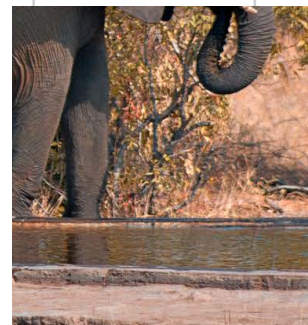
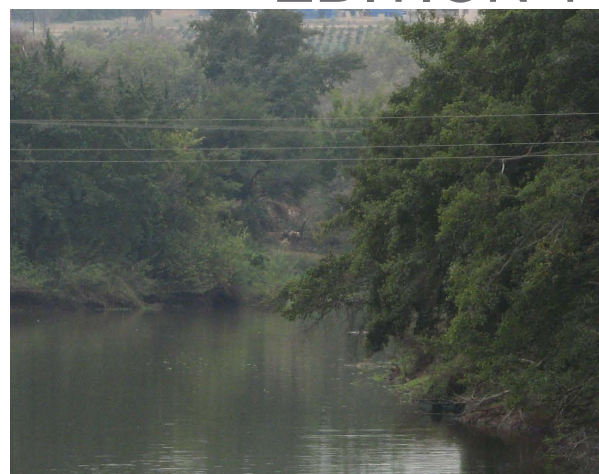
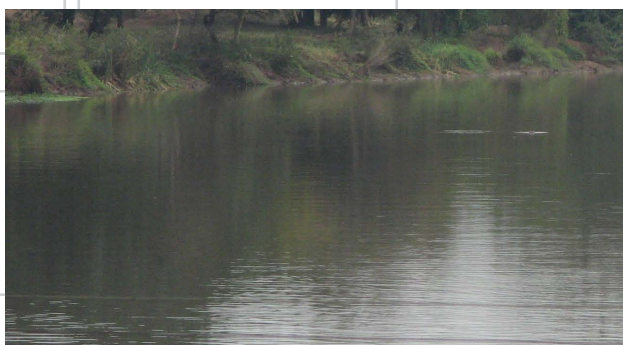
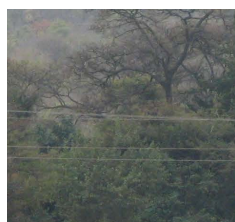
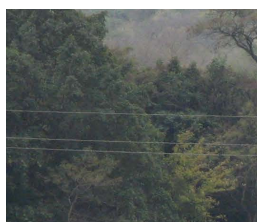
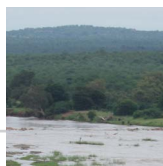


12 SEPT 2016



IWQMP FOR THE OLIFANTS RIVER SYSTEM NEWSLETTER

EDITION 1



PURPOSE OF THIS DOCUMENT

The purpose of this document is to provide water users in the Olifants River Water Management Area (WMA) with information about the Department of Water and Sanitation's project to develop an Integrated Water Quality Management Plan for the Olifants River system.

This document provides the background to the project, a description of the project area, motivation for the project, approach to the study, anticipated outcome of the project and future implementation, the opportunities for comment and the stakeholder engagement process. Please contact the following Project Team members for more information:

