



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA



DETERMINATION OF WATER RESOURCE CLASSES AND ASSOCIATED RESOURCE QUALITY OBJECTIVES IN THE THUKELA CATCHMENT: BACKGROUND

PROJECT STEERING COMMITTEE MEETING 01

Presented by:
Mohlapa Sekoele
Department: Water & Sanitation

Date: 16 JULY 2020

PRESENTATION CONTENT

- Legal Mandate
- Water Resource Classes
- Resource Quality Objectives (RQOS)
- Reserve
- Study Focus: The Determination of Classes and RQOs in the Thukela Catchment
- Process: Classification of water resources and determination of the Resource Quality Objectives
- Stakeholder Engagement

LEGAL MANDATE

- **The protection of water resources through Resource Directed Measures (RDM) is required by the National Water Act (NWA) (No. 36 of 1998) Chapter 3 regarding the protection of water resources)**
- **The Resource-Directed Measures for protection of water resources are:**
 - **Classification (S13)**
 - **Reserve (S16)**
 - **Resource Quality Objectives (S13)**
- **S12 requires the Minister to establish the Water Resource Classification System, (WRCS)**
- **WRCS was published as Regulation 810 in Government Gazette No. 33541 dated 17 September 2010**
- **The WRCS defines:**
 - **water resource classes and**
 - **the procedure to determine Class, RQOs and Reserve**
- **According to the NWA, once the WRCS has been gazetted all significant water resources must be classified**

WATER RESOURCE CLASSES

	Description of use	Majority of ecological categories
Class I	Minimally used	A-B
Class II	Moderately used	C
Class III	Heavily used	D

Ecological Category (EC) - means the assigned ecological condition to a water resource . It is measured by determining how much the ecosystem has changed from natural (pre-development condition).

RESOURCE QUALITY OBJECTIVES

RQOs are numeric or descriptive statements of conditions which should be met in the receiving water resource;

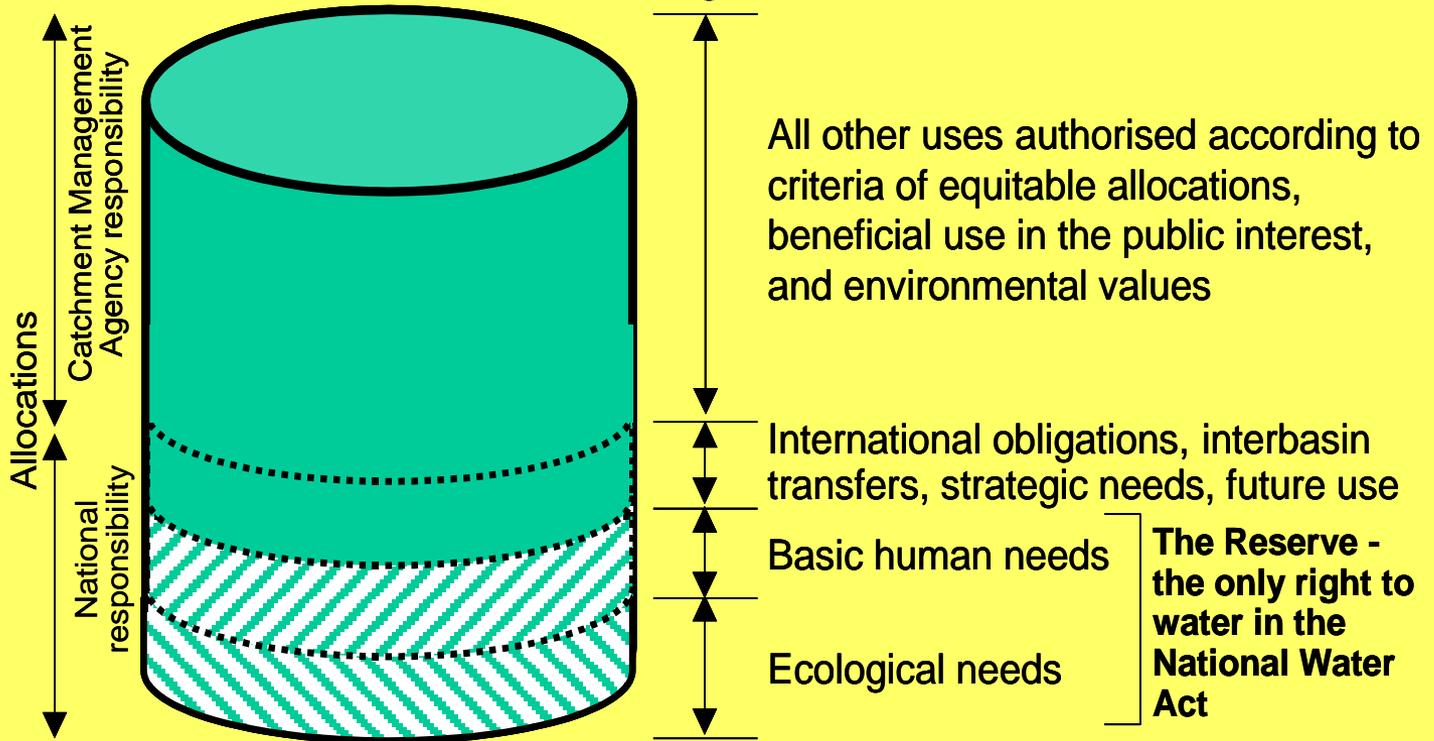
The objectives provide statements about:

