



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

PROJECT RESERVE DETERMINATION STUDY FOR SELECTED SURFACE WATER, GROUNDWATER, ESTUARIES, AND WETLANDS IN THE F60 AND G30 CATCHMENT WITHIN THE BERG-OLIFANTS WATER MANAGEMENT AREA: WP11340.

MEETING : MINUTES OF THE PROJECT STEERING COMMITTEE (PSC) MEETING NO. 2

VENUE : MS TEAMS (Hybrid meeting)

TIME : 09:00

DATE : 21 JULY 2022

| Item | Description | Action | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1. | <p>Welcome</p> <ul style="list-style-type: none"> The chairperson, Ms Ndileka Mohapi, opened the meeting and welcomed all present. It was requested that the meeting be recorded – there was no objection. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | <p>Attendance/Apologies A hybrid meeting was held, with several attendees joining via MS Teams. A round of introductions was done. The attendees and apologies are listed below.</p> <p>Attendance Register</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Designation</th> </tr> </thead> <tbody> <tr> <td>1. Ndileka Mohapi (NM)</td> <td>DWS: Chief Director: Water Ecosystem Management</td> </tr> <tr> <td>2. Gerhard Cilliers (GC)</td> <td>DFFE: Biodiversity & Coastal Research</td> </tr> <tr> <td>3. Yakeen Atwaru (YA)</td> <td>DWS: Reserve Determination</td> </tr> <tr> <td>4. Adaora Okonkwo (AO)</td> <td>DWS: Water Resources Classification</td> </tr> <tr> <td>5. Khoza Philani (KP)</td> <td>DWS: Groundwater Reserve Determination</td> </tr> <tr> <td>6. Louise Dobinson</td> <td>Zutari - Project team hydrology</td> </tr> <tr> <td>7. Lebogang Matlala (LM)</td> <td>DWS: Water Resources Classification</td> </tr> <tr> <td>8. Barbara Weston (BW)</td> <td>DWS: Surface Water Reserve Determination</td> </tr> <tr> <td>9. Dana Grobler (DG)</td> <td>Blue Science</td> </tr> <tr> <td>10. Toni Belcher (TB)</td> <td>Blue Science</td> </tr> <tr> <td>11. Gladys Makhado (GM)</td> <td>DWS: Surface Water Reserve Determination</td> </tr> <tr> <td>12. Bheki Cele (BC)</td> <td>DWS: Surface Water Reserve Determination</td> </tr> <tr> <td>13. Tovhowani Nyamande (TN)</td> <td>DWS: Source Directed Studies</td> </tr> </tbody> </table> | Name | Designation | 1. Ndileka Mohapi (NM) | DWS: Chief Director: Water Ecosystem Management | 2. Gerhard Cilliers (GC) | DFFE: Biodiversity & Coastal Research | 3. Yakeen Atwaru (YA) | DWS: Reserve Determination | 4. Adaora Okonkwo (AO) | DWS: Water Resources Classification | 5. Khoza Philani (KP) | DWS: Groundwater Reserve Determination | 6. Louise Dobinson | Zutari - Project team hydrology | 7. Lebogang Matlala (LM) | DWS: Water Resources Classification | 8. Barbara Weston (BW) | DWS: Surface Water Reserve Determination | 9. Dana Grobler (DG) | Blue Science | 10. Toni Belcher (TB) | Blue Science | 11. Gladys Makhado (GM) | DWS: Surface Water Reserve Determination | 12. Bheki Cele (BC) | DWS: Surface Water Reserve Determination | 13. Tovhowani Nyamande (TN) | DWS: Source Directed Studies | |
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| | 14. Rassie Nieuwoudt (RN) | DWS: Western Cape: Berg – Olifants CMA | |
| | 15. Melissa Lintnaar-Strauss (MLS) | DWS: Western Cape – Resource Protection | |
| | 16. Kwazikwakhe Majola (KM) | DWS: Groundwater Reserve Determination | |
| | 17. Tendayi Makombe (TM) | DWS: Planning - Reconciliation Strategies | |
| | 18. Ashton van Niekerk (AvN) | DWS: Western Cape: Groundwater | |
| | 19. Jenny Pashkin (JP) | DWS Planning: Reconciliation Strategies | |
| | 20. Charles Malherbe (CM) | West Coast District Municipality | |
| | 21. Jan Smit (JS) | WC DoA | |
| | 22. Francois van Heerden (FvH) | Sandveld Bewarings Komitee | |
| | 23. Louw Smit (LS) | SAKO/KAWV | |
| | 24. Monique Vlok (MV) | Krom Antonies WUA | |
| | Apologies: | | |
| | 1. Marlene de Ross | DEA&DP - WC | |
| | 2. Melissa Naicker | DEA&DP - WC | |
| | 3. Caren George | DEA&DP: Biodiversity& Coastal Management: SD Coastal Management | |
| | 4. Angila Joubert | Berg River Municipality: Environment office | |
| | 5. Felicity Strange | Friends of Verlorenvlei | |
| | 6. Grenville White | Friends of Verlorenvlei | |
| | 7. Ernst Baard | Cape Nature | |
| | 8. Callum Beattie | Cape Nature: Landscape Unit Cederberg Chair: Verlorenvlei Forum | |
| | 9. Ashia Petersen | Western Cape: Department of Agriculture | |
| 3. | Approval of the agenda | | |
| | <ul style="list-style-type: none"> The agenda was accepted by YA and seconded by BW. | | |
| 4. | Minutes | | |
| 4.1 | <ul style="list-style-type: none"> Minutes of the previous meeting of 26 January 2022 were adopted as a true reflection of the meeting with no changes. KM supported this, seconded by BC. | | |
| 4.2 | <ul style="list-style-type: none"> Matters arising <ul style="list-style-type: none"> TB distributed the presentation from the previous meeting with the minutes TT provided the updated water quality data DG provided the Project Programme – it was included in the presentation provided with the previous minutes DG emphasised that the technical data to support the EWR recommendations must be clearly presented and documented | | |

