

# 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	
	<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.<sup>1</sup></p>

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 was launched on 13 September 2019 following the previous data drive of 2017. The next data drive will occur during 2020 using data gained during 2018 / 2019. This report summarises the Gaps that have been identified for each of the 8 Targets by the end of 2019 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 the 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

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TARGET SPECIFIC (6.1) DESCRIPTION		VEHICLES OF CHANGE				Comments	Estimated Budget
No.	GAP	ACTION	NW&SMP – Is it covered already ?	NW&SMP – Can this be a new action?	OTHER (NWSRS, Legislation etc)		
1	<b>SDG 6 Dashboard:</b> 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 and present the outcomes in a form of a dashboard.	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 <b>R10 million</b> 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	<b>No data on rural water quality</b>	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.	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	Rural water quality to integrate into the Blue Drop process = <b>R3 million</b> rand.

		As an Interim measure. A proxy indicator measured in the GHS will be used to track drinking water quality.				source needs to integrate with the Blue Drop data collection process. The IT systems will need to work closely with the SDG 6.1 team.	
3	<b>Improve Interruptions of basic water supply – i.e. reliable water supply. SDG 6.1 – safely managed</b>	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 Water Knowledge System 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  <b>= R3 million</b>
4	<b>Updating the Water Services (water and sanitation) Knowledge System to include coordination between actors and formal mechanisms</b>	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 Department of Health and the Department of Education	YES	YES The SDGs are supported by AMCOW, the WHO and through their GLAAS process highlighted	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 donors that contribute to WASH activities nationally. Includes	<b>= R2 million</b>

		needs to be strengthened.		the need to strengthen co-operation with other National Departments .		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.	
	<b>TOTAL</b>						<b>R18 million</b>

**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.	GAP	ACTION	NW&SMP – Is it covered already ?	NW&SMP – Can this be a new action?	OTHER (NWSRS, Legislation etc	Comments	Estimated Budget
1	Prioritisation of sanitation services through various grants funding allocation	<p>WSIG Framework: Impose allocation formula between water and sanitation (introduce a % between W&amp;S)</p> <p>MIG Framework: Enforce implementation of the allocation formula between water, sanitation and roads</p> <p>Inclusion of a condition in WSIG &amp; MIG frameworks that enforce Water Services Authority to prioritize Health and hygiene user education within the project planning and drafting of business plans /technical rep</p>	No	Yes	DORA, 2016 Sanitation Policy , SFWFS MIG Framework	<p>Municipalities will not meet the SDG targets due to slow delivery and none prioritization of sanitation services. Promotional material &amp; guidelines are required</p> <p>Health and hygiene allocation not utilised effectively, used for construction purposes at times</p>	R3m

2	Proportion of population using safely managed sanitation services, including a hand washing facility with soap and water	Strengthen hygiene user education and training to address the needs of women and girls and those in vulnerable situations  Incorporated, in the regulation ( Norms & Standards) document.	No	Yes		Support the initiative regarding menstrual hygiene and related sanitation services	
3	Eradication of Open Defecation including the rising challenge in the cities due to migration	Develop a National Sanitation Integrated Plan Influence WSDP/IDPs planning processes at local levels  Green drop results to inform planning and recommendations for funding	Yes	No	NW&SMP SFWS	Dilapidating cities and degrading of environment that can lead to unhealthy people.	
4	Lack of Safely Managed Sanitation Plans for faecal sludge management for onsite sanitation and state of treatment plants to ensure safely management and Disposal	Develop National Faecal Sludge Management strategy  Pilot the faecal Sludge Management system in Polokwane Municipality.  Develop Regulatory requirements of faecal sludge Management	No	Yes	Sanitation Policy	Document research studies projects that in the country that support faecal sludge management	R2m
5	Data and progressive monitoring for indicator 6.2.1	Establish & implement a country wide Integrated National Sanitation Information System to monitor, report, evaluate & regulate the entire sanitation	No	Yes	(2016 Policy position 32)	Update the existing Sanitation Monitoring Tool on Monthly Basis.	R5m