- what the **quantity** of the water should be (water level, pattern, timing)
- what the water **quality** should be (physical, chemical and biological)
- what the condition of the instream and riparian (river bank) **habitat** should be
- what the condition of the aquatic (water) **animal and plant** life should be.

RESERVE

Balancing equity with sustainability - the Reserve

If all the water in the country could be put into a bucket, the “Reserve” is the water that must always be left in the bucket for basic human needs and ecological needs.

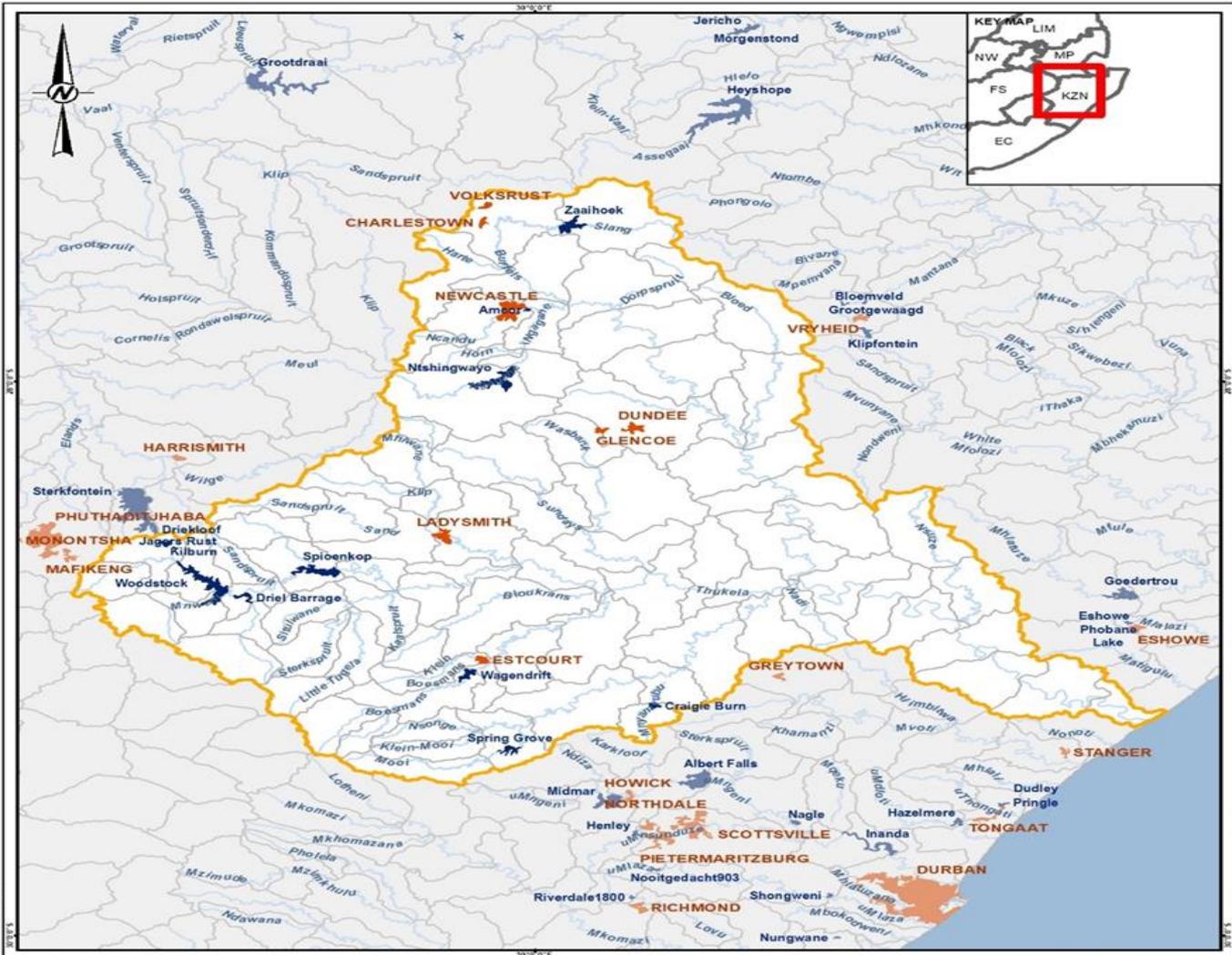


STUDY FOCUS: DETERMINATION OF CLASSES AND RQOS IN THE THUKELA CATCHMENT

- 30 Months project: from August 2019 to February 2021
- The aim of the project is to determine:
 - Water Resource Classes
 - Resource Quality Objectives
- Water Resource Classes and RQOs will be gazetted once approved by the Minister.

STUDY AREA

- The study area is the Thukela Catchment
- Primary drainage region V.
- This includes the four sub-catchments,
 - Upper Thukela,
 - Buffalo,
 - Mooi/Sundays,
 - Lower Thukela catchments.



LEGEND

- Major Rivers
- Quaternary Catchments
- Major Towns
- Provinces
- Dams
- Thukela Catchment

CLIENT
DEPARTMENT OF WATER AND SANITATION

CONSULTANT

YYYY-MM-DD	2019/12/10
DESIGNED	
PREPARED	MW
REVIEWED	PM
APPROVED	PM

SCALE

0 50 000 100 000
1:1 809 685 METRES

NOTE(S)

REFERENCE(S)
1. COORDINATE SYSTEM:

PROJECT
THUKELA WATER RESOURCE CLASSIFICATION

TITLE
LOCALITY

PROJECT NO. 1791356

CONTROL

REV

FIGURE

water & sanitation
Department of Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Path: S:\GIS\054\Figures\75104_Tpkm402021\0418175104_Tpkm_Locality.mxd PRINTED ON: 2019-12-10 14:12:58 PM
 If this measurement does not match what is shown on the site, please have been used from 1970-1974

