

SDG 6



2020 GAP / ACTIONS TO INFLUENCE NW&SMP / OTHER

The SDG goals and targets came into effect on 1 January 2016 and will guide the decisions taken within South Africa over the next fifteen years. The target date for outcomes to be achieved is 2030. The SDG targets are indeed valid for and applicable to South Africa. They are also in line with the Vision 2030 (the National Development Plan) as well as Medium Term Strategic Framework (MTSF) Outcome Targets. They are also a key driver of the National Water & Sanitation Master Plan in terms of the water and sanitation needs of each..

Table 1: Definition of the SDGs

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|  | <p>The 17 SDGs were endorsed “without reservation” by all heads of state, including South Africa, on 25 September 2015. The SDGs are a collection of 17 global goals set by the UN General Assembly in 2015. The UN resolution is widely known as “<i>The 2030 Agenda on Sustainable Development</i>” and is a plan of action for people, planet and prosperity. The goals are broad and interdependent, yet each has a separate list of targets to achieve. Achieving all 169 targets would signal accomplishing all 17 goals. The SDGs cover social and economic development issues including poverty, hunger, health, education, global warming, gender equality, water, sanitation, energy, urbanisation, environment and social justice.ⁱ</p> |
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Statistics South Africa (Stats SA) is the focal point for all 17 SDGs in the country. Out of these 17 goals to be attained by 2030, there is a dedicated water and sanitation goal, (Goal 6) with the objective to “ensure access to water and sanitation for all”.

DWS is now spearheading the effort in the South African water sector to deliver on the SDGs, in particular SDG6: Ensure availability and sustainable management of water and sanitation for all. It is widely recognised that achieving SDG 6 is essential for progress on all other SDGs and vice versa. Sustainable management of water and sanitation underpins wider efforts to end poverty, advance sustainable development and sustain peace and stability.

The SDG 6 goal focuses on clean water and sanitation, and it is driven through eight targets and eleven indicators that will be used to propel different components and monitor progress. Achieving SDG 6 is not only essential for the water and sanitation sector, but it also has a major impact on all other 16 SDG goals led by others – from improving the health of our people; to curtailing hunger; improving the education of our children; maximizing gender equality; and the inclusion of all, including vulnerable groups. All of the above has to be taken into account while ensuring environmental protection; minimizing the impacts of climate change and ensuring sustainable growth for our country. Water and sanitation is central to development and has a major role to play in all SDG activities.

The SDG Country Report for the 2017 Data Gathering process, was launched on 13 September 2019. The next data drive took place during 2020 and all Targets developed their Indicator Reports for the UN besides their Gap Reports for the year 2020 . This Consolidated Gap Report summarises the Gaps that have been identified for each of the 8 Targets by the end of 2020 which must be addressed in order to close the gaps / data needs identified by each and whilst providing recommendations of areas to be improved and with which vehicles of change.

The Tables below summarise these Gaps and proposed Actions which will be taken to the NW&SMP / NWSRS Teams for consideration and incorporation into their respective action plans for implementation.

On completion of a long awaited SDG 6 M&E system, the SDG 6 programme will be able to measure the progressive closing of the 11 Indicator Gaps of the 8 Targets effectively, and quantify the performance of Actions implemented towards the closure of these Gaps through vehicles such as the NW&SMP, the NWSRS, Legislation/ Strategies / Policies / Systems implemented through DWS and the Sector for example.

6.1 – Achieve universal and equitable access to safe and affordable drinking water for all

| 6.1 – Achieve universal and equitable access to safe and affordable drinking water for all | | | | | | | |
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| TARGET SPECIFIC (6.1) DESCRIPTION | | VEHICLES OF CHANGE | | | | | |
| No. | GAP | ACTION | NW&SMP – Is it covered already ? | NW&SMP – Can this be a new action? | OTHER (NWSRS, Legislation etc | Comments | Estimated Budget |
| 1 | SDG 6 Dashboard: A systems approach is required to track the 8 SDG indicators including SDG 6.1. The purpose is to keep the Department, Sector Role Players and its Regional Offices informed of SDG 6 progress. | SDG 6.1 Task leader has engaged with the IT team which supports Water Macro Planning to set up and maintain a WS knowledge base (<i>wks</i>) and present the outcomes (<i>indicators</i>) in a form of a dashboard. <i>These indicators are aligned with Stats SA indicators.</i> | YES | YES | The NWA and WSA requires the Department to maintain a knowledge system to track water and sanitation i.e. SDG 6.1 & 6.2. The proposal is to track all 8 SDG indicators which link both water and sanitation. | A Business Plan has been presented to for consideration by the SDG Project Manager | Initial R10 million to role out the Business Plan as presented. This includes system development, data uploading, cleaning and transforming of SDG 6's Task Teams data, training and rollout, support/maintenance, data interrogation and reporting. |
| 2 | No data on rural water quality | To reinvigorate Regulatory BLUE DROP system. However, the BD approach does not have enough coverage of water quality in the rural areas. There will need to address this gap with an appropriate approach implemented by Regulation. As an Interim measure. A proxy indicator measured in the | YES | YES, need to include a more comprehensive approach that will adequately address rural areas. | NDP | The SDG 6.1 Task Leader will need to engage with Regulation, Stats SA, WRC (researching the UNICEF Rapid Response Test Kit) and the JMP to optimise the data collected to present the full picture of water quality in rural areas. This new data source needs to integrate with the Blue Drop data | Rural water quality to integrate into the Blue Drop process = R3 million rand. |