		sector across the country					
6	Sanitation Technical Committee on Appropriate Technology	Establish a committee to support institutional sanitation regarding appropriate technology  Establish National Strategy on Technology uptake  Develop Regulatory requirements of faecal sludge Management	No	Yes			R3m
7	Promotion of Incentive driven and uptake of appropriate Sanitation Technology	Launching an Incentive driven and decentralized Sanitation Innovation Campaign by Minister of Water & Sanitation, to encourage utilisation of resource efficient sanitation infrastructure in both rural and urban human settlement areas	No	Yes	<b>2016 Policy position 24</b>	Some WSA are not aware of their performance and backlog as well as targets to be met.	R15 M
8	Sanitation delivery Status Quo per WSA not known	Communicate Status quo of sanitation delivery per WSA. Raise profile on Meeting SDG 2030 targets					



**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;**

No.	TARGET SPECIFIC (6.3) DESCRIPTION		VEHICLES OF CHANGE			Comments	Estimated Budget
	GAP	ACTION <sup>1</sup>	NW&SMP – Is it covered already ?	NW&SMP – Can this be a new action?	OTHER (NWSRS, Legislation etc		
1	<b>There is no surface- or ground-water quality data from National Water Quality Monitoring Programmes for 2018 and 2019.</b>	Revitalise the existing National Water Quality Monitoring programmes to <i>at least</i> resemble the monitoring programme status as at 2016	Yes	-	NWSRS IWQM Strategy (WQM2020 <sup>2</sup> )	<p>This is addressed in the NW&amp;S MP<sup>3</sup> 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><b>Level 3 Action:</b> <u>Undertake routine national water quality monitoring, considering the recommendations of the Review of the South African Water Resource Monitoring Network Report.</u></p> <p>(Action 1.5.3 in the updated Vol 3 for Water Quality)</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&amp;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>

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

<sup>2</sup> 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

<sup>3</sup> The Version of the MP referred to here is V4.8 of 2018

No.	TARGET SPECIFIC (6.3) DESCRIPTION		VEHICLES OF CHANGE			Comments	Estimated Budget
	GAP	ACTION <sup>1</sup>	NW&SMP – Is it covered already ?	NW&SMP – Can this be a new action?	OTHER (NWSRS, Legislation etc		
2.	<b>Lack of sufficient national coverage of Water Quality Monitoring sites for ground and surface water.</b>	Through a phased Implementation process: expand and realign the National WQ Monitoring programme in line with the study “ <i>Review, evaluation and Optimisation of the National Water Resource Monitoring Network</i> ” (For Groundwater to cater for the SDGs, this consists of expanding the monitoring to cover all the Hydrogeological Regions (Vegter, 2001) – 4 of which do not have any active monitoring boreholes).	Yes	-	NWSRS IWQM Strategy (WQM2020 <sup>4</sup> )	This is addressed in the NW&S MP <sup>ii</sup> under action Level 2: 1.5.2 Routinely monitor resource water quality  (Action 1.5.3 in the updated Vol 3 for Water Quality)  <b>Level 3 Action:</b> <u>Undertake routine national water quality monitoring, considering the recommendations of the Review of the South African Water Resource Monitoring Network Report</u>	R600 000 for 2020 (Cost of 6 new Boreholes for monitoring water quality)  R859 486 120 is the full cost of implementing the optimised networks
3.	<b>DWS cannot readily report on compliance to RQOs for water quality.</b> This data is not yet collected, stored and easily accessed for those WMAs that have RQOs	Monitor and report on compliance to the WQ RQOs 1. Develop methodology for compliance reporting 2. Align Monitoring programmes to monitor WQ RQOs 3. Monitor and Report on	Yes	-	NWSRS IWQM Strategy (WQM2020)	This is addressed in the NW&S MP under the following Actions: <b>Level 2 Action: 1.5.1</b> <b>Level 3 Action:</b> Support RQOs in specified catchments with regard to integrated water quality	R20 000 000 over 3 years (as per NW&S MP costs)  R4 800 000 (As at Nov 2018 there are 451 WQ RQO sites for all water resource types.

