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Water and Sanitation
REPUBLIC OF SOUTH AFRICA



Determination of Water Resource Classes, Reserve & Associated Resource Quality Objectives (RQOs) in the Keiskamma and Fish to Tsitsikamma Catchments

Presentation by:
Lawrence Mulangaphuma
Date: 10 and 12 February 2026



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PRESENTATION CONTENT

- Legal mandate
- Definition of Resource Directed Measures (RDM)
- Study processes/steps
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Determination of water resource Classes, Reserve and RQOs in the Keiskamma and Fish to Tsitsikamma catchments

- September 2021 to May 2026
- The aim of the project is to determine:
 - ❖ Water Resource Classes
 - ❖ The Reserve
 - ❖ Resource Quality Objectives
- Groundtruth cc was appointed to assist DWS

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Legal Mandate

- Chapter 3 of the National Water Act (No. 36 of 1998), deals with the protection of water resources
- The 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 and Resource Quality Objectives determined

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DEFINING THE WATER RESOURCE CLASS

- Water Resources:
 - Rivers
 - Estuaries
 - Wetlands
 - Groundwater
- Each class represents
- A different level of protection that is required for the water resource
- The extent to which water can be used

Class	Description of Use	Ecological Category	Description of Resource Condition
Class I	Minimally used	A–B	Minimally altered
Class II	Moderately used	C	Moderately altered
Class III	Heavily used	D	Heavily altered

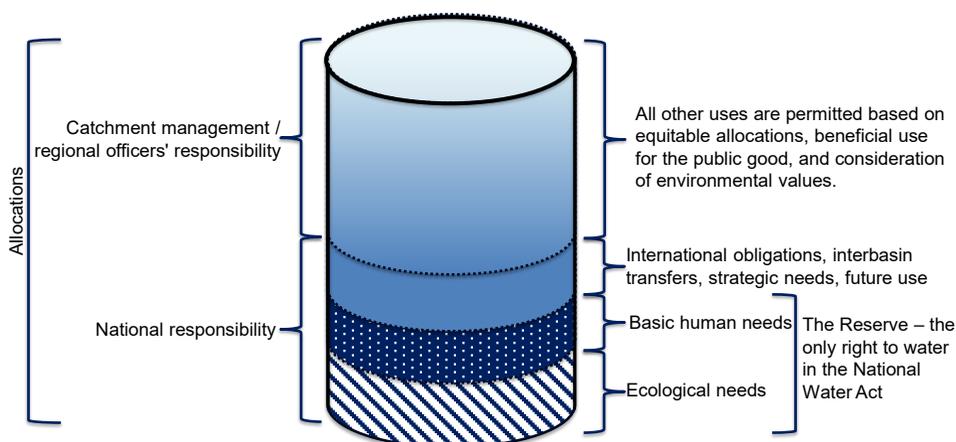
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SETTING THE RESERVE

Achieving a balance between equity and sustainability – the Reserve



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RESOURCE QUALITY OBJECTIVES

- RQOs provide statements / clear goals relating to:
 - What the quantity of water should be (water level, pattern, timing)
 - What the quality should be (physical, chemical, biological)
 - What the condition of the instream/riparian habitat should be (river bank)
 - What the condition of the aquatic (water) animals and plant life should be
- Provide limits or boundaries for the sustainable use of water resources
- In determining RQOs, a balance must be sought between the need to protect and sustain water resources and the need to use them
- Must take account of user requirements and the class of the resource
- Binding on all authorities and institutions
- The RQOs may inform decision-making relating to the use of the water in a specific water resource.



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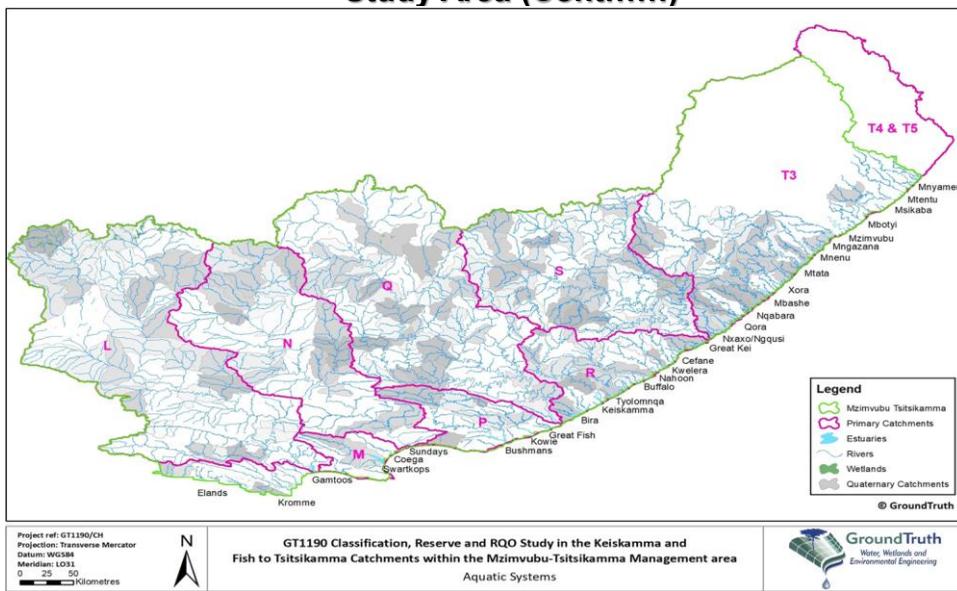
Study Area

