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: Blue Lagoon Conference Venue, East London (In-person) and MS Teams (Online)**
**21 January 2025**

**Chairperson(s): Ms. Ndileka Mohapi (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:**

| | |
|---|---|
| **BCM** | **- Buffalo City Municipality** |
| **CSIR** | **- Council for Scientific and Industrial Research** |
| **DEA** | **- Department of Environmental Affairs** |
| **DEDEAT** | **- Department of Economic Development, Environmental Affairs and Tourism** |
| **DFFE** | **- Department of Forestry, Fisheries and Environment** |
| **DWS** | **- Department of Water and Sanitation** |
| **EWR** | **- Ecological Water Requirements** |
| **IUA** | **- Integrated Units of Analysis** |
| **LM** | **- Local Municipality** |
| **MISA** | **- Municipal Support Infrastructure Agent** |
| **REC** | **- Recommended Ecological Category** |
| **PES** | **- Present Ecological State** |
| **PSC** | **- Project Steering Committee** |
| **PSP** | **- Professional Service Provider** |
| **RQOs** | **- Resource Quality Objectives** |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| **1. Welcome** | The Chair, Ms. Ndileka Mohapi (DWS) and Ms. Portia Makhanya (DWS) welcomed all attendees and opened the third Keiskamma and Fish to Tsitsikamma Catchment Water Resource Classes, Reserve and RQOs Determination Project Steering Committee (PSC) Meeting. | | |
| **2. Attendance/Apologies** | Attendees' details were noted in the attendance register.<br><br>Apologies received for the meeting:<br>- Phumlani Ntobeko Cele (DWS)<br>- Dayton Tagwi (DWS)<br>- Fundisiwe Pakkies (DWS)<br>- Ncamile Dweni (DWS)<br>- Ilse Chilton (DWS)<br>- Lucrecia Mdluli (DWS)<br>- Yakeen Atwaru (DWS)<br>- Bolekwa Kama (DWS)<br>- Jackie Jay (DFFE)<br>- Yolokazi Galada (DFFE)<br>- Charles de Kock (Kouga LM)<br>- Sandra Mutangadura (Municipal Support Infrastructure Agent - MISA)<br>- Wentzel Coetzer (Conservation Outcomes)<br>- Bonani Madikizela (Water Research Commission) | The apologies were noted. | |
| **3. Approval and action items from previous minutes (PSC 2, 28 June 2023)** | The meeting minutes were adopted and accepted as a true reflection of the previous PSC meeting.<br><br>The updates of the action items from the previous PSC meeting were noted in the Actions List. | | |
| **4. Acceptance of Agenda/ Additions to Agenda** | The meeting's agenda was accepted without any changes. | | |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| **5. Purpose of the PSC meeting** | Ms. Ndileka Mohapi (DWS) outlined the purpose of the PSC meeting. | | |
| **6. Project Overview** | 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 brief overview of the latest deliverables uploaded onto the DWS website being the Scenario Report, Socio-economic Report and Final Estuary Report. | | |
| | **Comments and questions on the presentation by DWS:**<br>1. N/A | | |
| **7. Technical presentation PSP** | Ms. Kylie Farrell (GroundTruth) gave a presentation on the project that outlined the Project progress to date since the previous PSC meeting as well as an overview of some of the outcomes of the priority rivers and priority wetlands. Dr. Lara van Niekerk (CSIR), Dr Mark Graham (GroundTruth), Mr. Jonathan Schroder (AECOM) and Ms. Karen Eatwell (Prime Africa) presented and gave an overview of some of the outcomes of the assessments of the priority estuaries, an overview of the proposed water resource scenarios i.e. the development and assessments of these scenarios, the ecological and socio-economic consequences for the study area and results for two focused Integrated Units of Analysis (IUAs) – the Gamtoos and the Great Kei for the purpose of this PSC meeting.<br><br>[Power point presentation is available online at https://www.dws.gov.za/RDM/WRCS/kft.aspx and provided with the meeting minutes]. | | |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| **7.1 Project progress to date since the previous PSC meeting** | **Comments and Questions:**<br><br>1. Dr Mark Graham (GroundTruth) asked if a response to the letter outlining and detailing some of the sandmining, sewage discharge and the nutrient enrichment issues was received from the regional office. Ms. Ndileka Mohapi (DWS) and Ms. Portia Makhanya noted that such queries should also be escalated to higher level personnel (e.g. directors and provincial heads) so they may be addressed accordingly.