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| | | GHS will be used to track drinking water quality. | | | | collection process. The IT systems will need to work closely with the SDG 6.1 team. | |
| 3 | Improve Interruptions of basic water supply – i.e. reliable water supply. SDG 6.1 – safely managed | This is the most important action required to improve the indicator safely managed water indicator. | YES | Provide universal and equitable access to <u>reliable water</u> supply and sanitation services | NWA and WSA | Cabinet (July 2014): Ensure 90% reliable services by 2019. Not achieved. Tenders now called to do this work. Data from this process needs to inform the wsks to enhance the existing data to include reliable in the process. Will also need to include Business Intelligence to the data to align with statistical data from Stats. This process is all about maintaining existing water and sanitation infrastructure it is a major add on to the existing database. | It is very difficult to report on this indicator as Census 2011 was the last time any meaningful data on reliable water supply was obtained. Using the 5-year reliability planning process is a major practical step in improving the safely managed component of SDG 6.1 = R3 million |
| 4 | Updating the Water Services (water and sanitation) Knowledge System to include coordination between actors and formal mechanisms | The SDG process has highlighted the need that in order to report on SDG 6.1 and 6.2 there is a major gap in receiving information from other National Departments. For example, data flows and sharing of information with the | YES | YES The SDGs are supported by AMCOW, the WHO and through their GLAAS process highlighted the need to strengthen co- | International reports | Formal mechanism needs to be put in place to coordinate work of different ministries. Includes all ministries and agencies influencing service delivery. Includes non-governmental stakeholders Includes | = R2 million |

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| | | Department of Health and the Department of Education needs to be strengthened. Also need to include CoGTA and engage with their WIS MIG reporting. | | operation with other National Departments. | | donors that contribute to WASH activities nationally. Includes mutual review and assessment Evidence-based decision making, considering agreed indicators. Bases work on agreed sectoral framework or national plan Includes documentation of processes and activities Budget line allocated for coordination activities. | |
| | TOTAL | | | | | | R18 million |

6.2 - Achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

| No. | SDG 6.2 GAPS | PROPOSED ACTION | NW&SMP – Is it covered already? | NW&SMP – Can this be a new action? | OTHER (NWSRS, Legislation etc | Comments | Estimated Budget |
|-----|---|--|---------------------------------|------------------------------------|--|---|------------------|
| 1. | Analysis of required delivery rate to meet SDG 6.2 targets and Eradication of Open Defecation by 2030 | Development of the National Sanitation Integrated Plan (NSIP) | Yes | No | MTSF 2019-2024 | The NSIP will guide the sector in the implementation and monitoring of sanitation and provide a 10 year roadmap for ensuring access to adequate sanitation services per province and eradicating open defaecation | R5.6m |
| | | Conduct Sanitation Delivery Awareness Campaigns across all provinces for meeting the SDG6.2 Sanitation targets Conduct Sanitation Delivery Awareness Campaigns across all provinces for meeting the SDG6.2 Sanitation targets | No | Yes | 2016 Sanitation Policy | Awareness campaigns will assist to accelerate access to delivery and meeting the SDG6.2 targets | R0.5m |
| 2. | Lack of processes to accelerate uptake of alternative and | To undertake analysis of institutional arrangements and the roles of various | No | Yes | 2016 Sanitation Policy Strategic Framework for Water Services | The analyses will lead to the development of a sanitation technology uptake protocol and | R0.2m |

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| | appropriate sanitation technologies for households and associated institutions such as schools | institutions involved in sanitation technology uptake To establish National Sanitation Technology Uptake coordination forum. | | | | identification of relevant stakeholders to serve in National Sanitation Technology Uptake coordination forum. | |
| 3. | Addressing the increase in number of households served with onsite sanitation technologies having full pits and to ensure safely managed sanitation along the entire sanitation value chain | Development of Faecal Sludge Management Strategy for non sewerred systems | No | Yes | Water Services Act (Act 108 of 1997) 2016 Sanitation Policy | Approximately 2.8 million households in South Africa are without access to improved sanitation services, and approximately 2% of the national population practiced open defecation | R2m |
| 4. | Strengthening of data collection and monitoring of NGOR Commitments and reporting progress on access to sanitation and hygiene across sectors | Ensure strong leadership and coordination at all levels to build and sustain governance for sanitation and hygiene across sectors especially water, health, education, gender and the environment | No | Yes | 2016 Sanitation Policy | Through the existing National Sanitation Task Team (NSTT) strengthen coordination and participation of the relevant stakeholders | R0.1m |
| 5. | Strengthening of | Development of a | No | Yes | Strategic Framework for | There is an urgent need | R2m |