<sup>4</sup> 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

No.	TARGET SPECIFIC (6.3) DESCRIPTION		VEHICLES OF CHANGE			Comments	Estimated Budget
	GAP	ACTION <sup>1</sup>	NW&SMP - Is it covered already ?	NW&SMP – Can this be a new action?	OTHER (NWSRS, Legislation etc		
		Compliance to RQOs				<p>management</p> <p><b>Level 2 Action: 1.5.2</b> <b>Level 3 Action:</b> 1.5.2 Realign/ establish regional water quality monitoring programmes in cooperation with all relevant role-players and undertake routine regional monitoring</p> <p>(Action 1.5.6 in the updated Vol 3 for Water Quality)</p> <p>Method and templates for reporting on Compliance to RQOs can be developed in-house.</p> <p>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.</p>	<p>Of this 327 Sites are for Rivers and Dams.</p> <p>Cost for sample collection and analysis is estimated at R3600 per sample per site, with the assumption of a minimum of 4 samples per annum and the assumption that other monitoring programmes do not cover the RQO sites)</p>

No.	TARGET SPECIFIC (6.3) DESCRIPTION		VEHICLES OF CHANGE			Comments	Estimated Budget
	GAP	ACTION <sup>1</sup>	NW&SMP - Is it covered already ?	NW&SMP – Can this be a new action?	OTHER (NWSRS, Legislation etc		
4	<b>There are large data gaps with regards to the quantity and quality of effluent discharged by Municipalities.</b> Many municipalities do not have flow gauging stations or are monitoring the quality of outflows. The last comprehensive assessment was undertaken in 2012/13.	Revitalisation of the Green drop Assessments. - Comprehensive (not just partial) assessments are necessary - volumes that are discharged must be included in the GDAs.	Yes	-	NWSRS IWQM Strategy (WQM2020 <sup>5</sup> )	This is addressed in the NW&S MP under: <b>Level 2 Action:</b> <u>1.4.1 Revitalise the Green, Blue and No Drop programmes and publish results and revise and establish norms and standards.</u>  (Action 1.5.12, level 3: - Develop and implement an inventive based programme for WQ - in the updated Vol 3 for Water Quality)	R29 000 000 over 3 years (as per NW&S MP costs)  R32 000 000 over 4 years (SDG Gaps report estimated costs)
5	<b>There is a lack of legislative requirements compelling companies to load their waste water discharge data.</b>	Develop and Gazette regulations to compel water users to register and upload water discharge water quality data on iRIS	No	Yes	NWSRS IWQM Strategy (WQM 2020) Data Management Strategy for RSA	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. A system is now in place to capture discharge data. Regulations are now required to compel existing	R200 000 in 2020 (cost of gazetting)

<sup>5</sup> 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

No.	TARGET SPECIFIC (6.3) DESCRIPTION		VEHICLES OF CHANGE			Comments	Estimated Budget
	GAP	ACTION <sup>1</sup>	NW&SMP - Is it covered already ?	NW&SMP - Can this be a new action?	OTHER (NWSRS, Legislation etc		
						<p>users to load their data onto iRIS</p> <p>This action is not in the current version of the NW&amp;S MP. It could be included under Action 1.4.10</p> <p>(This is Action 1.5.8, level 3: -in the updated Vol 3 for Water Quality)</p>	
6	<p><b>Data management systems for water quality are not integrated</b>, including WARMS/eWULAAS, WMS, NCIMS and iRIS. (data from one system does not automatically correlate to data from another system. This hampers routine reporting on the no.of WWTWs that are authorised)</p>	<p>Adapting current information management systems (WARMS; IRIS; NCIMS; WMS) to obtain data from the various systems in order to allow reporting on SDG Target 6.3</p>	No	yes	<p>NWSRS IWQMS Data Management Strategy for RSA</p>	<p>The current version of the NW&amp;S MP (Action 1.5.3) refers to systems for Resource Water Quality. An action that refers to source control data systems is needed.</p> <p>(This is Action 1.5.11 in the updated Vol 3 for Water Quality: level 3: "Government to ensure the harmonisation of data and information systems pertaining to (water quality) source control")</p>	<p>R9 000 000 (R5 mill development costs R3 million per annum maintenance costs for three year contract)</p>