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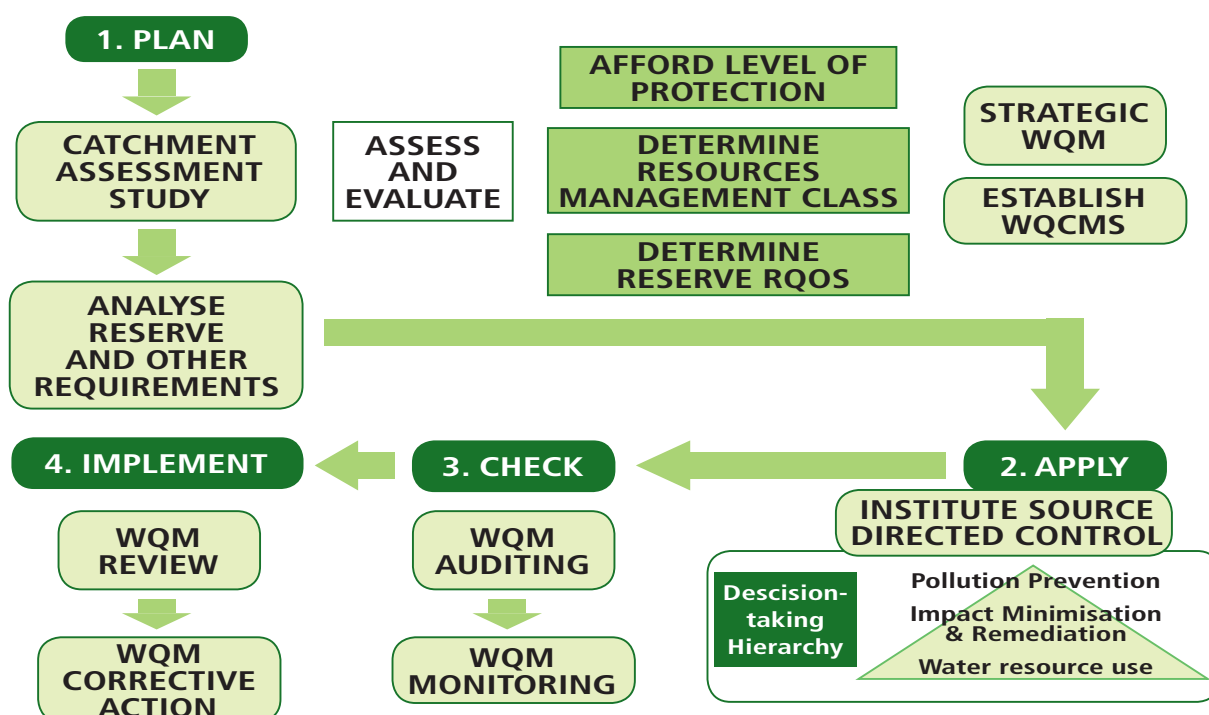
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INTRODUCTION

Water resource management occurs within a highly integrated environment, where water quality, water quantity and the aquatic ecosystem are all interlinked and interdependent. In the South African context this integration is achieved at a national level by the National Water Resource Strategy (NWRS), which provides a framework for sustainable water resources management between and within Water Management Areas (WMAs) as well as Catchment Management Strategies (CMS's) at a catchment or WMA level. Resource Directed Measures (RDMs) comprising the Classification System for water resources, implementation of a Reserve for a specific water resource and the setting of Resource Quality Objectives (RQOs) underpin this framework (see Figure 1).

The management of water quality within a catchment, therefore, must be informed by the requirements of the Water Resource Management Class, RQOs, the Reserve, and the NWRS (see Figure 1). Together these establish the water quality, water quantity and aquatic ecosystem attributes that are required to ensure a given level of protection of the resource, to meet basic human needs, and to meet the requirements of strategically important water users. The development of an Integrated Water Quality Management Plan (IWQMP) will realize the CMS framework, ultimately to give effect to the Class, Reserve and the RQOs set for a particular catchment.

The DWS has identified the need to develop an overarching Integrated Water Quality Management Plan (IWQMP) for the Olifants River WMA to equip water users with a practical plan to better manage their impacts on the WMA.



BACKGROUND

The Olifants River system (Olifants WMA) comprises the Olifants, Letaba and Shingwedzi catchments, is a highly utilised and regulated catchment and like many other WMAs in South Africa, its water resources are becoming more stressed (both from a water quantity and water quality point of view) due to increasing pressures from climate change, population growth, over utilisation, poor land-use practices and subsequent pollution, placing more stress on the water resources.

South Africans need to value water far more and use it more efficiently. This means that water needs to be recognised as a valuable resource and technologies and communications that will improve the way in which water is used and managed need to be investigated. In respect of this project to develop an IWQMP for the Olifants WMA, every effort must be made to ensure that water resources are improved to a level that can sustain the uses and be maintained at the desired states.

This IWQMP will be developed in collaboration with water users from all sectors in the Olifants WMA and needs to:

- Be cognisant of, and align with a number of existing studies and initiatives as well as those that have been completed in the recent past; and
- Establish clear goals relating to the quality of the Olifants River water resource to facilitate a sustainable balance between the protection and use of water resources.

In addition, the IWQMP for the Olifants River System will be developed in conjunction with the team developing the Water Quality Management Policies and Strategies for South Africa.

DESCRIPTION OF THE WMA

The headwaters of the study area are located along the Highveld Ridge in the Secunda-Bethal area, which is the divide between the Vaal and the Olifants River systems. The Olifants River flows northwards through the Witbank Dam down to Loskop Dam. The confluences of the Klein Olifants, Spookspruit, Klipspruit and Wilge Rivers with the Olifants River are between the Witbank and Loskop Dams.