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| | <ul style="list-style-type: none"> ○ AvN and GM had discussed and agreed on the distribution of data on groundwater for the study. Data had been provided to the PSP team. ● Representation at the PSC meetings was discussed further. NM requested an indication of the representation of stakeholders at the PSC meeting. The following representatives were present: <ul style="list-style-type: none"> ○ Department of Agriculture is represented by JS ○ West Coast District Municipality is represented by CM ○ Berg River Local Municipality: Ms Angelina Joubert tendered apologies but had been invited. ○ DWS: Western Cape is represented by MLS, RN and AvN ○ Friends of Verlorenvlei tendered apologies but would be meeting with the team after the meeting. ○ SAKO/KAWV is represented by LS ○ Sandveld Bewarings Komitee is represented by FvH ○ JS asked about representation from the F60 Catchment. Wittefontein and Langplaas WUA are in that area. He was asked to provide contact details. <p>Purpose of the PSC meeting The purpose of the PSC meeting is to:</p> <ul style="list-style-type: none"> ○ Share progress made related to the following: <ul style="list-style-type: none"> ○ Surface and Groundwater delineations ○ Eco-classification ○ Dry Season Survey | PSP team & JS |
| 5. | <p>Updates on study progress:</p> <p>A presentation was given by GM that covered the following topics:</p> <ul style="list-style-type: none"> ● Background to the study ● Introduction ● Study area ● Environmental Flow ● Environmental Protection ● Objectives of the PSC ● Roles and responsibilities of the PSC ● Reports ● Meetings ● Conclusion <p>A copy of the presentation will be emailed with the meeting minutes.</p> | GM |
| 6. 6.1 & 6.2 | <p>Technical Presentations</p> <p>Background to the study and project progress</p> <ul style="list-style-type: none"> ● TB provided a presentation that provided background to the study and the project's progress. A copy of the presentation will be emailed with the meeting minutes. ● DG provided feedback on other project discussions and activities: <ul style="list-style-type: none"> ○ Hydrological and Technical Integration Workshops have been held within the team ○ Discussions were held with DWS Region on the Use of Water User Data ○ Various Stakeholder Engagements have been held, including: <ul style="list-style-type: none"> - Meeting with the interest groups of Verlorenvlei (minutes to be distributed) | TB DG DG |