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| | Sanitation hygiene and user education | National Hygiene and User Education Plan to intensify promotion of Sanitation Hygiene and user Education | | | Water Services 2016 Sanitation Policy | in the country to strengthen hygiene user education and training to accelerate safe sanitation and good hygiene practices | |
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6.3 - Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally;

| SDG 6.3: WASTEWATER AND WATER QUALITY | | | | VEHICLES OF CHANGE | | | | |
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| No. | GAP | ACTION ¹ | RESPON S-IBILITY | NW&SMP – Is it covered already? | NW&SMP – Can this be a new action? | OTHER (NWSRS, Legislation etc) | Comments | Estimated Budget |
| 1 | There is inadequate surface and groundwater water quality data to enable reporting on SDG 6.3.2 | <p>1) Fully implement the National Water Quality Monitoring programmes for Surface Water to at least resemble the monitoring programme status as at 2016:</p> <p>1.1) WMS System clean up needed to align monitoring programmes information between what is in WMS and actual monitoring sites</p> <p>1.2) Ensure Surface</p> | RQIS RQIS & Region | Yes | N/A | NWSRS IWQM Strategy (WQM2020 ²) | <p>This is addressed in the NW&S MP³ under action Level 2: 1.5.2 Routinely monitor resource water quality</p> <p>(Action 1.5.3 in the updated Vol 3 for Water Quality)</p> <p>Level 3 Action: <u>Undertake routine national water quality monitoring, considering the recommendations of the Review of the South African Water Resource Monitoring Network</u></p> | <p>R7 316 000 will be required to revitalise the National WQ Monitoring Programmes for priority sites</p> <p>Ideal scenario – fully functioning programmes: R14 000 000 / annum (as per NW&S MP costs)</p> <p>R28 000 000/annum (as per SDG estimation – costed at R3000 per sample, per month for priority NCMP sites for all WQ Variables)</p> |

¹ These actions are equivalent to a “Level 3 and/or 4” action under the NW&S MP

² WQM 2020 refers to the DWS WQ Drive to tackle deteriorating WQ in RSA, consisting of a high level Anti-Pollution Task Team and the DWS WQ Strategy Steering Committee

³ The Version of the MP referred to here is V4.8 of 2018

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| | | water monitoring sites that are not yet monitored are re-activated | s | | | | <u>Report.</u> (Action 1.5.3 in the updated Vol 3 for Water Quality) | R600 000 for 2020 (Cost of 6 new Boreholes for monitoring water quality) |
| | | 2) Expand the coverage of groundwater monitoring sites (For Groundwater to cater for the SDGs, this consists of at least expanding the monitoring to cover all the Hydrogeological Regions (Vegter, 2001) – 4 of which do not have any active monitoring boreholes) | SGWI | | | | | |
| 2. | Compliance to RQOs are not being monitored and reported. This data is not yet collected, stored and easily accessed for those WMAs that have RQOs | 1) Monitor and report on compliance to the WQ RQOs | | Yes | - | NWSRS IWQM Strategy (WQM2020) | This is addressed in the NW&S MP under the following Actions: Level 2 Action: 1.5.1 Level 3 Action: Support RQOs in specified catchments with regard to integrated water quality management Level 2 Action: 1.5.2 Level 3 Action: 1.5.2 Realign/ establish regional water quality | R20 000 000 over 3 years (as per NW&S MP costs) R6 825 600 (As at Jan 2021 there are 474 WQ RQO sites for all water resource types (Rivers: 324, Dams: 22, Wetlands: 15, Groundwater 69, and estuaries: 44). Cost for sample collection and analysis is estimated at R3600 per sample per site, with the assumption |
| | | 1.1) Develop an Inventory of WQ RQOs | WR Classification & WQP | | | | | |
| | | 1.2) Develop and test methodology/guideline for compliance reporting (set out the steps and standardise the reporting formats) | SDG 6.3.2 TT | | | | | |

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| | | for use by relevant DWS staff | | | | | monitoring programmes in cooperation with all relevant role-players and undertake routine regional monitoring (Action 1.5.6 in the updated Vol 3 for Water Quality) Method and templates for reporting on Compliance to RQOs can be developed in-house. Alignment of monitoring programmes with RQOs can also be undertaken through an in house assessment. Monitoring Costs/implications will depend on the number of “new” monitoring sites needed. | of a minimum of 4 samples per annum and the assumption that other monitoring programmes do not cover the RQO sites) |
| | | 1.3) Align Monitoring programmes to monitor WQ RQOs | RQIS & Regions | | | | | |
| | | 1.4) Monitor and Report on Compliance to RQOs (use WMS and NIWIS to generate reports) | RQIS & Regions | | | | | |
| 3 | There are large data gaps with regards to data on the quantity and | 1) Revitalisation of the Green Drop Assessments (GDA). • Comprehensive | Water Services Regula | Yes | - | NWSRS IWQM Strategy (WQM2020 ⁴) | This is addressed in the NW&S MP under: Level 2 Action: <u>1.4.1 Revitalise the</u> | R29 000 000 over 3 years (as per NW&S MP costs) R32 000 000 over 4 years |

