

SDG 6.6

2020 GAP / ACTIONS TO INFLUENCE NW&SMP / OTHER



| SDG 6.6: WATER-RELATED ECOSYSTEMS | | | VEHICLES OF CHANGE | | | | Comments | Estimated Budget |
|-----------------------------------|--|---|--------------------|----------------------------------|------------------------------------|--------------------------------------|---|---|
| No. | GAP | ACTION ¹ | RESPONSIBILITY | NW&SMP – Is it covered already ? | NW&SMP – Can this be a new action? | OTHER (NWSRS, Legislation etc | | |
| 1 | There is a severe lack of wetland data. 69% of RSA has low confidence in data on the location and extent of wetlands Monitoring of wetland health is currently not being undertaken by DWS with limited wetlands monitored by others. This is un co-ordinated and presents massive gaps and issues with access to data. | 1) Implement the National Wetland Monitoring Programme - (capacity created and training undertaken) and co-ordinate the sector towards harmonized wetland data systems | RQIS & Regions | No | Yes | NWSRS W-DAM Action Plan ² | No reference to the Wetland Monitoring Programme can be found in the current Vol 3 (v4.8) of the NW&S MP. | R12 000 000 over 3 years (Cost of establishing the NWMP (staff + capacity building). R7 000 000/ annum thereafter (staff costs) |
| 2. | There is insufficient estuarine monitoring data (Only 23 of the 300 | 1) Expand the estuarine health monitoring programme in | RQIS | No | Yes | Coastal Management Act, NWSRS | No reference to the Estuarine Monitoring Programme can be | R1 500 000 (R500 000 per year |

¹ These actions are equivalent to a “Level 2 and/or 3” action under the NW&S MP

² The Wetland Data Acquisition and Management (W-DAM) Steering Committee was established in 2019. The Action Plan is due for finalisation during 2020/21.

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| | Estuaries are being monitored through the DWS National Estuary Monitoring programme) | consultation with other sector partners | | | | | found in the current Vol 3 (v4.8) of the NW&S MP. | cumulatively over the next three years) |
| 3. | Insufficient hydrology (rainfall-runoff) data for rivers, lakes, dams and estuaries. A well-functioning, well-maintained rainfall and surface water monitoring network is required. In addition, data collected needs to be converted into information and for this modelling is required. | 1) Implement the review, evaluation and optimisation of National Monitoring Networks report findings, acquire and patch appropriate rainfall data. 2) Update the hydrological models (WR2012) and conduct necessary hydrology assessments on a 5 yearly basis. In terms of undertaking 1) and 2) above, partnerships and MOUs with other organisations that have data should be explored. | SGWI | Yes | - | NWSRS National Data Management Strategy | This need is catered for under numerous actions in the NW&S MP. The SDGs provide a level of refinement in terms of the needs (level 4 actions). Action Level 2: <u>1.1.7</u> Water Resources Catchment studies (Continuously undertake hydrological monitoring in order to improve the resiliency and sustainability of the available sources on account of future climate change) <u>1.1.11</u> Refurbish gauging | R 3 266 351 935 (Cost of implementing an optimised network. Includes the costs (as at 2016) of EIAs and Construction of 164 new stations and O&M Costs for 990 River and Reservoir Stations) R10 000 000 (Cost a WR2020 Study) R500 000 every 5 years (cost of modelling flow |

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| | | | | | | | stations <u>2.6.20</u> Initiate a hydrological monitoring centre for South Africa in order to re-establish a robust data, monitoring and information capability for more effective water resources planning and climate change forecasting in future | inputs into estuaries) |
| 3 | Groundwater level data is insufficient (16 Geohydrological Regions having only 1 borehole and 4 having none at all. In total it is estimated that 54 boreholes need to be reactivated/developed in these areas) | 1) Implement the review, evaluation and Optimisation of National Monitoring Networks recommendations for Groundwater Water Level monitoring in those Vegter Regions (Vegter, 2001) that lack sufficient sites. Following this process if there are any remaining gaps, develop required additional | SGWI | No | Yes | NWSRS National Data Management Strategy National GW Management Strategy | No reference to the Groundwater Monitoring network could be found in the Masterplan. | R4 000 000 to put in place/refurbish monitoring boreholes for Vegter regions with low coverage (pending the outcomes of the implementation of the optimisation |

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| | | boreholes. | | | | | | report recommendations) |
| 4 | Lack of groundwater operating rules in high groundwater use areas to ensure sustainable use of groundwater. There is a drive to use more groundwater in RSA. To effectively regulate this process and to prevent overuse of groundwater resources , the development of groundwater operating rules will be necessary. For SDG 6.6 this is particular important for areas where ecosystems are highly groundwater dependant | 1) Undertake detailed Groundwater assessments and establish Groundwater operating rules in high groundwater use areas. This should be undertaken as part of Groundwater management plans . | WRPS | Partially | Yes | National GW Management Strategy | This action could fit in with Action Level 2: 1.1.12 Increase groundwater use (including artificial recharge) and re-use of water | R300 000 per project/area. (can range between R50 000 to R800 000) |
| 5 | Lack of updated National River Survey (Data on the Condition of River Ecosystems is needed every 10 years to | 1) Undertake a National River Survey (updated PES/EIS) every 10 years to track change in condition of RSA's rivers | WE | No | Yes | NWSRS National Data Management Strategy | No Reference to the REMP or National Surveys for River Condition could be found. | R20 000 000 |

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| | successfully track trends. To enable trend determination it is necessary that a national survey of rivers be undertaken to assess their state at the same point) | | | | | | | |
| 6 | <p>A number of the global SDG indicators for ecosystems are not useful for decision making in SA.</p> <p>Management Targets and corresponding performance indicators that are meaningful for RSA need to be identified and aligned across sectors</p> | <p>1) Initiate a liaison platform with DEFF and SANBI on the ecosystem SDGs</p> <p>2) Undertake an assessment to determine the necessary Targets and develop the requirement Indicators to accurately report on water-related ecosystems in RSA</p> | <p>SDG 6.6 TT</p> <p>SDG 6.6 TT</p> | No | No | UNCCD, Paris Agreement, Outcome 10, NWSRS | This is not a necessary action to be placed in the masterplan, however the outcomes of this will be crucial for future development of the ecosystems chapter of the Master Plan. | R200 000 (WRC Study) |