No.	TARGET SPECIFIC (6.3) DESCRIPTION		VEHICLES OF CHANGE			Comments	Estimated Budget
	GAP	ACTION <sup>1</sup>	NW&SMP – Is it covered already ?	NW&SMP – Can this be a new action?	OTHER (NWSRS, Legislation etc		
7	DWS do not know where all the water users with a pollution potential (both lawful and unlawful ) are situated and how much they discharge and of what quality	Develop a method and undertake Validation and Verification assessment for all 9 WMAs of all water users with a pollution potential	Partially	Yes	IWQM Strategy Implementation (WQM2020 <sup>6</sup> )	This is alluded to in the current version of the NW&S MP in Action 1.4.5 “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  (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”)	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)

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**Note!** Through the SDG process, in addition to the above key requirements to enable reporting on SDG 6.3, a number of amendments have been made to the water quality components in Vol 3 (V4.8) of the NW&S MP to better allow for alignment between the SDGs and Master Plan and to capture the changes that have been made since Vol 3 (v4.8) was developed (in 2018). It is requested that these changes be considered by the NW&S MP project team.

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<sup>6</sup> 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 withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.**

No.	TARGET SPECIFIC (6.4) 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	There has been no comprehensive national water balance done since the NWRS 1 (2004) issued balances which directly impact 6.4.2 calculation	Carry out the Study(Project) as a matter of priority within DWS with stakeholder involvement (water sector)	High level water balance was issued	yes	NWRS APP Project of DWS	It is currently a priority project in NWRP Directorate with a TOR already developed and procurement processes progressing for a PSP	To cover the whole country provisional cost of Study has been put at R30M for 3 years
2	Improving EWR calculation as per FAO developed guidelines which is part of 6.4.2 calculation w:water stress	Adapting current methodology on current FAO calculation sheet	no	no	NWRS	DWS has been invited to an expert workshop by FAO where the refining of the methodology for EWR will be discussed for country specific requirements	R100 000 – to cover the following - (1participant to attend -workshop in ROME) Organise workshop locally for stakeholders on EWR for SDG

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	Some of the projects to develop these tools and systems are already on the pipeline and are prioritised in the Directorate: WUE. However, approval by Top Management is crucial.	The estimated amount required to develop a WUE web-based management system R10M
4	Baseline critical information for each sector	Collection of the information	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



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

Target indicator 6.5.1	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	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
2	The drafting of subsidiary regulations to support existing legislation						
3	Incorporation of sanitation policy into the legislation	Incorporate of sanitation policy into the legislation				Draft document available	
4	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	
5	7 x Catchment management strategies still to be developed	DWS should follow through in line with the NWRS 2	yes	yes	NWRS 2		
6	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 Aurascom and Limcom that have fully developed OP	

7	Integrated management of groundwater resources at river basin level	Develop Integrated management of groundwater resources at river basin level	yes	yes			
8	Limited cooperative governance	Improve and increase interaction with other organs of state	n/a	n/a			
9	Communication across water sectors	Improve and increase interaction with water sector partners					
10	Institutional capacity	Develop human capacity	yes	yes			
11	Little Transformation of irrigation boards to WUAs	Transform of irrigation boards to WUAs	yes	yes	NWRS 2		
12	Gender mainstreaming targets still to be achieved	Increased participation of vulnerable groups in IWRM					
13	National budget for investment including water resources infrastructure	Implementation of 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)	
14	Tariff setting mechanisms and policy in place						
15	Incorporate sanitation policy into the legislation	The relevant procedures to achieve this should be fast tracked	yes	yes			
<b>Target indicator 6.5.2</b>							
	Human capacity						