⁴ WQM 2020 refers to the DWS WQ Drive to tackle deteriorating WQ in RSA, consisting of a high level Anti-Pollution Task Team and the DWS WQ Strategy Steering Committee

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| | <p>quality of effluent discharged by Municipalities. (Many municipalities do not have flow gauging stations or are monitoring the quality of outflows. The last comprehensive assessment was undertaken in 2012/13.)</p> | <p>assessments are necessary</p> <ul style="list-style-type: none"> Volumes that are discharged must be included in the GDA. | tions | | | | <p><u>Green, Blue and No Drop programmes and publish results and revise and establish norms and standards.</u></p> <p>(Action 1.5.12, level 3: - Develop and implement an incentive based programme for WQ - in the updated Vol 3 for Water Quality)</p> | (SDG Gaps report estimated costs) |
| 4 | <p>There are significant gaps in the availability of data on wastewater discharged by authorised non-municipal WWTWs, both into municipal sewer systems and into water resources.</p> | <p>1) Undertake initiatives to collect data on discharges from Non-Municipal WWTW's.</p> <p>1.1) Develop and Gazette regulations to compel Water Services Authorities to monitor and record the flow and effluent quality received from industries. The data must be loaded on the Integrated Regulatory Information System (IRIS)</p> <p>1.2) Give written instructions to all currently authorised discharge users to</p> | <p>CM</p> <p>Regions</p> | No | Yes | <p>NWSRS IWQM Strategy (WQM 2020) Data Management Strategy for RSA</p> | <p>Compliance Monitoring Data produced by water users who generate and discharge/dispose of waste or water containing waste is submitted currently to the DWS in hard copy format.</p> <p>A system is now in place to capture discharge data. Regulations are now required to compel existing users to load their data onto iRIS</p> <p>This action is not in the current version of the NW&S MP. It could be included under Action</p> | R200 000 in 2020 (cost of gazetting) |

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| | | <p>register on iRIS and upload their data and information</p> <p>1.3) Pilot the roll-out of the Methodology for SDG 6.3.1 in the North West Region.</p> | CM & NW Region | | | | <p>1.4.10</p> <p>(This is Action 1.5.8, level 3: -in the updated Vol 3 for Water Quality)</p> | |
| 5 | This is a lack of Information on unlawful water users with a pollution potential (location, volumes of discharge and water quality) | <p>1) Develop a Water Quality Validation and Verification method</p> <p>2) Undertake Validation and Verification assessment for all 9 WMAs of all water users with a pollution potential</p> | RPW RPW & Regions | Partially | Yes | IWQM Strategy Implementation (WQM2020 ⁵) | <p>This is alluded to in the current version of the NW&S MP in Action 1.4.5</p> <p>“Replace all Existing Lawful Use (ELU) with licences with enforceable water use conditions”, but its not clear if this includes a deliverable to undertake V&V for Water Quality</p> <p>(This is Action 1.5.12 in the updated Vol 3 for Water Quality: level 3: “Validate and verify (V&V) registered water use with a direct water quality impact”)</p> | R261 000 000 (Cost of a V&V Study X 9 for each CMA. Includes water quantity and quantity components. Estimated at R29 Million per Catchment) |

⁵ WQM 2020 refers to the DWS WQ Drive to tackle deteriorating WQ in RSA, consisting of a high level Anti-Pollution Task Team and the DWS WQ Strategy Steering Committee

6.4 - Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

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| TARGET SPECIFIC (6.4) DESCRIPTION | | | VEHICLES OF CHANGE | | | | |
| No. | GAP | ACTION | NW&SMP – Is it covered already ? | NW&SMP – Can this be a new action? | OTHER (NWSRS, Legislation etc | Comments | Estimated Budget |
| 1 | There has been no comprehensive national water balance at catchment level done since the NWRS 1 (2004) issued balances which directly impact 6.4.2 calculation disaggregation | 1) Carry out the Study(Project) as a matter of priority within DWS with stakeholder involvement (water sector) 2) Participate in Pilot Study proposed by FAO on disaggregation of Indicator 6.4.2 at sub Basin level | High level water balance was issued | yes | NWRS APP Project of DWS Request approval from Acting DG to participate in Pilot Study and request WRC to administer the project. | It is currently a priority project in NWRP Directorate with a TOR already developed and procurement processes progressing for a PSP. The pilot study aims to disaggregate the SDG 6.4.2 indicator at catchment/basin level which gives a better reflection of the level of water stress in the primary drainage areas in South Africa and also accounting for the inter basin transfers. | To cover the whole country provisional cost of Study has been put at R30M for 3 years FAO has drafted a Letter of Agreement and a the Terms of reference of the Study with an provisional budget of USD 40 000 |