<br><br>2. Ms Phumla Mzazi (DEDEAT) asked if there is collaboration between the project team and the Eastern Cape Wetlands Forum. Wetland vulnerability has been raised as an issue previously and a recommended resolution for the governance of these vulnerable wetlands was that they be taken up for gazetting. Ms. Mzazi further commented and asked what the recommendations for the vulnerable wetlands and estuaries was during the current study's assessments so that the Department can align their action plans with them. | **Responses to corresponding issues raised by stakeholders:**<br><br>1. Ms. Nqabisa Gwentshe (DWS) responded and acknowledged that the letter was received and forwarded to the relevant personnel, but no response has been received to date.<br><br>2. Ms. Mohapi (DWS) responded and noted that the questions may be answered by presentations or information shared by the project team as the meeting progresses. Dr. Graham (GroundTruth) also responded and noted that the current study's estuary studies are publicly available, and Ms Mzazi may refer to them to answer some of her questions. | |
| **7.2 Overview of the Integrated Units of Analysis for the study area** | 1. Ms. Mohapi (DWS) commented and noted that the presentation highlighted some recommended interventions for the priority estuaries especially those that are at low levels (Cs and Ds). | 1. The comment was noted | |
| **7.3 Overview of the proposed water resource scenarios for the study area** | **Comments and Questions:**<br><br>1. Ms. Reinette Colesky (Gamtoos Water User Association) asked what the associated risk of | **Responses to corresponding issues raised by stakeholders:**<br>1. Mr. Jonathan Schroder (AECOM) responded and noted that the WR2012 was used | |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| | using hydrology (WR2012) for catchments that do not have observed points. | where there was not a better source of information i.e. in the less developed rivers in the east of the study area where there hasn't been a catchment-specific study that has developed updated yield or hydrology models. The team did adjust some of the calibrations where there was room for improvement especially in the more rural catchments.<br>Mr. Schroder also noted that for the Algoa and Amatola systems, the hydrology was reviewed and updated. The updated information has been used, superseding the WR2012. However, the WR2012 data still includes a number of dry and wet periods over the last ~100 years. The study is looking at the difference of supply with and without ecological water requirement prioritisation, as well as to align with what has been put forward as recommendations instead of re-doing reconciliation strategies. | |
| | 2. Mr. Andrew Lucas (DWS) commented on the models and asked if considerations had been given to the less formal transfer schemes in the catchments. | 2. Mr. Schroder (AECOM) responded and noted that the less formal transfer schemes are taken into consideration as the models show where there are direct abstractions and where there are return flows. The projections of significant return | |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| | | flows that impact the hydrology of the catchment are taken into consideration. | |
| **7.4 Detailed presentations: 2 IUAs on their identified water resource scenarios and associated ecological and socio-economic consequences** | **Comments and Questions:**<br>1. Ms. Ndileka Mohapi (DWS) noted that some areas lack data which may be attributed to the gaps left by personnel who leave the Department and are not replaced due to budgetary constraints. However, the scientific experts are able to model and simulate catchments and scenarios. Extrapolation, followed by calculations, can then occur for the points where there isn't enough data. | **Responses to corresponding issues raised by stakeholders:**<br>1. The comment was noted. | |
