGY: WATER IN THE CITY OF TSHWANE
 High Performance Centre, University of Pretoria
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WETLANDS & COMMUNITIES AWARENESS


ERNST WOHLITZ
 CITY OF TSHWANE: ENVIRONMENTAL MANAGEMENT SERVICES





UNIVERSITEIT VAN PRETORIA
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WETLANDS & COMMUNITIES PROJECT FOR CITY OF TSHWANE

- Project initiated by the International Council for Local Environmental Initiatives (ICLEI) with the Local Acton for Biodiversity (LAB) program
- ICLEI is a powerful movement of 12 mega-cities, 100 super-cities and urban regions, 450 large cities as well as 450 small and medium-sized cities and towns in 84 countries
- ICLEI support cities to develop a green urban economy
- The LAB program promote the importance of urban biodiversity and the roll local governments have to play

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MAIN OBJECTIVES ARE:

- Raise awareness on wetland ecosystems & biodiversity at local municipal level
- Promote strategies that foster:
 - Need to protect wetlands, biodiversity & ecosystem services
 - Prevent biodiversity loss
 - Restoration of wetlands, biodiversity & ecosystem services to benefit disadvantaged communities
 - Community participation

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TIME FRAMES

- Develop Tshwane LAB Wetlands and Communities Assessment Report (June 2013 – December 2013)
- Signing of the Durban Commitment: Local Governments for Biodiversity by Tshwane. (Jan 2014) Done
- Prepare a Local Government Wetland Management Plan (LGWMP) for Tshwane. (October 2013 – June 2014)
- Adopt and approved LGWMP for Tshwane (June 2014)
- Implementation of the LGWMP with partnership (s) (April 2014 – February 2015)

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WETLANDS MAPPED IN TSHWANE

- Region 1 = 7 wetlands
 - Region 2 = 2 wetlands
 - Region 3 = 5 wetlands
 - Region 4 = 5 wetlands
 - Region 5 = 1 wetland
 - Region 6 = 6 + 3 in Rietlvei Nature Reserve
 - Region 7 = 2 in Bronkhorstspuit Nature Reserve
- Total = 31 wetlands

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WETLAND GOALS FOR TSHWANE

- Detail assessment of all wetlands in Tshwane
- Brand all wetlands with information signage (international logo`s for ecosystem services)
- Fenced off all wetlands with access control to secure their protection
- Enhance wetlands with walk ways and bird hide facilities for communities to utilised.
- Conduct educational programs on wetlands
- Do rehabilitation work were needed
- Identify offset mitigation requirements and address issues.

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CHALLENGES

- Control and manage development impacts on urban nature areas
- Continuous fragmentation of urban nature areas and the demolishing of eco-corridors
- Poor policing on criminal activities conducted from urban nature areas
- Impact of the building industry on nature areas (dumping building rubble)
- Storm water management changing urban hydrology
- Lack in capacity to enforce wetland conservation measures

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SOCIAL ISSUES

- Vagrants squatting on urban nature areas (unsafe because of criminal activities – burning of wetlands to increase visibility for safety purposes)
- Job creation (people to clean up polluted water courses)
- Sustainable harvesting of wetland material
- Urban agriculture for food production adjacent to wetland areas
- Tourism and recreation (bird hides and bird watching)
- Environmental health that wetlands can contribute to

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AWARENESS

- Communities must be able to identify wetlands
- Communities should be aware of the importance and the services these wetlands supply
- Illegal activities must be prevented
- All should be aware of the ability of wetlands to prevent flooding and erosion
- Be aware of the filtering of water, the recharge of underground water levels, the water release over longer periods during the dry season.
- Wetlands help to clean the city from waste, noise and air pollution.
- Wetlands have a positive effect on temperature levels in the city. (infra structure like roads, parking areas and buildings cause high rises in temperatures)

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PRINCIPLES

- Conduct sustainable development
- Avoid biodiversity loss
- Take consequences of decisions and actions in consideration
- Wetlands are under pressure from human resource usage and development
- Pollution and environmental degradation will have health effects
- Wetlands are critical to sustaining surface water
- Wetlands should be managed on catchment and sub-catchment basis
- Natural ecosystems must be sustainably utilised
- Wetlands are core components of the natural heritage system

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