From the Loskop Dam the Olifants River flows some 80 km to the Flag Boshielo Dam. The Moses and Elands Rivers join the Olifants River downstream of the Loskop Dam from the west while the Bloed River joins from the east. The Steelpoort River confluences with the Olifants River about 50 kilometres before the confluence of the Olifants and Blyde Rivers after which it confluences with the Ga-Selati River on the border of the Kruger National Park.

The Letaba River joins the Olifants River upstream of the border into Mozambique. Thereafter, the Olifants River joins the Limpopo River before discharging into the Indian Ocean. The Shingwedzi River flows

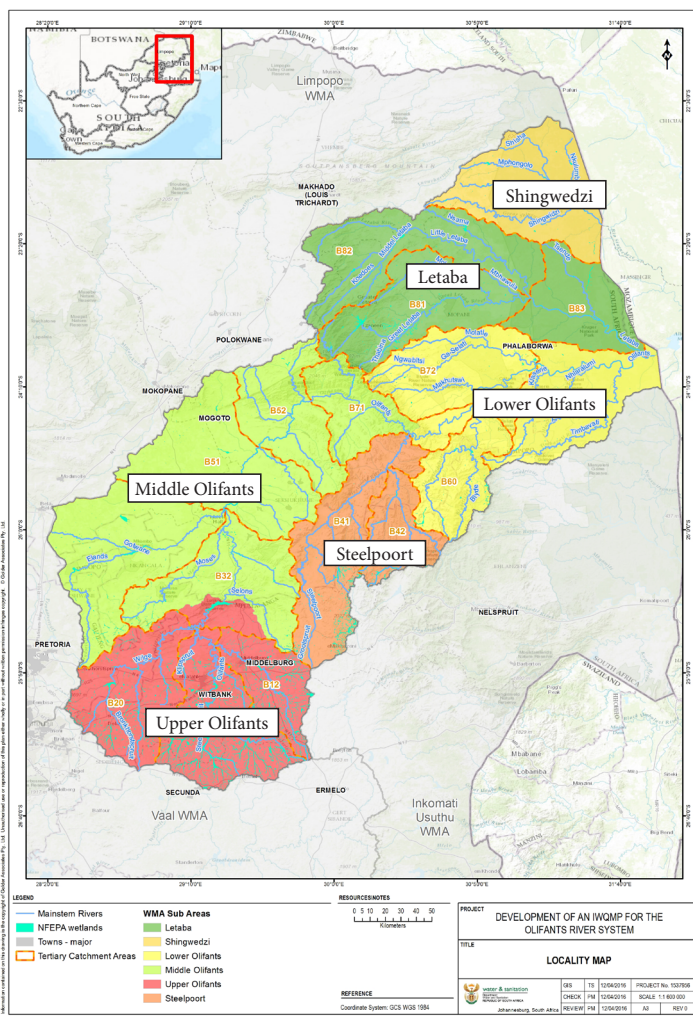


Figure 2. The map shows the extent of the Olifants River WMA, which includes the Letaba and Shingwedzi catchments.

through the Kruger National Park becoming the Rio Shingwedzi in Mozambique.

For the purpose of the study the Olifants catchment has been divided into six sub-catchments (see Figure 2):

- **Upper Olifants catchment:** constitutes the catchment of the Olifants River down to the Loskop Dam;
- **Middle Olifants catchment:** comprises the catchment of the Olifants River downstream from the Loskop Dam to the confluence with the Steelpoort River;
- **Steelpoort catchment:** corresponds to the drainage region of the Steelpoort River;
- **Lower Olifants catchment:** represents the catchment of the Olifants River between the Steelpoort confluence and the Mozambique border;
- **Letaba catchment:** constitutes the drainage region of the Klein Letaba, Groot Letaba and Letaba Rivers; and
- **Shingwedzi catchment:** corresponds to the drainage region of the Shingwedzi catchment.

PURPOSE OF THE STUDY

The purpose of the study is to develop an Integrated Water Quality Management Plan (IWQMP) for the Olifants River system.

The objective of the IWQMP is to address and incorporate the required management measures to maintain and improve the water quality in the Olifants River System in a holistic manner so as to ensure the fitness for use of the water resources.

The management measures will be addressed both at national and sub-catchment levels.

The plan will detail feasible management options for implementation in the short term (next five years), assess the medium term strategies (10 years) at the pre-feasibility level and longer term strategies at the reconnaissance level.

A further important deliverable from the study will be a set of integrated Water Quality Planning Limits (WQPLs) for the Olifants WMA and the individual sub-catchments that will include:

- adjustment to the existing WQPLs;
- development of WQPLs where gaps exist; and
- alignment to Resource Quality Objectives (RQOs).