- The study area forms part of the Mzimvubu to Tsitsikamma Water Management Area (WMA7).
- The water resources of the Mzimvubu River (T31 – T36) are not included as part of the study area for the purposes of this study.
- The larger drainage basins are the:
 - ❖ Mbashe River (part of drainage region T and includes T11, T12 and T13),
 - ❖ Great Kei River (drainage region S),
 - ❖ Great Fish (drainage region Q),
 - ❖ Sundays (drainage region N), and
 - ❖ Gamtoos River (drainage region L).
- The small drainage regions include the:
 - ❖ Mthatha River (drainage region T20),
 - ❖ Small coastal rivers in the Pondoland area (drainage regions T60 to T90),
 - ❖ Keiskamma, Buffalo, Nahoon and Gqunube Rivers (drainage region R),
 - ❖ Kowie, Kariega and Boesmans Rivers (drainage region P),
 - ❖ Koega and Swartkops Rivers (drainage region M),
 - ❖ Krom and Seekoei Rivers (drainage region K90), and
 - ❖ Tsitsikamma and small coastal rivers in drainage region K80.

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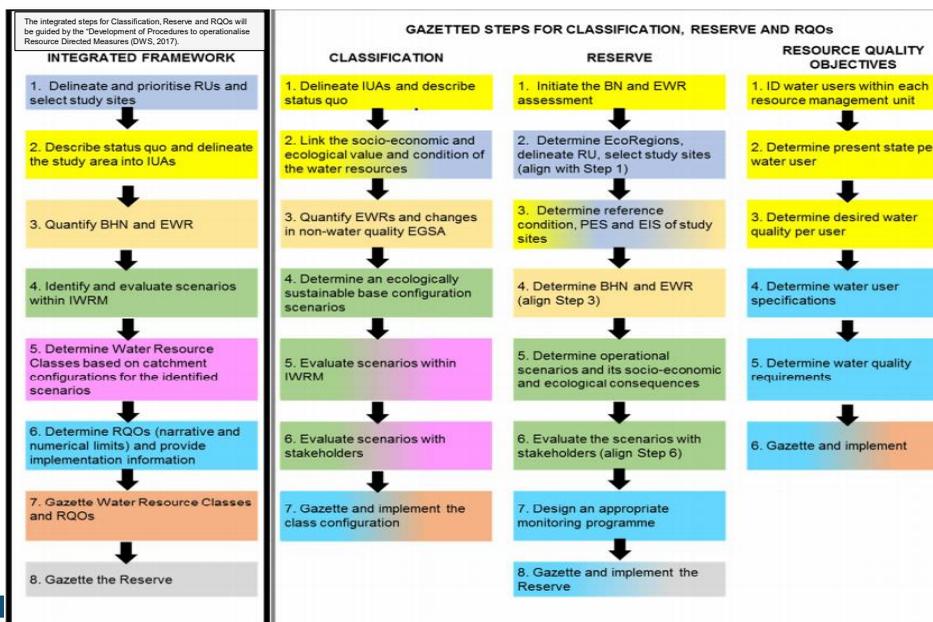
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Study Area (Cont.....)



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STUDY INTEGRATED APPROACH



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Progress made so far.....

- Nineteen (19) Integrated Units of Analysis were identified.
- Ninety (Priority 1) and 102 (Priority 2) Resource Units (RUs) for rivers, dams, estuaries, groundwater, and wetlands.
- The EWR quantification phase for rivers and estuaries has been completed
- Five (5) operational scenarios were defined and evaluated.
- Sixteen IUAs are in Class III, except for two IUAs classified as Class II and one as Class I.
- The report is completed on the determined RQOs for all prioritised RUs across significant water resources.