CLASSIFICATION AND DETERMINATION OF RQOs: PROCESS

In accordance with the Classification and RQOs guidelines

1	Describe the status quo and delineate the study area into units of analysis (IUAs)	Stakeholder Engagement
2	Delineate and prioritise Resource Units (RUs)	
3	Quantify the ecological water requirements (EWRs)	
4	Identify and evaluate scenarios within the IWRM process	
5	Determine Water Resource Classes based on catchment configurations	
6	Determine RQOs and provide implementation information	
7	Gazette Water Resource Classes and RQOs	



STAKEHOLDER ENGAGEMENT

Objectives of the Stakeholder Engagement

- To improve the management process of the project.
- To reduce the potential for future conflict.
- To enable the Department and stakeholders to share knowledge and expertise.

Stakeholder Engagement Plan

Platforms	Stakeholder groups	Purpose
Project Steering Committee	Representatives from various Sectors	To provide strategic inputs to the project
Technical Task team Meeting	Representatives from sectors with technical knowledge of study area and water resource management	To source comments and inputs on technical aspects of the project
Public Meeting	The broader public	Information sharing
Forums	Catchment management forums	Information sharing
Sectors	Different sectors e.g. Domestic, Agriculture, mining etc. (where necessary).	Information sharing

Outcomes of the Stakeholder Engagement

- Final technical reports
- Updated data sources
- Issues and response register
- Updated stakeholder database

THANK YOU

Contacts:

	Email address	Telephone	Mobile
Project Manager: Ms Mohlapa Sekoele	sekoelem@dws.gov.za	012 336 8329	082 809 5418
Scientist Manager: Mr Mkhevu Mnisi	mnisim2@dws.gov.za	012 336 6887	082 908 3291
Director: Ms Lebogang Matlala	matlalal@dws.gov.za	012 336 6707	082 884 5399

<http://www.dwa.gov.za/rdm/WRCS/default.aspx>