Free State
Progress Report
on the
Implementation of SDG 6

July - December 2021

By

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Table of Contents

List of abbreviations

BWS	Bulk Water Supply
CMA	Catchment Management Agency
CoGTA	Cooperative Governance and Traditional Affairs
DAFF	Department of Agriculture, Forestry and Fisheries
DESTEA	Department of Small Business Development, Tourism and Environmental Affairs
DMR	Department of Mineral Resources
DOH	Department of Health
DWS	Department of Water and Sanitation
DWQ	Drinking Water Quality
IB	Irrigation Board
IRIS	Integrated Regulatory Information System
NGO	Non-governmental Organization
NW&SMP	National Water and Sanitation Master Plan
RSA	Republic of South Africa
RBIG	Regional Bulk Infrastructure Grant
SDG	Sustainable Development Goals
SDGWG	Sustainable Development Goals Working Groups
UN	United Nations
WDCS	Waste Discharge Charge System

WRC	Water Research Commission
WSIG	Water Services Infrastructure Grant
WTW	Water Treatment Works
WUA	Water User Association
WWTW	Waste Water Treatment Works

Background

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 and Sanitation Master Plan in terms of water and sanitation needs.

The Statistics South Africa (STATSSA) is the focal point for all 17 SDGs in the country. 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. However, it is acknowledged that water is inherently reflected and/or implied in various other goals.

SDG 6 on water and sanitation provides a tremendous opportunity to accelerate progress on the 2030 Agenda, given the water sector's central role in human rights, poverty reduction, inequality elimination, peace and justice, and the environment. For example, achieving universal access to water is linked to SDG 6 to achieve gender equality. Women and girls are responsible for water collection in 8 out of 10 households where water is not accessible in the home across 61 countries. Bringing water sources closer to people reduces the time needed to collect water and makes more time available for educational activities, especially for females.

The Deputy Director General: Water Resource Management is responsible to oversee the implementation of SDG 6 in SA on behalf of the Department and with collaboration with STATSSA. The day-to-day implementation of SDG 6 programme is the responsibility of Chief Director: Water Services Planning & Information. SDG 6 contains 6 sub-goals and 2 sub targets, all focusing directly on water and sanitation services and water resource management, namely:

- 6.1 achieve universal and equitable access to safe and affordable drinking water for all

- 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

- 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

- 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

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

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

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

- 6.b support and strengthen the participation of local communities in improving water and sanitation management.

Participation by Free State Provincial Office

To facilitate the implementation of SDG 6 programme the DWS SDG 6 Working Group has been established within the Branch Water Services Management. The working group is an overarching forum that provides strategic direction to various task teams of various SDG 6 sub-goals. Each task team is therefore expected to develop their own ToR including an action plan on how data specific to its target is going to be collected, processed, analysed, reported, etc. It is also the responsibilities of task teams to develop indicators and monitoring programmes to monitor the achievement of targets of their respective sub-goals and indicators. The Provincial Office contributes to these task teams and are represented in the Working Group.

Subsequently, the Free State Provincial Office drafted an Action Plan with the actions that will be implemented this year to contribute to the SDG goals.

The Free State Action Plan

This Action Plan was signed off. It stipulates actions that will contribute to the sub-target, the Responsible Director, the Role of the Task Team and also the Budget

Required and Risks involved. This Action Plan forms the basis of the content of this bi-annual report.

SDG Gap Report

A Consolidated Gap Report was developed to summarize the gaps that have been identified for each of the 8 targets, which must be addressed in order to close the gaps/ data needs identified, whilst providing recommendations of areas to be improved. Subsequently the Department developed proposed actions to be implemented towards the closure of these gaps through vehicles such as the NW&SMP and the NWSRS.

The Free State has identified the following gaps that need to be closed by 2030:

SDG GAP	**VEHICLES OF CHANGE**
SDG 6.1	
Large data gaps with regards to data on the quantity and quality of treated water by Municipalities, especially water quality in rural areas	Revitalisation of the Blue Drop Assessments Rural water quality monitoring
SDG 6.3	
Fully implement the National Water Quality Monitoring Programme for surface and groundwater	Extension of the groundwater monitoring network to include rural areas Extension of the hydrological monitoring network Monitor and report on compliance to the water quality RQOs
Compliance to RQOs are not being monitored and reported	Monitor and report on compliance to the water quality RQOs
Large data gaps with regards to data on the quantity and quality of	Revitalisation of the Green Drop Assessments

effluent discharged by Municipalities	
SDG 6.4	
Lack of consistent and accurate water use and water loss data	Training to be provided to the sector to solicit accurate reporting
SDG 6.5	
Slow transformation of irrigation boards to WUAs	Transformation of IBs to WUAs
SDG 6.6	
Severe lack of wetland data	Implementation of the National Wetland Monitoring Programme
Lack of groundwater operating rules in high groundwater use areas to ensure sustainable use of groundwater	Undertake detailed groundwater assessments and establish groundwater operating rules in areas with high use
SDG 6.b	
Establishment of CMAs	Fast track the establishment of CMAs