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| 2 | Improving EWR calculation as per FAO developed guidelines which is part of 6.4.2 calculation :water stress | <p>Adapting current methodology on current FAO calculation sheet</p> <p>Attending training workshops to better understand EWR calculation.</p> <p>Organise external workshop with stakeholders in the water sector to solicit further inputs and confidence in FAO approach.</p> | no | no | NWRS | DWS participated in an expert workshop by FAO where the refining of the methodology for EWR. It was evident that the methodology adopted is has been implemented in South Africa and RSA as a country is significantly ahead in classifying their river systems in Environmental Management Classes for both resource quantity objectives and Resource quality objectives. | Budget for a virtual meeting on Zoom platform or Microsoft teams. |
| 3 | There is lack consistent and accurate water use and water loss data in all major water use sectors (Agriculture, Industry and Municipalities) | Develop tools and web based systems that will enable data collection and verification of such data | No | Yes | NWRS Regulations Licence Conditions WC/WDM Strategies | The existing tools and systems are not web based and not integrated. The approval to integrated and develop WUE web based system by the CIO and top management is crucial. | The estimated amount required to develop a WUE web-based management system R10M |

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| 4 | Baseline critical information for each sector | Collection of the information per sector as per FAO questionnaire | No | No | | SWPN has already undertaken the exercise of collecting data for the Agricultural sector which will assist us to populate the FAO questionnaire | Internal |
| 5 | Lack of integrated approach to efforts/projects that seek to support the achievement of interrelated SDGs. | Establishment of forums where Interrelated SDGs will share the information(e.g. SDG 6.4 with 8, 12 and 13) | No | No | Intergovernmental relations Act | Establishment of integrated working group for interrelated SDGs to ensure collaborative efforts are taken. | |
| 6 | Lack of data to assist DWS to respond effectively to FAO questionnaire (power irrigated area, percentage of irrigated areas per crop type crop production, drainage-wetland cultivated and impacts of irrigation on environment | Liaison between DWS and sector stakeholders to ensure future data availability on the power irrigated area, irrigation production, drainage and impacts of irrigation on environment. | No | No | DAFF Regulations WC/WDM Strategies | DWS to work with DAFF to develop strategies for information sharing. | |

Note:

1. This Table provides a simple overview of the Actions that come from your own Target Gap report and clarifies which 'Vehicle of Change' it can influence and how.
2. You are required to populate the above Table for your own Target - An example is shown in the Table.
3. Pls include up to 6 priority Gaps/Actions from your Target and include this Table as part of your Gap Report

6.5 – Implement integrated water resources management at all levels, including through trans-boundary cooperation as appropriate

| TARGET SPECIFIC (6.1...6.b) DESCRIPTION | | VEHICLES OF CHANGE | | | | | |
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| Target indicator | 6.5.1 GAP | ACTION | NW&SMP – Is it covered already? | NW&SMP – Can this be a new action? | OTHER (NWSRS, Legislation etc | Comments | Estimated Budget |
| 1 | Example: There is no provision for testing Oxygen in rivers as per 6.3.1 requirements | Instruct all laboratories in SA to make provision for testing Oxygen levels in rivers | NO | YES | NWSRS WQM Policy | This can be a new action addressed under 1.5 of the NWSMP (Vol 3) (Maintaining And Improving Raw Water Quality) | Initial R30 mill to mobilise all SA laboratories and then R5mil / annum to operate |
| 2 | Reviewed policy not yet gazetted. | Encoding the updated policy positions into relevant legislation | Yes | Yes | NWSSS | Policy has been reviewed and seems there is no traction by parliament | n/a |
| 3 | The drafting of subsidiary regulations to support existing legislation | Entrenching them as action items in the NWRSS Strategy and the NWRSS Master Plan | Not clear | resuscitated | | A lot of consultation and coordination has to happen between other sections and branch policy and regulation | R5million for the programme. |
| 4 | Incorporation of sanitation policy into the legislation | Incorporate of sanitation policy into the legislation | Not yet | yes | | Draft document available | R5million for the programme. |
| 5 | Maintenance of water resources reconciliation and development studies | Provide adequate budget for studies on a continuous basis | yes | yes | NWRSSS | This activity is continuous and should not be given a closed time frame | R25million /a |
| 6 | 7 x Catchment management strategies still to be | DWS should follow through in line with the NWRSS 2 | yes | yes | NWRSS 2 | The DWS needs to be committed to establishing these institutions | R70million for all. |