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Public meeting/ stakeholders engagement

Objectives:

- **Ensuring understanding:** transparent process of engagement & communication will be undertaken to ensure stakeholders are informed.
- **Involving stakeholders in the assessment:** to improve the management process of this project
- **Building relationship:** to enable the Department and stakeholders to share knowledge and expertise.
- **Managing expectations:** to reduce the potential for future conflict.
- **Effective communication:** for successful project outcome, simply producing reports is not enough.

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Stakeholder Engagement Plan

Platforms	Stakeholder groups	Purpose
Public Meetings	The broader public	To announce the project & To present the proposed classes & RQOs 20 - 21/04/22 ; 10-12/02/26
Project Steering Committee	Representatives from various Sectors	To give strategic inputs to the project 10/06/2022 ; 28/06/23 ; 21/01/25 ; 24/06/25
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 02 – 06 June 2025
Forums	Catchment management forums	Share project progress
Sectors	Different sectors e.g. Domestic, Agriculture, mining etc. (where necessary).	Share project progress 25 – 28 March 2025



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Public meeting: 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)



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Communication method

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 (<https://www.dws.gov.za/RDM/WRCS/>)
Emails

NB: Stakeholder database and Issues & Response Register to be updated regularly

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ABOUT US

Purpose: Water Ecosystems Management develops measures to protect water resources. This entails determining appropriate protection levels and goals described by the Class, Resource Quality Objectives and Reserves of water resources as well as developing water resource protection strategies supported by water quality management plans aimed at priority interventions.

Description of functions:

The authority to carry out the following functions is delegated to the Chief Director: Water Ecosystems Management.

- a) Determination of the class of water resources and resource quality objectives (Section 13 of the NWA),
- b) Preliminary determination of the class and resource quality objectives (Section 14 of the NWA),
- c) Determination of the Reserve (Section 16 of the NWA), and Preliminary determinations of the Reserve (Section 17 of NWA).

The service rendered by the Chief Directorate: Water Ecosystems Management can thus be outlined as follows:

- Facilitate and coordinate the classification of water resources and Reserve determination (and updating thereof) for all significant water resources.
- Development of indicators of water ecosystems requirements (both resource quality and quantity) against specified resource quality objectives (RQOs) and the Reserve.
- Prioritization, piloting and co-ordination of resource directed measures (RDM) implementation, i.e. the Reserve, water resources classification and resource quality objectives; and Capacity building and technical support in order to give effect to RDM.

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Purpose: The purpose of the Directorate: Water Resources Classification (D:WRC) is to develop policies, strategies, systems, methodologies and guidelines to facilitate the protection of water resources through the progressive classification of significant water resources as well as determine in a phased and progressive manner, the classes of significant water resources in the country.

Description of functions:

Chapter 3 of the National Water Act, 1998 (Act 36 of 1998) (NWA) makes provision for a series of measures to ensure the comprehensive protection of all water resources, which includes the determination of the classes, Reserve and resource quality objectives for all or part of water resources considered to be significant. According to the NWA, once the regulations for a water resource classification system have been published, where appropriate, the class of a water resource, the Reserve and resource quality objectives must be determined and approved by the delegated authority. The above-mentioned regulations were subsequently promulgated in September 2010 thereby giving effect to the establishment of a prescribed water resources classification system.

The services rendered by the D: WRC can thus be outlined as follows:

- Develop policies, strategies, systems, methodologies and guidelines for the classification of water resources
- Developing and incrementally updating a water resources classification system;
- Co-ordinating the determination of the class of all significant water resources.
- Scientific and water resource classification related support for the implementation of strategic imperatives (i.e. Climate Change and NWRS).
- Development and maintenance of strategic relationships within the department and with other organs of state, NGO's and stakeholders.
- Develop and maintain the necessary WRC support required to fulfil this function.
- Financial planning according to PFMA and MTEF.

[Water Resource Classification – Active Projects](#) ★

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THANK YOU!

Professional Service Provider:

Stakeholder Engagement Specialist
Ms Fonda Lewis
082 803 8989 / 033 343 2229
Stakeholder.fish@groundtruth.co.za

Project Director
Dr Mark Graham
mark@groundtruth.co.za

Project Manager
Mrs Kylie Farrell
0836864212
Kylie.farrell9@gmail.com

Department of Water and Sanitation:

Project Manager
Mr Lawrence Mulangaphma
mulangaphuma@dws.gov.za

Project Manager
Ms Tinyiko Mpete
mpeteT@dws.gov.za

All study reports can be accessed from the DWS website: <https://www.dws.gov.za/RDM/WRCS/>