SDG interlinkages

According to the 2016 UN report with the title: “Water and sanitation interlinkages across the 2030 Agenda for sustainable development”, water and sanitation have a particular role to play in the 2030 Agenda, because of their centrality to each of the three dimensions that cut across all SDGs, namely society, economy and the environment.

The WRC concluded a study in 2020 under the title: Mapping water and sanitation interlinkages across the sustainable development goals. In the study they identified

the interlinkages (synergies and tradeoffs) between SDG 6 indicators and the other SDGs in a RSA context.

A task team had been established to look at the interlinkages. Their goal will be to develop a Gap Report for each of the other 16 SDGs which can similarly feed into the NW&SMP Volume 3 revision and be taken forward by the task team leaders for the relevant actions that are required. Therefore, the Provincial Office will have to consider these interlinkages and our contribution towards it, in future reports.

The Free State Progress Report on SDGs

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

Situation analysis of the Province

There are currently 70 Water Treatment Works in the Free State Province. WSAs in the Free State Province struggle to effectively manage drinking water quality due to the lack of capacity, financial resources and the complete lack of effective operation and maintenance plans. This situation results in poor quality drinking water supplied to consumers with the most common failures on Turbidity, Total Coliforms and E. coli.

The majority WSAs does not have updated water safety plans or Risk Based monitoring programs. Water Treatment Works (WTW) are in a very poor condition due to the lack of effective O&M. The majority of process controllers are unskilled, not registered and classified.

Water quality data is not loaded on the Integrated Regulatory Information System (IRIS) due to the lack of access to accredited laboratories.

The Regional Bulk Infrastructure Grant (RBIG) is intended to develop new, refurbish, upgrade and replace ageing bulk water and sanitation infrastructure of regional significance that connects water resources to infrastructure serving extensive areas across municipal boundaries or large regional bulk infrastructure serving numerous communities over a large area within a municipality.

The Water Services Infrastructure Grant (WSIG) is intended to provide water and sanitation services and reduce backlogs.

The above grants are implemented under the Regional Bulk Infrastructure Programme (RBIP) to ultimately improve access to water supply and manage wastewater disposal by increasing the number of households with access to reliable, safe drinking water and sanitation services.

Through the RBIG and WSIG programmes a total of 92 projects are currently under implementation aimed at water services.

Sub-Indicator (Alignment with Target Gap Reports)	**Projects being implemented towards Target**	**Gaps identified by the Region**	**Activities being implemented in support**	**Data management requirements**
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	Monitoring of Drinking water quality from WTW Conduct Blue Drop Task Team meetings within 19 WSAs:	WSAs does not have sufficient capacity to effectively monitor DWQ. Access to accredited laboratories is a challenge. Lack of proper Operation and Maintenance plans for WTWs and implementation thereof Lack internal skills at municipal level for operation and maintenance of the plants	Monitored final water produced by 70 WTWs in July-Sept 2021 and again in Oct -Dec 2021. 1609 COVID-19 water tanks monitored from July – Dec 2021 Blue Drop Task Team meetings were held with 19 WSAs: 1 Meeting per WSA in July-Sept 2021 and 1 Meeting per WSA in Oct-Dec 2021. Letters were sent to WSAs with measures to implement as rectification towards DWQ failures	DWS monitors submission of data by 19 WSAs on IRIS system
	RBIG and WSIG water projects	Inadequate capacity to properly monitor all	Quarterly performance evaluation conducted with	Spatial interpretation by means of GIS for all

		projects under implementation	Implementing Agents to engage on project implementation challenges The projects are listed below this table*	projects and the impact thereof

*The following Infrastructure Projects contributes to this SDG target:

Jagersfontein/Fauresmith BWS

Welbedacht Pipeline

Tokologo BWS

Tswelopele BWS

Maluti-a-Phofung BWS

Dihlabeng BWS

Nketoana BWS

Masilonyana BWS

Construction of reversal pipeline in QwaQwa

Refurbishment of Fika Patso WTW

Mafube Water and Sanitation intervention

Mantsopa Water and Sanitation intervention

Setsoto BWS

Phumelela (Warden) WTW

Rouxville/ Smithfield/ Zastron BWS

Ngwathe BWS

RBIG COVID sustainable water supply projects

Metsimaholo refurbishment of Oranjeville WTW and construction of pressure tower

Moqhaka construction of 2,15Ml reservoir in Steynsrus

Moqhaka (Steynsrus) BWS

Moqhaka (Viljoenskroon) groundwater project

Mafube (Cornelia) groundwater project

Masilonyana (Winburg and Brandfort) groundwater project

Tokologo (Dealesville) emergency water supply Phase 3

Tokologo (Dealesville) connection of JoJo tanks

Tokologo (Boshof) connection of JoJo tanks

Tokologo (Hertzogville) connection of JoJo tanks

Maluti-a-Phofung BWS in Kestell/Thlolong

Maluti-a-Phofung upgrading of nuwejaarspruit water supply system and pump station

Maluti-a-Phofung construction of comet to Ha-Rankopane pipeline

Maluti-a-Phofung repairs of the Mangaung Showgrounds to Thaba Bosiu pipeline

Maluti-a-Phofung immediate water supply in QwaQwa

Setsoto upgrading of Clocolan WTW

Mantsopa construction of 6Ml reservoir in Ladybrand

Mantsopa construction of 6Ml reservoir in Ladybrand Phase 2

Nketoana 20,4km pipeline from Lindley to Arlington

Nketoana equipping and reticulation of existing boreholes in Arlington, Lindley and Petrus Steyn

Kopanong (Trompsburg) BWS

Kopanong (Bethulie) upgrading of bulk water steel pipe

Kopanong (Reddersburg) BWS

Kopanong groundwater project in Jagersfontein, Bethulie, Reddersburg and Trompsburg

Mohokare (Rouxville) abstraction works

Mohokare (Zastron) upgrading of WTW and pump station

Mohokare groundwater project in Rouxville

Mohokare groundwater project in Rouxville Ext 5

Mohokare (Smithfield) water supply

Mohokare groundwater and elevated tanks

Letsemeng (Petrusburg) boreholes

Support needed from the SDGWG

Support needed in raising awareness regarding financial and human resources for the internal laboratory in Free State. The functions of the laboratory to be included in the Directorate: Regulations, Compliance and Enforcement. All these will assist that the laboratory participates in accreditation / proficiency schemes to ensure credible data.

Task Team leader must assist in outlining the need for additional capacity to properly implement and monitor water and sanitation infrastructure projects

Covid 19 Impact

No impact, drinking water quality was monitored uninterrupted during July to December 2021.

SDG 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

Situation analysis of the Province

The Regional Bulk Infrastructure Grant (RBIG) is intended to develop new, refurbish, upgrade and replace ageing bulk water and sanitation infrastructure of regional significance that connects water resources to infrastructure serving extensive areas across municipal boundaries or large regional bulk infrastructure serving numerous communities over a large area within a municipality.

The Water Services Infrastructure Grant (WSIG) is intended to provide water and sanitation services and reduce backlogs.

The above grants are implemented under the Regional Bulk Infrastructure Programme (RBIP) to ultimately improve access to water supply and manage wastewater disposal by increasing the number of households with access to reliable, safe drinking water and sanitation services.

Through the RBIG and WSIG programmes 32 projects are currently under implementation aimed at sanitation services.

The department, through the Water Sector Support component, provides support to municipalities with regards to tariff setting. Information is shared with municipalities in order to assist them when they draft their tariffs.

Sub-Indicator (Alignment with Target Gap Reports)	Projects being implemented towards Target	Gaps identified by the Region	Activities being implemented in support	Data management requirements
6.2 by 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation,	RBIG and WSIG Sanitation Projects	Inadequate capacity to properly monitor all projects under implementation	Quarterly performance evaluation conducted with Implementing Agents to engage on project	Spatial interpretation by means of GIS for all projects and the impact thereof

paying special attention to the needs of women and girls and those in vulnerable situations			implementation challenges The projects are listed below this table*.	
	Tariff setting shared with municipalities (retail)	There is a need to hold one on one engagements with identified municipalities.	Information has been collected and one on one engagements with municipalities are to be held. 7 municipalities were engaged on water tariffs and revenue collection: Ngwathe LM was engaged on Water tariff and revenue collection on 17 August 2021 Metsimaholo on 28 September 2021 and Setsoto on 29 September 2021, Mantsopa on 18 October 2021, Phumalela on 21 October 2021, Tswelopele LM on 19 November 2021 and Phumelela LM on 26 November 2021.	