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| | developed | | | | | | |
| 7 | No operational plans for the international basins are being developed | An autonomous river basin organisation needs to be established | yes | yes | NWRS 2 | Currently it looks like its only the Aurasecom and Limcom that have fully developed OP | |
| 8 | Integrated management of groundwater resources at river basin level | Develop Integrated management of groundwater resources at river basin level | yes | yes | NWRS 2 | GW should be managed in a similar fashion to SW especially items of data collection, records keeping and information sharing. | To further consult |
| 9 | Limited cooperative governance | Improve and increase interaction with other organs of state | n/a | n/a | | Progressive implementation is required especially with those states organs directly involved in the management of water. | |
| 10 | Communication across water sectors | Improve and increase interaction with water sector partners | | | | Top to bottom approach. Intensive involvement of the education sector and of community structures. | R100mil/a |
| 11 | Institutional capacity | Develop human capacity | yes | yes | | | |
| 12 | Little Transformation of irrigation boards to WUAs | Transform of irrigation boards to WUAs | yes | yes | NWRS 2 | Trust and will power has to be natured. WUA have a history of failure | |
| 13 | Gender mainstreaming targets still to be achieved | Increased participation of vulnerable groups in IWRM | yes | no | | Putting plans into action is vital , the legislation has create an enabling environment. | |
| 14 | National budget for investment including water | Implementation o the master plan should be well funded | yes | yes | | Current budget to implement IWRM is R900b and the DWS is R300b short(to be confirmed) | |

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| | resources infrastructure | | | | | | |
| 15 | Tariff setting mechanisms and policy in place | | | | | | |
| | Incorporate sanitation policy into the legislation | The relevant procedures to achieve this should be fast tracked | yes | yes | | | |
| Indicator 6.5.2 | | | | | | | |
| | Human capacity | | | | | | |
| 1 | No adequate funding for basin commissions | | yes | yes | | Too much reliance on donor funding to top up RBO functions and establishment | |
| 2 | No permanent commission for the Incomati basin | An autonomous river basin organisation needs to be established | yes | yes | NWRS 2 | Currently the basin states are in discussions and have established an interim secretariat. | R16 000 000 |
| 3 | Existing institutes seem to operate at oversight level only. | RBOs' need to be empowered to operate like RBOs from the rest of the world. | no | no | no | So much focus on complying with the SADC protocol/ on shared water courses, were is RSA is far more advanced itirms of IWRM and can actually do a lot more with its neighbours. | |

Note:

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3. Pls include up to 6 priority Gaps/Actions from your Target and include this Table as part of your Gap Report

6.6 – By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

| SDG 6.6: WATER-RELATED ECOSYSTEMS | | | | | | | | |
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| No. | GAP | ACTION ⁶ | RESPONSIBILITY | VEHICLES OF CHANGE | | | Comments | Estimated Budget |
| | | | | NW&S MP – 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 unco-ordinated and presents massive gaps and issues with access to | 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 ⁷ | 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) |

⁶ These actions are equivalent to a “Level 2 and/or 3” action under the NW&S MP

⁷ 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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| | data. | | | | | | | |
| 2. | There is insufficient estuarine monitoring data (Only 23 of the 300 Estuaries are being monitored through the DWS National Estuary Monitoring programme) | 1) Expand the estuarine health monitoring programme in consultation with other sector partners | RQIS | No | Yes | Coastal Management Act, NWRS | No reference to the Estuarine Monitoring Programme can be found in the current Vol 3 (v4.8) of the NW&S MP. | R1 500 000 (R500 000 per year 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 inputs into estuaries) |

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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 | |
| 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 boreholes. | 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 report recommendations) |
| 4 | Lack of groundwater operating rules in high groundwater use areas to | 1) Undertake detailed Groundwater assessments and establish Groundwater | WRPS | Partially | Yes | National GW Management Strategy | This action could fit in with Action Level 2: 1.1.12 Increase groundwater use (including artificial | R300 000 per project/area. (can range between R50 000 to R800 000) |

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|---|---|--|-----------|-----------|-----|---|--|-------------|
| | <p>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</p> | operating rules in high groundwater use areas. This should be undertaken as part of Groundwater management plans . | | | | | recharge) and re-use of water | |
| 5 | <p>Lack of updated National River Survey (Data on the Condition of River Ecosystems is needed every 10 years to successfully track trends. To enable</p> | 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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|---|--|---|---|----|----|---|--|----------------------|
| | trend determination it is necessary that a national survey of rivers be undertaken to assess their state at the same point) | | | | | | | |
| 6 | A number of the global SDG indicators for ecosystems are not useful for decision making in SA. Management Targets and corresponding performance indicators that are meaningful for RSA need to be identified and aligned across sectors | <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) |

6. a – Expand international cooperation and capacity building support to developing countries in water and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

| No. | TARGET SPECIFIC (6.1...6.b) DESCRIPTION | | VEHICLES OF CHANGE | | | Comments | Estimated Budget |
|-----|---|---|---------------------------------|------------------------------------|--|---|------------------|
| | GAP | ACTION | NW&SMP – Is it covered already? | NW&SMP – Can this be a new action? | OTHER (NWSRS, Legislation etc) | | |
| 1. | Enhancing existing and new cooperation | Conduct benchmarking and comparison assessments | Yes | No | IWC programmes of work Strategic plan of dept | Enhanced cooperation to create awareness on the content of targets for goal6 | ± R 25 000 |
| 2. | ODA declining is also true for the South African water sector | Identify developing partners and engagements to be targeted | Yes | No | Foreign policy of SA NWSRS | This is an existing action that can contribute to attracting external investment | ± R50 000 |
| 3. | Finding innovative ways to attract ODA | Intensify efforts to place water on the global agenda, by placing emphasis on cooperation with the developing AU and UN member states | Yes | No | Foreign policy of SA NWSRS | Intensify existing programmes | ± R100 000 |
| 4. | Finding ways to close the gap on dispersed ODA taking into account the international response strategies in place to COVID- | Strengthen existing Partnerships within the region | Yes | No | NT ODA policy NWSRS | Motivate all water use sectors to embrace water stewardship, strengthen their collaboration, and participate in integrated water resource | ± R 50 000 |

