



**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

## PUBLIC MEETING 01

Presented by:  
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Date: 26-27 February 2020

# PRESENTATION CONTENT

- Legal Mandate
- The Water Resource Classification System (WRCS)
- Process for the classification of water resources and determination of the Resource Quality Objectives
- Water Resource Classes
- Resource Quality Objectives (RQOS)
- The Determination of Classes and RQOs in the Thukela Catchment
- Stakeholder Engagement

# LEGAL MANDATE

- **The classification of South African water resources 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**
- **According to the NWA, once the WRCS has been gazetted all significant water resources must be classified**

# CLASSIFICATION SYSTEM

➤ **The WRCS defines:**

- **water resource classes and**
- **the procedure to determine Class, RQOs and Reserve**

## 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	

# WATER RESOURCE CLASSES

## A Class

- describes what state the water resources need to be in to satisfy beneficial use;
- facilitates the balance between protection and use of the water resources;
- is defined by taking into account the social, economic & ecological landscape;

# THREE WATER RESOURCE CLASSES

<b>Classes</b>	<b>Description of use</b>	<b>Ecological categories</b>
<b>Class I</b>	<b>Minimally used</b>	<b>A-B</b>
<b>Class II</b>	<b>Moderately used</b>	<b>C</b>
<b>Class III</b>	<b>Heavily used</b>	<b>D &amp; lower</b>

**Ecological Category (EC)** - means the assigned ecological condition to a water resource in terms of the deviation of its biophysical components from a pre-development condition.

## RESOURCE QUALITY OBJECTIVES (RQOS)

- RQOs are numeric or descriptive statements of conditions which should be met in the receiving water resource;
- RQOs represent the requirements for water quantity, quality, and habitat and biotic integrity to be maintained in aquatic ecosystems.
- They are targets that can be measured/audited, and can be used as benchmarks to monitor a combined resource that may have several licensed users.
- RQOs provide measurable goals that give direction as to how the resources need to be managed.

# DETERMINATION OF CLASSES AND RQOS IN THE THUKELA CATCHMENT

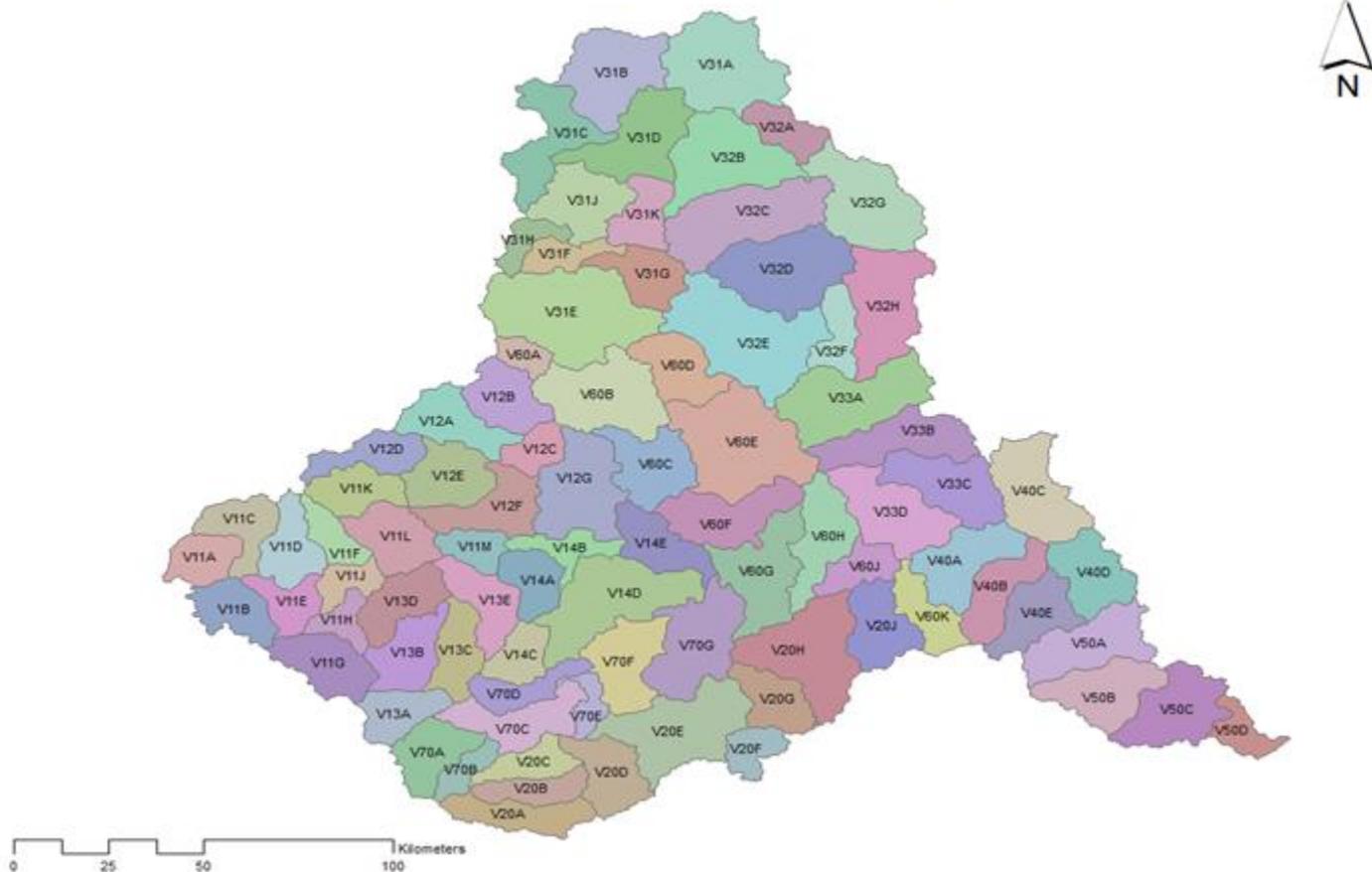
- 30 Months project: from August 2019 to February 2021
- The aim of the project is to determine:
  - Water Resource Classes
  - Resource Quality Objectives
- Golder Associates Africa was appointed to assist DWS

# 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.

# Map

## Thukela Quaternaries





# STAKEHOLDER ENGAGEMENT

# OBJECTIVES OF THE STAKEHOLDER ENGAGEMENT

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

# TARGETED STAKEHOLDERS

- Agriculture
- Emerging Farmers
- Mining – COM and mining houses
- Industries
- Local government – local and district municipalities in Catchment
- Conservation
- NGOs
- Regulators
- Water Service Authorities/Providers
- Information/Academic institutions – libraries, universities
- Unions & House of Traditional leaders
- Catchment Forums & WUA
- Civil society and the environment representatives
- Community members (public at large)

# STAKEHOLDER ENGAGEMENT: COMMUNICATION METHODS

- Direct communication via meetings
  - Identified Platforms: Project Management Committee (PMC), Project Steering Committee (PSC), Technical Task Group (TTG), Existing Forums, Sector, Public Meetings
  
- Print media
  - newspaper adverts
  - BIDs, newsletters
  
- Electronic media
  - DWS internet site ( [www.dwa.gov.za/rdm/WRCS/default.aspx](http://www.dwa.gov.za/rdm/WRCS/default.aspx) )
  - Emails
  
- Stakeholder database and Issues & Response Register to be updated regularly

## OUTCOMES OF THE STAKEHOLDER ENGAGEMENT

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

# THANK YOU

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