<b>1</b>	No adequate funding for basin commissions		yes	yes		To much reliance on donor funding to top up RBO functions and establishment	
<b>2</b>	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

## 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 ii	NW&SMP – Is it covered already ?	NW&SMP – Can this be a new action?	OTHER (NWSRS, Legislation etc	Comments	Estimated Budget
1	<b>There is a severe lack of wetland data.</b> 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.	Implement the National Wetland Monitoring Programme - (capacity created and training undertaken) and co-ordinate the sector towards harmonized wetland data systems	<b>No</b>	Yes	NWSRS W-DAM Action Plan <sup>ii</sup>	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.	<b>Only 23 of the 300 Estuaries are being monitored</b> through the DWS National Estuary Monitoring programme	Expand the estuarine health monitoring programme in consultation with other sector partners	<b>No</b>	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)

4.	<p><b>National surface water hydrology (rainfall-runoff) data availability (for rivers, lakes, dams and estuaries) is declining.</b> 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.</p>	<p>Implementation of the review, evaluation and optimisation of National Monitoring Networks report findings, acquire and patch appropriate rainfall data, update the hydrological models and conduct necessary hydrology assessments on a 5 yearly basis.</p>	Yes	-	NWSRS National Data Management Strategy	<p>This need is catered for under numerous actions in the NW&amp;S MP. The SDGs provide a level of refinement in terms of the needs (level 4 actions).</p> <p><b>Action Level 2:</b> <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)</p> <p><u>1.1.11</u> Refurbish gauging stations</p> <p><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</p>	<p>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&amp;M Costs for 990 River and Reservoir Stations)</p> <p>R10 000 000 (Cost a WR2020 Study)</p> <p>R500 000 every 5 years (cost of modelling flow inputs into estuaries)</p>
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5	<p><b>National Ground water hydrology data distribution is insufficient</b> with 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.</p>	<p>Implementation of the review, evaluation and Optimisation of National Monitoring Networks 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.</p>	No	Yes	<p>NWSRS National Data Management Strategy National GW Management Strategy</p>	<p>No reference to the Groundwater Monitoring network could be found in the Masterplan.</p>	<p>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)</p>
6	<p>There is a drive to use more groundwater in RSA. To effectively regulate this process and to <b>prevent overuse of groundwater resources</b>, 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>	<p>Undertake detailed Groundwater assessments and where necessary establish Groundwater operating rules for priority areas. This should be undertaken as part of Groundwater management plans .</p>	Partially	Yes	<p>National GW Management Strategy</p>	<p>This action could fit in with Action Level 2: 1.1.12 Increase groundwater use (including artificial recharge) and re-use of water</p>	<p>R300 000 per project/area. (can range between R50 000 to R800 000)</p>

7	<b>Data on the Condition of River Ecosystems is needed every 10 years to successfully track trends.</b> To enable trend determination it is necessary that a national survey of rivers be undertaken to assess their state at the same point.	Undertake a National River Survey every 10 years to track change in condition of RSA's rivers	No	Yes	NWSRS National Data Management Strategy	No Reference to the REMP or National Surveys for River Condition could be found.	R20 000 000
8	<b>A number of the global SDG indicators for ecosystems are not useful for decision making in SA.</b> Management Targets and corresponding performance indicators that are meaningful for RSA need to be identified and aligned across sectors	Undertake an assessment to determine the necessary Targets and develop the requirement Indicators to accurately report on water-related ecosystems in RSA	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.a) 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	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 management.	± R 50 000
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



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

No.	TARGET SPECIFIC (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	Establishment of CMA	Fast track the establishment of the remaining 7 CMA	Yes	No	NWA NWRS 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 NWRS 2	This action is already covered on NW&SMP	To be determined by Institutional Oversight Directorate

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## **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.

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## **SDG6 / NW&SMP Interface**

### Process:

1. Each SDG6 Task Team Leader to develop their Target Gap Report by end of week 2 in December 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 week 2 in 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 process is currently being unfolded to identify inter-linkages with all other SDGs (16 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.

