



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA



GroundTruth
environment & engineering

Keiskamma and Fish to Tsitsikamma Water Resource Classes, Reserve and RQOs Determination PSC Meeting
Venue: MS Teams (Online)
24 June 2025

Chairperson(s): Mr. Yakeen Atwaru (DWS)

Agenda: Annexure I

Attendance List: Annexure II

PowerPoint Presentations: Provided with meeting minutes and provided in link: <https://www.dws.gov.za/wem/WRCS/kft.aspx>

Abbreviations:

CSIR	- Council for Scientific and Industrial Research
DEDEAT	- Department of Economic Development, Environmental Affairs and Tourism
DWS	- Department of Water and Sanitation
EWR	- Ecological Water Requirements
IUA	- Integrated Units of Analysis
PSC	- Project Steering Committee
RQOs	- Resource Quality Objectives
RU	- Resource Units
SAEON	-South African Environmental Observation Network
TPC	-Threshold of Potential Concern

	DISCUSSION AND DECISIONS	RESPONSES	ACTIONS / MATTERS ARISING
1. Welcome	The Chair, Mr. Yakeen Atwaru (DWS) welcomed all attendees and opened the fourth Keiskamma and Fish to Tsitsikamma Catchment Water Resource Classes, Reserve and RQOs Determination Project Steering Committee (PSC) Meeting.		
2. Attendance/Apologies	<p>Attendees' details were noted in the attendance register.</p> <p>Apologies received for the meeting:</p> <ul style="list-style-type: none"> - Cebisa Goboza (Department of Water and Sanitation) - Bhekokwakhe Kunene (Department of Water and Sanitation) - Barbara Weston (Department of Water and Sanitation) - Tinyiko Mpete (Department of Water and Sanitation) - Ndileka Mohapi (Department of Water and Sanitation) - Bolekwa Kama (Department of Water and Sanitation) - Portia Makhanya (Department of Water and Sanitation) - Neliswa Piliso (Department of Economic Development, Environmental Affairs and Tourism) - Bennie Haasbroek (Hydrosol consulting) - Johan Kotze (Dutoit Agri) - Duncan Shaw (GIBB Engineering) - Nikite Muller (Amatola Water) - Sikhumbuzo Yoko (Amathole District Municipality) - Dr. Daniel Lemley (Nelson Mandela University) - Prof Nikki James (NRF The South African Institute for Aquatic Biodiversity (SAIAB)) - Dr. Mark Graham (GroundTruth) 	The apologies were noted.	

	DISCUSSION AND DECISIONS	RESPONSES	ACTIONS / MATTERS ARISING
3. Acceptance of Agenda/ Additions to Agenda	The meeting's agenda was accepted without any changes.		
4. Purpose of the PSC meeting	Mr. Yakeen Atwaru (DWS) outlined the purpose of the PSC meeting. He noted that the main purpose was to present the Integrated Units of Analysis (IUA) for T03 and T04 (Mthatha and Pondoland respectively) and also recap on the work that has been done thus far in the study.		
5. Adoption of the previous meeting minutes	The minutes were adopted as a true reflection of the previous Project Steering Committee (PSC) meeting held on 21 January 2025.		
6. Background of the study	Mr. Lawrence Mulangaphuma (DWS) presented on the project progress. The presentation gave a background of the project (inclusive of the project sites) as well as the process and approach of the study, the process of stakeholder engagement as well as the completed and upcoming deliverables associated with the study. He further provided a DWS link to access project progress reports and related materials.		
7. Technical presentation	<p>Ms. Kylie Farrell (GroundTruth) gave a presentation on the project that outlined the process of resource classification and Resource Quality Objectives (RQOs) determination. Ms. Farrell, Ms. Retha Stassen (GroundTruth), Mr. Steven Ellery (GroundTruth), Mr. Robert Schapers (JG Afrika) and Dr. Lara van Niekerk (CSIR), presented and gave an overview of the RQOs set for the rivers & dams, wetlands, groundwater and estuaries in the T03 and T04 catchments.</p> <p>[Power point presentation is available online at https://www.dws.gov.za/RDM/WRCS/kft.aspx and provided with the meeting minutes].</p>		
7.1 Scope of study and study area	Comments and Questions:	Responses to corresponding issues raised by stakeholders:	