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| | <ul style="list-style-type: none"> - Formal meeting with Potato SA in terms of our (minutes to be distributed) • JS requested clarity on the dry season survey and wet season survey. TB indicated that assessments were undertaken at each of the River and Wetland EWR sites, the cross-sectional surveys are needed to determine the relationship between water level and volume of flow through that specific point. The cross-sectional surveys will be revisited during the wet season to see the flow depth relationship at these sites when there is more flow or inundation at the sites. In terms of the volume of surface water bodies, Louise Dobinson will make comments during the formal presentation. There are methodologies/routines in the modelling that can be used. • RN raised concerns with regards to how wetland areas and springs were to be incorporated into the study and that other means of mapping be utilised than just the national wetland layers. DoA had undertaken work in the Nadouwsberg and asked that JS share the outcomes of that assessment. TB responded that for the wetland mapping, all available layers are being utilised. The National Wetland Map is just one layer that is being used. Any other knowledge, data or mapping would be gladly accepted. • RN highlighted the importance of natural springs in the study area and that the historical flow data for the springs is limited but that it is important that the contribution from springs to surface water ecosystems is properly quantified. TB agreed with this observation and indicated that past aerial imagery of wetland habitat and vegetation and water use of the springs will be used to understand the contribution of the springs to surface water ecosystems. • TB indicated that the wet season survey would be conducted in August/September, depending on the rainfall. She indicated that July 2022 had been dry and that if the low rainfall pattern continues, August will not provide a true reflection of the typical flows in the systems. DG added that the wet season survey would provide the team with a snapshot of the surface water systems at the time. • NM stated that the limited water resources data must be acknowledged and the circumstances during the study considered and documented. The study will be indicative with regard to the timeline in which it was done. <p>6.3 Presentation on hydrological modelling progress</p> <ul style="list-style-type: none"> • LD provided a presentation on the hydrological modelling component of the study and the approach that was being used to update and improve the hydrology of the area. A copy of the presentation was distributed with the agenda for the meeting. • RN raised a concern regarding the twelve rainfall stations in SAWS which are sparsely distributed and in high-lying areas. In general, the rainfall data for the area is poor. The F60 catchment is, in particular poor, but there are also some individuals in the area keeping data. LD responded that the SAWS rainfall data is usually available for the upper catchment and any other sources of data would be very useful. The Pitman model that is being used, has an adjustment for rainfall in the lower catchment. • RN also enquired about the slide in the presentation showing the land use data table. He enquired what the units being used were. LD responded that the land use mapping and the table were just a representation for the presentation and that the data would be interrogated in much more detail. • RN was also concerned that the land use data did not differentiate between what is irrigation and what is dry land information from the crop census. The data does not match the 4 900 hectares of irrigation that is indicated to be in G30B, C, D, and E, Verlorenvlei catchment. The total area in the Sandveld | JS |
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| | <p>under potato production is indicated by Potato SA to be 7 000 ha on an annual basis. LD indicated that she would cross-check with RN.</p> <ul style="list-style-type: none"> • RN also commented on the database for registered dams. – He enquired if data was only supplied for the G30B Verlorenvlei catchment as reflected in the presentation, with nothing in other sub-catchments. LD indicated that the data for registered dams was for all the sub-catchments. These were all registered dams - Registered in Dam Safety (2019). Other catchments had no registered dams. RN requested that the table on the registered dam then include a (0) for other catchments in the table. DG suggested there be a separate session between LD, JS and RN to scrutinise the land use data as input into the present-day hydrology modelling. • RN also stated that in the modelling for the Kruismans River, water users with dams initially use surface water to fill the dams and then groundwater. LD responded that as input into the hydrology modelling, the catchments had been delineated to differentiate surface and groundwater characteristics (and use). • AvN asked that if there is a lack of gauged flow data of streams, can another approach not be applied for ungauged catchments. Methods such as the GW/SW interaction isotopes approach could be applied. The faulting structures in the catchment need to be considered, particularly in terms of the contributions to flow/springs. • NM indicated that DWS must assist the project team to get the best result. • LD asked that AvN please also provide input into the modelling. The Pitman model allows for spot measurement but needs a long-term of flow data. In terms of addressing the surface water/groundwater interaction, LD is working closely with Dr Andrew Watson and GEOSS to validate groundwater contributions to surface water that is based on the team’s understanding of faulting structures and the groundwater contributions to surface water. The Pitman and SPATSIM models are limited in terms of groundwater contribution. • CM queried the inclusion of climate change in the hydrological modelling. The West Coast reduction in MAP is indicated to be the highest in SA. LD responded that the rainfall and climate change scenario will be considered and will be based on available climate change models. • CM also asked about the registered dams – are the newer dams reflected in the data? DG responded that the Reserve study does not look at water use licensing, but a session will be held with RN, JS and CM regarding using the outcome of the ecological Reserve in water use decision-making. NM responded that unauthorised dams are a legal issue and will not necessarily be approved. RN added that EIA freshwater specialist studies only focus on local water resources and not catchment resource extent. This study is important in looking at the wider context. | LD, JS & RN |
| 7 | <p>Upcoming Activities: DG indicated that the Wet Survey field assessments are planned for September 2022. The survey may need to be postponed depending on rainfall.</p> <p>Capacity building program</p> <ul style="list-style-type: none"> • DG indicated that he must still share the capacity-building programme. Each opportunity that provides an opportunity for capacity building within the project is being identified and the information is shared with the various departments. DG will also provide an update on the stakeholder engagements held within the project. AvN indicated that he would also provide suggestions for capacity building. | DG AvN |