| **7.4.1 IUA_KL01 (Gamtoos)** | **Comments and Questions:**<br>1. Mr Andrew Lucas (DWS) asked if for the Kromme and the Kouga dams, it would be simple to release environmental flows or if there would be major construction and amendment/alterations of the dam walls. He further asked if it would be possible to get EWR OFF, ON with maximum opportunity and making decisions using the current infrastructure but committing to as much as possible of releasing environmental flows i.e. is there anything in between the EWR OFF and EWR ON that can be found in the current state of the environment. | **Responses to corresponding issues raised by stakeholders:**<br>1. Mr. Jonathan Schroder (AECOM) responded and noted that engagements have been held with the regional DWS offices to understand what the release potential of the dams is. The release limitations of the dams have been taken into consideration. The complexities and risk to the infrastructure of trying to amend the dams are not cost effective. The study has taken into consideration the limits/maximum of what the existing infrastructure can release. The decision of releasing from the dams comes down to the prioritisation of the water that is available in the resource. He further noted that through the process of assessing impacts from an ecological and | |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| | | socio-economic perspective the environmental requirements may be revised in a trade-off process to derive a practical and balanced solution. Mr. Schroder further noted that it would not be an infrastructure issue but more aligned with how much water is committed to which user. The infrastructure capacity is seldom the limiting factor, the resource is usually the limiting factor. Dr. Graham (GroundTruth) also responded and emphasized that there isn't an infrastructural issue on EWR OFF and EWR ON but it is more on the institutional management of the resource. It is possible to from an ecological basic human needs perspective to meet the Reserve without compromising domestic, irrigation users' water supply. | |
| | 2. Mr. Andrew Lucas (DWS) requested clarification on whether the study referred to desalination for domestic use or for environmental purposes i.e. less saline water back into the systems | 2. Ms. Kylie Farrell (GroundTruth) responded and noted that the desalination plant is for the additional supply of water for domestic use. The desalination plant and additional groundwater developments will reduce the pressure on the surface water resources. | |
| | 3. Dr. Mark Graham (GroundTruth) commented and noted that there is often very little buffer zone between the estuary and the river. When it rains or there are floods and return flows come through, the nutrients from the irrigation goes straight into | 3. The comment was noted. | |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| | the water body as there aren't reeds to absorb the nutrients. This is why agriculture is seen to be setting back the river system.<br><br>4. Ms. Nompilo Mahlobo (DWS) asked how wide the buffer/set back has to be, can it be natural (used for grazing but not for irrigation) and what must be the management strategy of that setback/buffer portion of land. | 4. Dr. Graham (GroundTruth) responded and noted that the size of the buffer is dependent on different factors such as the slope, irrigation patterns, passive or intensive agriculture etc. Ms Phumla Mzazi also responded and noted that the Department of Environmental Affairs (DEA) now DFFE, recommends a 50m buffer. Dr. Lara van Niekerk (CSIR) noted that there is a Water Research Commission study on buffer zones that draws on international literature. This study works out an approximate 150m buffer for nutrient absorption. Furthermore, mining and ploughing impacts (sediment disturbances) should have approximately 500m buffers. She further noted that reeds (as buffer zones) can only live in water that is 20 parts per 1000. The saltier the water is (due to water abstraction) the more the estuary loses its buffer vegetation. Awareness raising on the importance of the buffer vegetation is important. Mr Andrew Lucas (DWS) also emphasized that topography and runoff (slope steepness) is also important to consider for the size of the buffer. | |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| | 5. Ms. Kylie Farrell (GroundTruth) commented and noted there should be a balance in trade-offs of social and ecological impacts and benefits | 5. Dr Graham (GroundTruth) responded and agreed with the point made. Dr. Lara van Niekerk (CSIR) also responded and noted that for the estuary, the implementation vehicle for the mitigation actions, except for water, comes under the Integrated Coastal Act in the form of Estuary Management Plans. The team makes recommendations on how to meet the REC but the recommendations are through the management plan which plays the role of a coordinating cooperative governance body where different role players need to be involved. The recommendations will need to be picked up at the provincial level. | |