	DISCUSSION AND DECISIONS	RESPONSES	ACTIONS / MATTERS ARISING
	N/A	N/A	
7.2 Overview of Reserve, Classification and RQOs	Comments and Questions: N/A	Responses to corresponding issues raised by stakeholders: N/A	
7.3 What are RQOs and their importance?	N/A	N/A	
7.4 Recap on water resource prioritisation	Comments and Questions: N/A	Responses to corresponding issues raised by stakeholders: N/A	
7.5 Methodology to establish RQOs	Comments and Questions: N/A	Responses to corresponding issues raised by stakeholders: N/A	
8. Presentation of RQO results			
8.1 IUA_T03 (Mthatha) and its prioritised water resources	Comments and Questions: 1. Pieter Viljoen (DWS) commented and noted that the stricter categories downstream of the wastewater treatment works (WWTW), may not be successful. He also noted that the DWS, 2008 guidelines for setting water quality for Reserves was not signed off by DWS. Perhaps to consider using the TWQR, 1996 guidelines which has recently been updated through the Water Research Commission.	Responses to corresponding issues raised by stakeholders: 1. Ms Kylie Farrell (GroundTruth) acknowledged and agreed that strict RQOs could not be established downstream of the Mthatha WWTW. However, she emphasised the importance of considering the water quality at the further downstream EWR site. Consequently, it was proposed to set a Category C for the water quality downstream of the WWTW to minimise significant impacts on the water quality of the river and the Mtata Estuary. To effectively manage the system,	PSP to respond on the use of the 2008 water quality for Reserve guidelines

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		implementation measures must be established to ensure the functionality of the WWTW and prevent raw sewage from entering the Mthatha River. Regarding the DWS, 2008 guidelines, Ms Farrell confirmed that the DWS, 2008 guidelines provided more information for the categories, but will respond further once discussed with DWS.	
8.2 IUA_T04 (Pondoland) and its prioritised water resources	Comments and Questions: N/A	Responses to corresponding issues raised by stakeholders: N/A	
8.3 Rivers and dams RQOs (T03, T04)	Comments and Questions: None 1. Mr. Sifiso Maseko (DWS) requested clarity on the relationship between the quality and the quantity of the release for the Mthatha Dam. Mr. Maseko asked if the quantity aspect was included when the quality component was being determined, in order to improve the RQO or if it was only the baseflow that was considered. Mr. Maseko further noted that the hydropower in Mthatha has not been functional for a long period of time and suggested that clauses or disclaimer statements be added onto the RQOs specifying that the RQOs monitoring can effectively be carried out once the hydropower is functional again or that the monitoring must note if the hydropower is functional or not at that particular time. Lastly, he queried whether there would be an ecological impact of halting hydropower releases from the Ncora Dam to the Mbashe River due to the non-	Responses to corresponding issues raised by stakeholders: 1. Mr. Yakeen Atwaru (DWS) responded and noted that for the flow releases from the Mthatha Dam are to ensure that the Ecological Water Requirements (EWR) are met. Therefore, the releases upstream of the EWR site and the estuary must cater for the EWR downstream. Ms. Kylie Farrell (GroundTruth) also responded in agreement and noted that the RQOs that are set are gazetted and are, therefore, binding. It is then the responsibility of DWS and other government departments to ensure that the RQOs are met. Ms. Retha Stassen (GroundTruth) also responded and noted that irrespective of the functionality of	

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	<p>functional hydropower system assessed, and what were the findings.</p> <p>2. Mr. Pieter Viljoen (DWS) requested for clarification on the study's definition of the Threshold of Potential Concern (TPC) i.e. how would it be enforced.</p> <p>3. Ms. Ilse Chilton (DWS) commented and noted that at the Mthatha Dam there are 2 large sluice gates for the hydropower releases and there are no</p>	<p>the hydropower, the EWR need to be released. If the hydropower releases are functional, this will contribute to the requirements of the EWR, as the EWR is downstream and, therefore, will be catered for by releasing the hydropower. Ms. Stassen noted that the impact on the ecology of stopping the hydropower release to the Mbashe due to the non-functional hydropower was considered for the Ncora Dam. It was found that there would not be a negative impact. She noted that irrespective of the hydropower's functionality, the ecology would be unaffected.</p> <p>2. Ms. Kylie Farrell (GroundTruth) responded and noted that the TPC is incorporated into ecological specifications and serves as a guideline for the Department, Catchment Management Agencies (CMAs), and other government departments undertaking the monitoring. The TPC will assist in determine whether the RQO is being met or, conversely, whether a red flag is raised due to changes in the system that prevent the RQO from being achieved. She noted that it is the Department's decision whether to include or exclude the TPC in the gazette.</p> <p>3. Ms. Retha Stassen (GroundTruth) noted that the information that was provided on the maximum releases</p>	