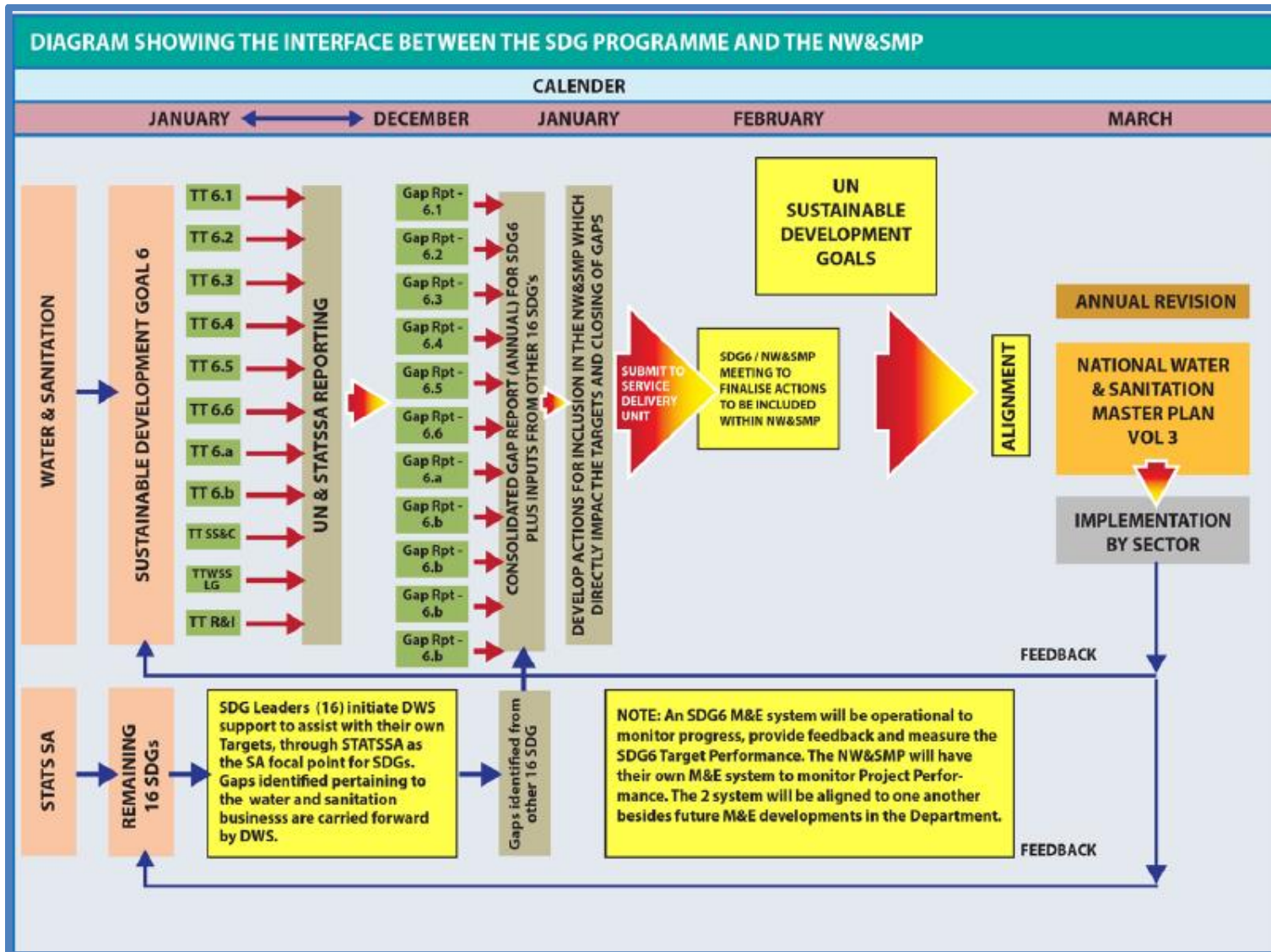


Table 2 – SDG / NW&SMP Interface