KEY ASPECTS OF THE STUDY

A key aspect of this study will be to have interaction with and participation by the water users in the catchment to develop a practical and implementable plan that will improve the water quality in the WMA.

TECHNICAL PROCESS

The study team will implement the technical process through the execution of five main tasks (each with sub-tasks) illustrated below:

- **Inception:** includes an assessment of the current situation;
- **Establishment of the sub-catchment IWQMPs:** this step will include identification of priority water quality management issues per sub-catchment, revision or development of Water Quality Planning Limits (WQPLs) which were previously known as Resource Water Quality Objectives (RWQOs) and were set for the Upper Olifants sub-catchments, assessment of findings and recommendations from previous studies including the Reserve Determination, Classification and Resource Quality Objectives, water quality modelling, water quality reconciliation and foresight and options analysis of existing management options as well as, proposed new management options– all of which will lead to the development of an IWQMP for each sub-catchment (Upper Olifants, Steelpoort, Middle Olifants, Lower Olifants, Letaba and Shingwedzi);
- Establishment of an overarching IWQMP for the Olifants River system;

- Implementation programme; and
- Study closure.

The following aspects are fundamental to the study and will inform and support the IWQMP development during the study execution phase:

- Legal considerations that inform the IWQMP and its implementation (sub-catchment and overarching);
- External drivers, considerations and influences to water quality and water quality management: In the development of the IWQMP for the Olifants River system, the multi-dimensional facets to water quality and water quality management, such as international and transboundary obligations, water quantity aspects, water resource planning priorities, resource directed measures (Classification, Resource Quality Objectives and the Reserve), ecosystems, water services related aspects, waste management, water resource economics and integrated water resources management, will be incorporated and considered;
- Integration of stakeholder issues and technical aspects; and
- Integration/ alignment with other processes/ initiatives/activities.

Situation assessment

The purpose of this status assessment task is not to provide a state of the environment report but rather to determine the issues, gaps and priorities resulting from the environment/ development interaction in order to set a context for informed decision-making.

The approach adopted for this study is based on identifying the stakeholders' needs with respect to use of the water resource over and above these requirements. This will be attained by following an iterative and incremental process that answers four generic questions:

a. What are the goals for water quality management?

Establish water quality planning limits (WQPL) for the resource to meet the requirements of the users, based on the fitness for use required for particular uses and aligned to the RQOs, classification and Reserve requirements determined.

b. How must the loads to the water resource change to achieve the goals?

Determine source management objectives to meet these needs. Who must reduce load, where and how much?

c. How will this be managed across the WMA?

Formulate a WMA-wide water quality management framework-plan that indicates the management priorities, requirements, CMS linkages, sectoral responsibilities and programme to achieve these objectives.

d. How, where, by whom and when will this be implemented?

Develop individual water quality management implementation plans, which may be source-, issue- or sector-specific, or even, multi-sectoral, to give effect to the water quality management framework plan.

Public participation process

Stakeholder engagement, underpinned by effective administrative support, is key to the successful development and implementation of the Integrated Water Quality Management Plan (IWQMP). Communication, sharing of information and engagement between members of the Department of Water and Sanitation, Project Steering Committee and Project Service Provider structures are very important.

Therefore, the identification of stakeholders in the study area is of utmost importance. A stakeholder database was developed comprising representatives from all sectors of society in the Olifants River WMA and beyond. Stakeholders who know of others who would want to participate in the study are welcome to contact the Public Participation Office.

The Project Steering Committee (PSC) will provide strategic direction and guidance and comprises representatives from the DWS National office, Directorates concerned with aspects of water quality function, as well as representation from the DWS Regional

offices, proto Catchment Management Agency (proto-CMA), other affected organs of state (e.g. Departments of Mineral Resources, Environmental Affairs, Agriculture, Forestry and Fisheries, district and local municipalities) and representatives of stakeholder sectors (e.g. conservation, agriculture/ irrigation, industry, mining, and others). It is envisaged that four PSC meetings will be taking place during the course of the study. These meetings will be linked to the achievement of key milestones achieved in the study.

Additional activities to keep stakeholders informed include:

- **Newsletters:** newsletters will be produced throughout the course of the project to keep PSC members and the broader body of stakeholders informed.
- **Access to information:** the DWS project website publishes all project documents to stakeholders to review and comment on.
- **Meetings with stakeholders:** a small number of meetings will be convened with the broader body of stakeholders during the course of the study.



Please contact the Public Participation Office should you wish to be kept informed of the project and progress:

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