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|----|---|---|-----|----|---------------------------|-------------------------------|------------|
| | 19 | | | | | management. | |
| 5. | ODA utilised to assist Africa to achieve SDG6 | Support regional agenda and scope of work in both bilateral and multilateral fora | Yes | No | NT ODA policy NWSRS | Intensify existing programmes | ± R100 000 |
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Note:

The COVID-19 crisis necessitates protecting the recent SDG gains and pursuing a transformative recovery from COVID- 19;

6. b – Support and strengthen the participation of local communities in improving water and sanitation management.

| 6. b – Support and strengthen the participation of local communities in improving water and sanitation management. | | | | | | | |
|--|---|--|------------------------------------|---------------------------------------|----------------------------------|---|---|
| | TARGET SPECIFIC (6.b) DESCRIPTION | | VEHICLES OF CHANGE | | | | |
| No. | GAP | ACTION | NW&SMP – Is it covered already? | NW&SMP – Can this be a new action? | OTHER (NWSRS, Legislation etc | Comments | Estimated Budget |
| 1 | Establishment of CMA | Fast track the establishment of the remaining 7 CMA | Yes | No | NWA NWSRS 2 | This action is already covered on NW&SMP | To be determined by Institutional Oversight Directorate |
| 2 | Transformation of Irrigation board into Water User Association | Fast track the transformation of remaining 179 irrigation boards | Yes | No | NWA NWSRS 2 | This action is already covered on NW&SMP | To be determined by Institutional Oversight Directorate |
| 3 | Current indicator does not measure performance of community participation | Develop a new proposed indicator and method of computation | No | Yes | | This action to be implemented with support from WRC | R300 k |

SDG 6 AND INTERFACES WITH VEHICLES OF CHANGE

Introduction

The SDG6 Programme measures the Gaps within the 8 Targets for which it is responsible. These Gaps must be closed by 2030 in terms of the commitment made by South Africa to the United Nations.

For the Gaps to close, relevant Projects and Programmes must be implemented within the sector and by all stakeholders involved in the water and sanitation business. There are a number of Vehicles of Change that can be utilised including the National Water & Sanitation Master Plan (NW&SMP), the National Water and Sanitation Resource Strategy (NWSRS), National Development Plan (NDP), DWS Annual Performance Plan (APP), Water Board Business Plans, Water Service Development Plans (WSDPs), Legislation and Policy etc. For the purpose of this section, one of the key vehicles to translate Gaps into Projects / Programmes for SDG6 is the NW&SMP. The NW&SMP informs the sector stakeholder of their responsibility to specific actions which will contribute towards the 2030 Goals of both SDG6 and the NW&SMP. In turn the sector stakeholders must then align their own plans (IDPs, WSDPs, Utility Business Plans etc) with the actions in the NW&SMP.

This section defines the process or interface between the SDG6 programme and the NW&SMP to ensure that the Gaps identified within SDG6 do indeed get translated into Projects / Programmes within the NW&SMP. It must be noted that a similar approach must be applied to other vehicles of change such as the National Water and Sanitation Resource Strategy (NWSRS) for example.

The NW&SMP Volume 3 is supposed to be revised annually in March of each year. However, the launch of the NW&SMP was delayed to September 2019 and is busy being established within the implementing phase. The process described below will ensure that identification of Target Gaps by the SDG6 team, creation of Target Actions by the SDG6 team and inclusion of these projects / programmes within Volume 3 of the NW&SMP by the NW&SMP team are adhered to.

In terms of Monitoring and Evaluation of these Programmes, both the SDG6 programme and the NW&SMP programme will have their own specific M&E systems that will be aligned to one another. The SDG6 M&E system will focus on the 8 Targets and the Gaps to be closed towards the 2030 Goal, whereas the NW&SMP M&E system will focus on the projects and programmes within the Master Plan and the performance thereof.

