CLASSIFICATION (IN ORDER TO DETERMINE THE MANAGEMENT CLASS) OF SIGNIFICANT WATER RESOURCES (RIVERS, WETLANDS, GROUNDWATER AND LAKES) IN THE OLIFANTS/DOORN WATER MANAGEMENT AREA (WMA): WMA 17

BACKGROUND INFORMATION DOCUMENT





PURPOSE OF THIS DOCUMENT

The purpose of this document is to serve as a background information document to inform stakeholders and Interested and/or Affected Parties (I&AP's) in and associated with the Olifants/Doorn Water Management Area of the Classification of significant water resources (Rivers, Groundwater, Lakes and Wetlands) to be undertaken.

INTRODUCTION AND BACKGROUND

The National Water Act (Act No. 36 of 1998) (NWA) is founded on the principle that National Government has overall responsibility for and authority over water resource management for the benefit of the public, without seriously affecting the functioning of the water resource systems. In order to achieve this objective, Chapter 3 of the NWA provides for the protection of water resources through the implementation of Resource Directed Measures (RDM).

The Chief Directorate: Resource Directed Measures (CD: RDM) is the directorate within the Department of Water Affairs (DWA) tasked with the responsibility of ensuring that the water resources are classified in terms of the Water Resource Classification System (WRCS) to ensure that a balance is sought between the need to protect and sustain water resources on one hand and the need to develop and use them on the other. The CD: RDM has identified the need to undertake the classification of significant water resources (rivers, wetlands, groundwater and lakes) in the Olifants/Doorn Water Management Area in accordance with the Regulations for the Establishment of the WRCS as promulgated on the 17th of September 2010.

Due to the fact that there is an accelerated rate of development and demand on South African water resources and changing weather patterns due to climate change, SA water resources are becoming more stressed. The classification of water resources will help in maintaining the desired state of the significant water resources, by

setting, over a period of time, the Management Class (MC) of each significant water resource in South Africa.

Directorate: Water Resource Classification, within the CD: RDM has commissioned a study to classify and set Management Classes for significant water resources in the Olifants/Doorn Water Management Area (WMA), in order to facilitate an appropriate balance between use of the water resources and protection thereof. BlueScience Consulting cc in a consortium with Nosipho (Pty) Ltd, Aurecon (Pty) Ltd, GEOSS Ptv (Ltd), WAMTechnology cc, and staff members of the Universities of Cape Town and Stellenbosch has been appointed to undertake the study, 'Classification of significant water resources (rivers, wetlands, groundwater and lakes) in the Olifants/Doorn Water Management Area.

The Olifants/Doorn WMA was prioritised for the classification process because of its importance from a conservation perspective. The Olifants River Catchment and in particular the Doring River, contains a number of indigenous fish species that occur in no other river systems and are considered endangered. The Olifants Estuary, which is one of only three permanently open estuaries on the west coast of South Africa, represents a critical habitat to many estuarine-associated fish species. In addition, the coastal wetlands of the Sandveld are deemed to be in a vulnerable state due to the pressure placed on the groundwater resource largely as a result of over-utilisation. The wetland area at Verlorevlei has been designated Ramsar status as а wetland of international importance.

In the development of the WRCS, the Olifants/Doring Catchment was used as a pilot catchment. This resulted in much of the information required for such a classification process being generated for the catchment; however the consultative process was not conducted. In addition, the Environmental Water Requirements for rivers and groundwater in the Sandveld have also been determined.

AIM OF THE PROJECT

The overall aim of the project is to determine Management Classes for WMA 17. The classification process is both a consultative and a scenario-based approach. As such the study will generate different scenarios for each integrated unit of analysis (IUA) and the anticipated social, ecological and economic consequences on the proposed MC. This approach enables the DWA to make management decisions, using the scenarios that have been generated by this project, based on the consideration of a number of water resource development alternatives with description of the anticipated consequences. To generate the required data and information, a series of IUAs in the Olifants/Doorn WMA will be identified and studied in detail. The output of the study will therefore be a MC for each IUA.

It should be noted that water use within the catchment is incorporated at a number of stages during the assessment. For example, the socio-economic benefits of a water resource are taken into consideration when determining the IUA class, operational constraints and catchment requirements are incorporated into yield scenario modelling, and the impact of the water use on the ecology is considered when determining MCs. However. the focus of Olifants/Doorn study is to come up with the MCs.

STUDY AREA

The study area is the Olifants/Doorn Water Management Area (see Figure 1) which comprises the Olifants, Doring, Sandveld, Kouebokkeveld and Knersvlakte sub-areas. The Olifants River, which flows to the northwest, through a deep narrow valley that widens and flattens into a wide floodplain below Clanwilliam, is the main river within the WMA. The Doring and Sout Rivers are major tributaries. The Olifants and Doring Rivers flow strongly during the winter months whilst flows only occur very occasionally in the Sout River. The Sandveld comprises the seasonal Verlorevlei, Langvlei and Jakkals Rivers

which flow westwards of the Olifants River towards the Atlantic Ocean.

Water abstraction from surface and groundwater throughout the WMA has modified flow, particularly reducing low flows in dry summer months. Major impacted rivers are the Doring tributaries, Sandveld Rivers and the lower Olifants River. Modified flows reduced habitat integrity consequently the ecological goods and services provided by these rivers. Land-use in the eastern and northern portions of the catchment consists largely of livestock farming (sheep and goats), with small areas being used for dryland farming. Citrus, grapes, deciduous fruit and potato farming is intensive in the south-west. Urban and rural areas are small, with the main towns being Citrusdal. Clanwilliam. Vredendal. Vanrhynsdorp, Niewoudtville, Calvinia and Lamberts Bav.

TIME-FRAME

The duration of the study is 18 months commencing in October 2010 ending in April 2012.

STAKEHOLDER ENGAGEMENT

Stakeholder engagement processes will be undertaken which will include stakeholder groups such as Water User Associations. Municipalities, Commercial and emerging Farmers Organisations, Nature Conservation Agencies, Industry and Commerce as prescribed by the classification guideline documents. Every effort will be made to link and align to existing structures and forums in an effort to eliminate stakeholder fatigue. All the stakeholders in the WMA will be invited to participate and will be consulted in the project and a stakeholder database will be compiled. A comprehensive stakeholder database will be set up to capture comments received during the Classification Process and it will periodically be updated. An advertisement will be placed in various local community newspapers to notify the general public of the intended project.

Two reference stakeholder meetings will be held for the duration of the Classification Process. The first meeting will be held with the Reference Group to familiarize these stakeholders with the project and allow for the tabling of key issues that would need to be addressed in the process. The scenario generation for the WMA will be discussed. The second meeting will be to consider the options emanating from the catchment scenarios and the stakeholders will then have an opportunity to raise their concerns and indicate their preferences. Records of all discussions held during meetings will be kept and stakeholders will be provided with minutes of such meetings.

Various mediums for the stakeholders to lodge their comments and concerns will be made available. Stakeholder will be able to lodge formal written comments/concerns on a template that will be developed for this purpose. At the meeting a comment box will be made available. Stakeholders will be invited to lodge their comments/concerns via post and telephonically. e-mail. fax, Stakeholders will also have an opportunity to visit a website (www.ewisa.co.za) specially set up for the project to track the progress of the project and also to lodge their comments and concerns.

CAPACITY BUILDING

The project manager, together with the technical team members will develop a capacity building programme which will include specific quantifiable measures to ensure that capacity building takes place throughout the project.

FURTHER INFORMATION

For further information regarding this project, please do not hesitate to contact:
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Figure 1: Major catchments and quaternary catchments of the Olifants/Doorn WMA