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	<p>facilities for smaller releases to cater for continuous EWR or for small volumes to be released. Ms. Chilton also asked what corrective measures could be implemented and within what time frames should those measures be implemented if the electrical conductivity is not met.</p>	<p>of the Mthatha Dam was used to guide the setting of the requirements. The requirements are not set beyond the release capacity of the dam. She further noted that with the EWR site being quite far downstream from the dam, there is some flow coming in from the catchments in between that will contribute to the EWR. The releases for the hydropower were adequate for supplying the baseflows.</p> <p>Ms. Lebogang Matlala (DWS) responded and noted that the RQOs that will be set are set in Resource Units (RUs) that have been prioritised based on the uses and activities around each particular RU. This is when compliance comes into play. When the time for implementation comes, the first step is determining if the RQOs are being met or not through the monitoring process. If the RQOs are not being met, the reasons or causes of non-compliance are investigated and the appropriate corrective measures and timeframes are proposed and applied. The timeframes of the corrective measures are, therefore, determined based on the particular non-compliance issues uncovered during the monitoring.</p>	
8.4 Wetland RQOs (T04)	<p>Comments and Questions:</p> <ol style="list-style-type: none"> Ms. Jenny Pashkin (DWS) commented and noted that with regards to the groundwater development, 	<p>Responses to corresponding issues raised by stakeholders:</p> <ol style="list-style-type: none"> Ms. Kylie Farrell (GroundTruth) commented and noted that the 	PSP to include in the Monitoring, Measuring and

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	there needs to be a disclaimer included when being prohibitive of groundwater development (e.g. drilling) if it is affecting the base flow.	Monitoring, Measuring and Implementation Plan will bring in the clause for the T04 prohibiting any further borehole drilling especially where there is a contribution to baseflow.	Implementation Plan
8.5 Groundwater (T03, T04)	Comments and Questions: N/A	Responses to corresponding issues raised by stakeholders: N/A	
8.6 Estuaries (T03, T04)	Comments and Questions: 1. Mr. Pieter Viljoen (DWS) asked for the 0-35 salinity range unit of measurement to be specified. He further commented and noted that perhaps the 0 could be excluded from the range and perhaps the range could be rephrased and rather reflected as less than 35 (<35). He also noted that if the gradient of the salinity measurement is important, it should be worked into the salinity figure.	Responses to corresponding issues raised by stakeholders: 1. Ms. Lara Van Niekerk (CSIR) responded and noted that the units of measurements are milligrams of salt per litre. She further noted that the 0-35 range was used as it is inclusive of a gradient of numbers but the <35 could just indicate one single constant number e.g. 34. The gradient is inclusive of any number in the range. She noted that if estuaries are closed for long periods of time, it may freshen out i.e. there will be low salinity or in drier areas, the water will evaporate and therefore it will go into hyper salinity. The range could then accurately capture the correct salinity of the estuary. She noted that, however, the use of the alternative form of the range would be considered and that a note would be included that the full gradient should be present at all	PSP to include in the Monitoring, Measuring and Implementation Plan

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	<p>2. Mr. Pieter Viljoen (DWS) commented and noted that the study must consider also including a descriptive RQO for the salinity.</p>	<p>times or that the gradient is only expected during floods etc. In the Monitoring, Measuring and Implementation Plan, it will be noted that especially for nutrients, the environmental limits for estuaries are often below the normal detection limits. Therefore, salinity is less of a concern but nutrients are more of an issue. The Monitoring, Measuring and Implementation Plan will also recommend that organisation such as South African Environmental Observation Network (SAEON) who have started monitoring systems such as the Kromme and the Gamtoos estuaries. The DWS regional office can, therefore, collaborate with such organisations.</p> <p>2. The comment was noted.</p>	
9. Next steps for the study: Classification, RQO and Reserve Draft Gazette	<p>Ms. Lebogang Matlala (DWS) presented the way forward. She noted that the RQOs report will be updated and circulated. Furthermore, the study will have a public meeting later in the year. Lastly, she noted that there will be a draft Legal Notice that will be released for public comment later in the year.</p> <p>She encouraged and urged all stakeholders to engage with the reports, documents and presentations that are posted on the link given <u>above (page 1) and below the agenda.</u></p>		
10. Closure and thank you	Mr. Atwaru thanked all attendees for attending and closed the fourth Keiskamma and Fish to Tsitsikamma Water		

	DISCUSSION AND DECISIONS	RESPONSES	ACTIONS / MATTERS ARISING
	Resource Classes, Reserve and RQOs Determination PSC Meeting.		