| | 6. Mr. Andrew Lucas (DWS) asked if it would be possible to compare some of the larger and smaller river systems (e.g. Kabeljous) in comparison to how the Gamtoos has been described. | 6. Ms Karen Eatwell (Prime Afrika) noted that from the economic perspective, the entire IUA was considered. Ms. Kylie Farrell (GroundTruth) noted that the IUA does encompass the entire Kromme and Kromme Estuary. Each system is treated differently as each system has different inputs and flows etc. Ms. Van Niekerk (CSIR) noted that the Kromme was evaluated and that it was naturally a marine dominated system and is in a moderately modified state. | |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| **7.4.2 IUA_S03 (Great Kei)** | **Comments and Questions:**<br>1. Dr. Mark Graham commented and noted that all stakeholders in their respective organisations and positions must work together to fix the issues that impact aquatic environments and water resources e.g. the E.coli issue that has impacted the Kei Mouth Beach.<br>2. Mr Sifiso Maseko (DWS) commented and noted that the impact of alien invasives in this catchment is significant. | **Responses to corresponding issues raised by stakeholders:**<br>1. The comment was noted.<br>2. Dr. Lara van Niekerk (CSIR) responded and noted that alien invasive removals helped to improve flows in the river – the smaller rainfall events may have water leading into the river courses. However, if there are a lot of alien invasives, they will absorb a lot of the base flows. | |
| **7.5 Final ranking of scenarios and recommendations** | **Comments and Questions: None** | **Responses to corresponding issues raised by stakeholders: N/A** | |
| **7.6 Proposed Water Resource Classes per Integrated Units of Analysis recommendations** | **Comments and Questions:**<br>1. Mr Andrew Lucas (DWS). asked if the implementation of the Reserve refers to the larger state dams and the smaller agricultural dams i.e. is there a need to focus on the many agricultural dams. | **Responses to corresponding issues raised by stakeholders:**<br>1. Mr. Jonathan Schroder (AECOM) responded and noted that most of the dams are in the upstream catchments. Monitoring and managing the use of river abstractions should be through the implementation of the Reserve. | |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| | 2. Ms Portia Makhanya (DWS) commented and noted that desalination is always the last option due to the cost implications.<br><br>3. Ms Lebogang Matlala commented and noted that stakeholders encouraged the Department to implement more action for the water resource issues and not just have discussions around issues i.e. more action and less talk is needed. | 2. Dr. Mark Graham (GroundTruth) commented and noted that there are often concerns of water production/provision in the lower catchments. There is a lot of information that needs to be used to combat this scenario or prevent it from occurring. The information shared in these platforms and meetings must be taken seriously. Ms. Ndileka Mohapi (DWS) also responded and noted that it has been noted that the Department has not been good in monitoring and regulating the protection and maintenance of the ecology. This has become a departmental priority.<br><br>3. The comment was noted. | |
| 8. **Next steps in the study and way forward** | Ms. Lebogang Matlala (DWS) presented the way forward.<br><br>She encouraged and urged all stakeholders to engage with the reports, documents and presentations that are posted on the link given ***above (page 1) and below the agenda*** to ensure the project moves forward with the correct information and inputs from stakeholders.<br><br>She noted that the date of the next PSC meeting will be communicated in due time and that stakeholders will be called upon to join the RQOs workshop. | | |