SDG6 / NW&SMP Interface

Process:

1. Each SDG6 Task Team Leader to develop their Target Gap Report by end of January of each year and submit to SDG6 Programme Coordinator
2. Each SDG6 Task Team Leader to submit proposed Target Actions to close remaining Gaps for their respective Target. These Target Actions to be ideally written in the format provided in Volume 3 of the National Water and Sanitation Master Plan. The proposed Target Actions from TT Leaders will be Level 2 Actions (as per Vol 3). TT Leaders will clarify which Level 1 Action they are aligning with. Task Team Leaders to submit their proposed Level 2 Actions to the SDG6 Programme Coordinator by end of January
3. All SDG 6 Target Actions to be consolidated by the SDG6 Programme Coordinator and submitted to the Service Delivery Unit of the NW&SMP by end of February each year.
4. A meeting to be held in March between the SDG6 Working Group and the NW&SMP team to confirm the proposed Target Actions for inclusion as Level 2 Actions of the NW&SMP.
5. The NW&SMP will monitor progress of all NW&SMP Actions detailed in Volume 3. The SDG6 Working Group will monitor the Target and corresponding indicators against the Gaps to be closed by 2030
6. A was completed by the WRC in 2020 to identify inter-linkages with all other SDGs (17 in total including SDG 6) so that the water and sanitation needs of Health, Education, Human Settlements, for example, are included in the process whilst influencing the proposed Actions that are captured in Volume 3 of the NW&SMP and other Vehicles of Change.

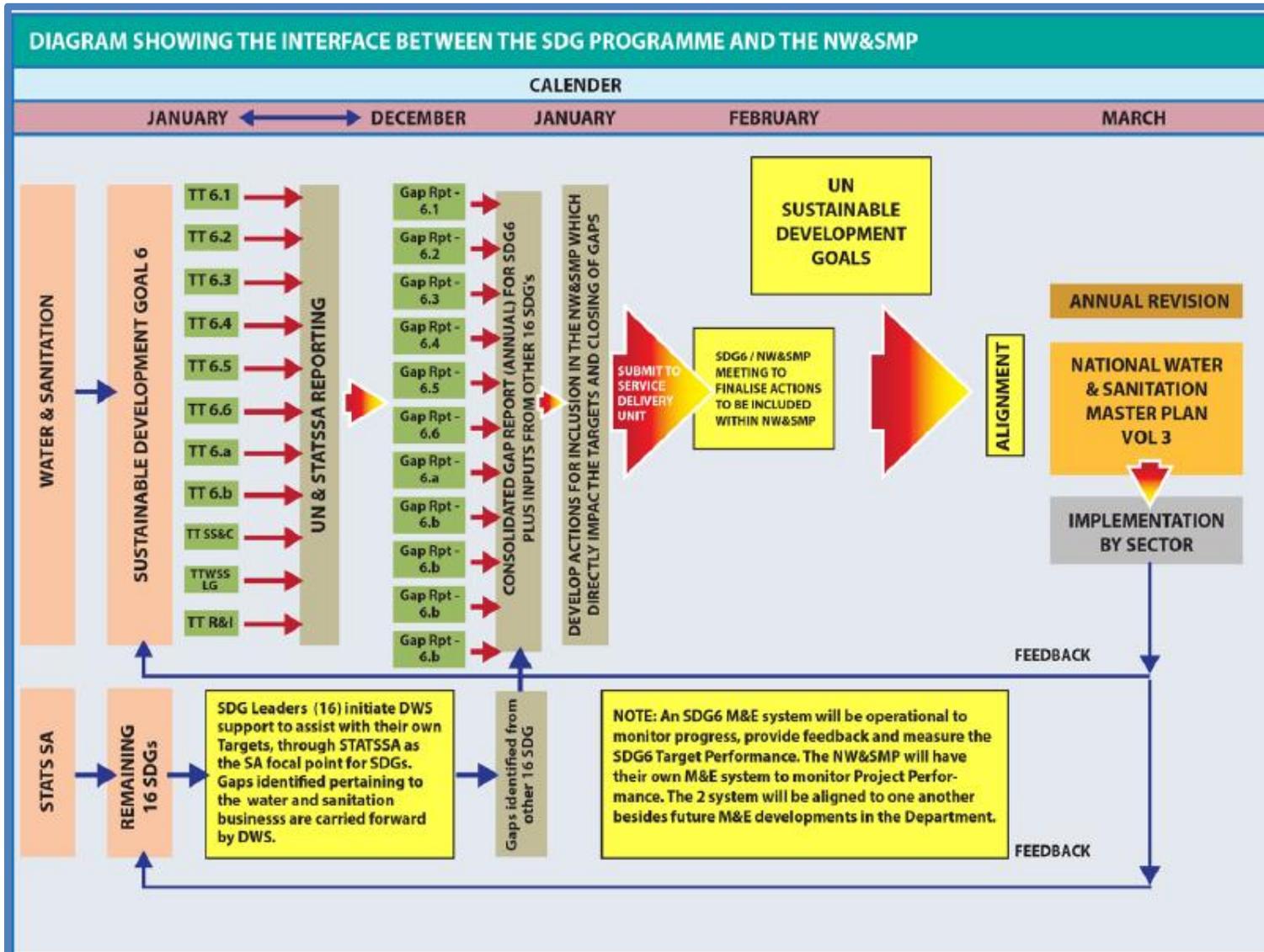


Table 2 – SDG / NW&SMP Interface

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