Signed:

**Professional Service Provider: Dr Mark Graham
 (GroundTruth)**

**Chairperson: Mr. Yakeen Atwaru
 (Department of Water and Sanitation)**



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

WP11354

**DETERMINATION OF WATER RESOURCE CLASSES, RESERVE AND
RESOURCE QUALITY OBJECTIVES (RQOs) FOR THE WATER RESOURCES IN
THE KEISKAMMA AND FISH TO TSITSIKAMMA CATCHMENT**

PROJECT STEERING COMMITTEE (PSC) MEETING 4

RESOURCE QUALITY OBJECTIVES FOR ALL WATER RESOURCES

Date:	24 June 2025
Time:	09h00 – 14h30
Virtual	Teams Meeting Platform Meeting ID: 378 368 025 615 Passcode: v6Ra9A3Q
Chairperson	Mr. Yakeen Atwaru
Purpose of the Project Steering Committee Meeting	
<p>The purpose of this PSC meeting with key stakeholders on the project is as follows:</p> <ul style="list-style-type: none"> • Recap and guide the stakeholders through the RQO determination process <ul style="list-style-type: none"> • Provide a detailed walkthrough of the methodology for establishing Resource Quality Objectives (RQOs), in alignment with Step 6 of the Integrated Framework. This includes defining RQOs with narrative and numerical limits and outlining implementation strategies. • Review the steps previously undertaken for the establishment of RQOs (Steps 1 to 5) as per the gazetted process for RQO determination. • Present selected Integrated Units of Analysis <ul style="list-style-type: none"> • This PSC meeting will focus specifically on two Integrated Units of Analysis (IUAs): <ul style="list-style-type: none"> • IUA T03 (Lower Mthatha) – Class III; and • IUA T04 (Pondoland) – Class I. • Evaluate RQOs for Selected Indicators <ul style="list-style-type: none"> • Summarise and discuss the proposed RQOs for a selected prioritised Resource Unit (RU) for rivers, wetlands, estuaries, groundwater and major dams within these 2 IUAs. This will involve analysing specific indicators and their relevance to the water resources under consideration. • Address Stakeholder Feedback <ul style="list-style-type: none"> • Provide a platform for stakeholders to raise pressing concerns, ask questions, and seek clarifications regarding the proposed RQOs before they are finalised for gazetting. <p>Your participation in these discussions is vital to ensuring the comprehensive and effective management of the water resources in these catchments.</p>	

AGENDA			
1.	Welcome	09h00 – 09h05	Mr Yakeen Atwaru
2.	Attendance/Apologies	09h05 – 09h10	Mr Yakeen Atwaru
3.	Acceptance of Agenda	09h10 – 09h15	All
4.	Purpose of the PSC Meeting	09h15 – 09h30	Mr Yakeen Atwaru
5.	Background of the study	09h30 – 09h45	Mr Lawrence Mulangaphuma
5.	Technical presentation	09h45 – 10h30	Ms Kylie Farrell
5.1	Scope of study and study area		
5.2	Overview of Reserve, Classification and RQOs		
5.3	What are RQOs and their importance?		
5.4	Recap on water resource prioritisation		
5.5	Methodology to establish RQOs		
Tea/coffee break (10H30 – 10H45)			
6.	Presentation of RQO results	10h45 – 12h00	PSP Team
6.1	IUA_T03 (Mthatha) and its prioritised water resources		
6.2	IUA_T04 (Pondoland) and its prioritised water resources		
6.3	Rivers and dams RQOs (T03, T04)		
6.4	Wetland RQOs (T04)		
Light lunch break (12h00 – 13h00)			
6.5	Groundwater (T03, T04)	13h00 - 14h00	PSP Team
6.6	Estuaries (T03, T04)		
7.	Next steps for the study: Classification, RQO and Reserve Draft Gazette	14h00 – 14h15	Ms Lebogang Betty Matlala
8	Closure and thank you	14h15 – 14h30	Mr Yakeen Atwaru
Close			

Website for Reports and Document : <https://www.dws.gov.za/RDM/WRCS/kft.aspx>

Annexure II: ATTENDANCE LIST

PLEASE NOTE – personal information has been redacted from the attendance list below in line with the Protection of Personal Information Act No 4 of 2013, (POPIA), which came into effect on 1 July 2021.

Organisations in Attendance	
Department of Water and Sanitation attendance	
DWS	22
PSC panel attendance	
Department of Economic Development, Environmental Affairs and Tourism	Buffalo City Municipality
Department of Economic Development, Environmental Affairs and Tourism	Buffalo City Municipality
Department of Economic Development, Environmental Affairs and Tourism	Gamtoos Water Users Association
Nelson Mandela Bay Metropolitan	Department of Forestry, Fisheries and Environment
Nelson Mandela Bay Metropolitan	Agri-EC
Kouga Local Municipality	Water Research Commission
Kouga Local Municipality	
Project team attendance	
GroundTruth	JG Afrika
GroundTruth	CSIR
GroundTruth	
GroundTruth	