| | DISCUSSION AND DECISIONS | RESPONSES | ACTIONS / MATTERS ARISING |
|---|---|---|---|
| **9.** | Ms. Mohapi thanked all attendees for attending and closed the third Keiskamma and Fish to Tsitsikamma Water Resource Classes, Reserve and RQOs Determination PSC Meeting. | | |

**Signed:** _____ _____

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

**Chairperson: Ms. Ndileka Mohapi (Department of Water and Sanitation)**

**Annexure I: AGENDA**

water & sanitation

Department:
Water and Sanitation
**REPUBLIC OF SOUTH AFRICA**

## PROJECT STEERING COMMITTEE (PSC) MEETING 3

**Determination of Water Resource Classes, Reserve and Resource Quality Objectives (RQOs) for the water resources in the Keiskamma and Fish to Tsitsikamma catchment (WP11354)**

***Primary objectives of the meeting:***

- Study progress to date since the PSC2;
- The primary focus will be to present the following:
  - Identified water resource scenarios for the study area;
  - Ecological and socio-economic consequences;
  - Final ranking of scenarios and recommendations; and
  - Proposed Water Resource Classes per Integrated Units of Analysis recommendations.

| | |
|---|---|
| Date: | 21 January 2025 |
| Time: | 09h00 – 14h00 |
| Meeting venue | In person: Blue Lagoon Conference Venue, East London |
| Chairperson | Ms. N Mohapi |

**AGENDA**

| | | | |
|---|---|---|---|
| **1.** | **Welcome** | 09h00 – 09:10 | Ms. N Mohapi |
| **2.** | **Attendance/Apologies** | 09:10 – 09:15 | Ms. N Mohapi |
| 3 | **Approval and action items from previous minutes (PSC 2, 28 June 2023)** | 09:15 – 09:25 | All |
| **4.** | **Acceptance of Agenda/ Additions to Agenda** | 09h25 – 09h30 | All |

| AGENDA | | | |
|---|---|---|---|
| 5. | **Purpose of the PSC meeting** | 09h30 – 09:40 | Ms. N Mohapi |
| 6. | **Project Overview** | 09h40 – 10h00 | Mr. L Mulangaphuma |
| **AGENDA** | | | |
| 7. | **Technical presentation** | | PSP |
| *7.1* | *Project progress to date since the previous PSC meeting* | 10h00 – 10h15 | |
| *7.2* | *Overview of the Integrated Units of Analysis for the study area* | 10h15 – 10h30 | |
| *Tea break (10h30 – 10h45)* | | | |
| 7. | **Technical presentation *continues*** | | |
| *7.3* | *Overview of the proposed water resource scenarios for the study area* | 10h45 – 11h15 | |
| *7.4* | *Detailed presentations: 2 IUAs on their identified water resource scenarios and associated ecological and socio-economic consequences* | | |
| *7.4.1* | • *IUA_KL01 (Gamtoos)* | 11h15-12h00 | |
| *7.4.1* | • *IUA_S03 (Great Kei)* | 12:00 – 12:45 | |
| *7.5* | *Final ranking of scenarios and recommendations* | 12:45 – 13h00 | |
| *7.6* | *Proposed Water Resource Classes per Integrated Units of Analysis recommendations* | 13h00 – 13h30 | |
| 8. | **Additions to agenda** | | All |
| 8.1 | | | |
| 8.2 | | | |
| 8.3 | | | |
| 9. | **Next steps in the study and way forward** | 13h30 – 13:45 | Ms L Matlala |
| 10. | **Closure** | 13h45 - 14h00 | Ms. N Mohapi |
| *Lunch (14h00)* | | | |

**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 - headoffice | 3 in-person, 6 virtual |
| DWS - regional | 7 in-person, 8 virtual |
| **PSC panel attendance** | |
| AGES Omega (Pty) Ltd | 1 in person, 1 virtual |
| Department of Economic Development, Environmental Affairs and Tourism (DEDEAT) | 2 in-person, 1 virtual |
| Gamtoos Water User Association | 2 in-person |
| **Project team attendance** | |
| GroundTruth | 3 in-person, 2 virtual |
| Private consultants | 2 in-person |
| AECOM | 1 in-person, 1 virtual |
| Prime Afrika | 1 in-person, 1 virtual |
| CSIR | 1 virtual |