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| 8 | <p>General</p> <ul style="list-style-type: none"> • RN and AvN indicated that the comments provided should be seen as inputs to improve the outcome of the study and they want to contribute to study deliverables and reports. They asked that a platform be created within the project to discuss the content of reports before they are finalised. • YA indicated that there would be technical task teams and meetings for regional input as part of the project. | PSP team |
| 9 | <p>Next PSC meeting</p> <ul style="list-style-type: none"> • DG indicated that the next PSC meeting is scheduled for the end of October or in November and would possibly be an <i>in-person</i> meeting in Clanwilliam. | |
| 10 | <p>Way forward</p> <ul style="list-style-type: none"> • YA indicated that for further information on the project and the project deliverables, PSC members should follow the link provided in the Background Information Document for the project (page 5). If there are problems with access, please contact GM. • YA indicated that the next step in the project is a significant step, which is the EWR quantification. Scenarios that need to be considered in the project also need to be discussed. This will require some engagement with the Department of Agriculture regarding and the local authorities as well as regional offices. | |
| 11 | <p>Closure</p> <ul style="list-style-type: none"> • NM thanked all and closed the meeting. The meeting was closed at 12.06 pm by the chair. | |

Actions

| Actions | Responsible official | Response |
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| Wittefontein and Langplaas WUA to be invited to the next PSC meeting. JS will assist with the contact details. | PSP team & JS | |
| Copies of the presentations given at the PSC meeting are to be sent out with the minutes for the meeting | PSP team | |
| Minutes of the various stakeholder meetings held are to be distributed | DG | |
| DoA to share any mapping that they have on wetlands in the study area | PSP team & JS | |
| A separate session is to be held between LD, JS and RN to scrutinise the land use data as input into the present day hydrology modelling | LD, RN and JS | |
| The draft capacity building programme is to be shared | DG | |
| A platform is to be created within the project to discuss content of reports before they are finalised | PSP team | |