*The following Infrastructure Projects contributes to this SDG target:

BEP Reitz upgrading of wastewater treatment plant

BEP Arlington grey water package plant

BEP Petrus Steyn outfall sewer

BEP Ficksburg outfall sewer

BEP Clocolan

BEP Senekal

BEP Dealesville

Brandfort bulk sewer

Lindley bulk sewer

Metsimaholo Bulk sewer (Upgrading of the Denneysville WWTW)

Mafube Bulk Sewer

Metsimaholo upgrading of Oranjeville WWTW

Moqhaka refurbishment of Kroonstad WWTW

Ngwathe upgrading of Koppies/Kwakwatsi WWTW

Matjhabeng refurbishment of Theronia WWTW

Masilonyana refurbishment of Winburg sewer pump station and WWTW

Nala Bothaville replacement of 2,5km sewer outfall pipeline

Phumelela upgrading of outfall sewer line and revamping of pump station #3 and WWTW in Warden/Ezenzeleni

Setsoto upgrading of van Soelen outfall sewer pipeline in Ficksburg

Kopanong upgrading of Philipolis WWTW

Support needed from the SDGWG

Task Team leader must assist in outlining the need for additional capacity to properly implement and monitor water and sanitation infrastructure projects

Covid 19 Impact

Due to the Covid 19 lockdown project sites could not be accessed and contractors left site. This has delayed the project implementation and completion of many projects. Since the lifting of the lockdown levels the projects have resumed and measures to fast-track implementation and completion are in place.

Engagements with municipalities with regards to tariff setting are not affected by COVID 19.

SDG 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

Situation analysis of the Province

There are 103 Waste Water Treatment Plants in the Free State Province. WSAs in the Free State struggle to effectively manage waste water services due to the lack of capacity, financial resources and the complete lack of effective operation and maintenance plans. This result in pollution of water resources and the environment as well as sewer spillages within communities.

The majority of WSAs does not have updated waste water risk abatement plans or waste water monitoring programs. Waste Water Treatment Works (WWTW) are in a very poor condition due to the lack of effective O&M. The majority process controllers are unskilled and not registered and classified.

Waste Water quality data is not loaded on the IRIS system due to the lack of access to accredited laboratories. Most of the WWTWs does not have a valid water use authorization to discharge treated effluent.

The Regional Bulk Infrastructure Grant (RBIG) is intended to develop new, refurbish, upgrade and replace ageing bulk water and sanitation infrastructure of regional significance that connects water resources to infrastructure serving extensive areas across municipal boundaries or large regional bulk infrastructure serving numerous communities over a large area within a municipality.

The Water Services Infrastructure Grant (WSIG) is intended to provide water and sanitation services and reduce backlogs.

The above grants are implemented under the Regional Bulk Infrastructure Programme (RBIP) to ultimately improve access to water supply and manage wastewater disposal by increasing the number of households with access to reliable, safe drinking water and sanitation services.

Through the RBIG and WSIG programmes 12 projects are currently under implementation aimed at improving water quality through wastewater treatment works development and/or refurbishment.

The Department of Water and Sanitation has embarked on the piloting of the waste discharge charge system (WDCS) to promote waste reduction and water conservation. It forms part of the Pricing Strategy, which is being established under the National Water Act (Act 36 of 1998). The WDCS is based on the polluter-pays principle and aims to:

- promote the sustainable development and efficient use of water resources
- promote the internalisation of environmental costs by impactors
- create financial incentives for dischargers to reduce waste and use water resources in a more optimal way.

The WDCS is premised on resource quality objectives (RQOs) as the measure of acceptable risk, and seeks to achieve RQOs at lowest total cost to the catchment. Where RQOs are exceeded or are threatened, impact on the resource is unacceptable and the WDCS may be deployed to achieve RQOs. The system will be applied at a catchment scale where the catchment is defined as those areas that have a significant impact on water quality, or are impacted by the specific water quality problem such as salinity, nutrients, heavy metals and organics. The Vaal catchment was identified as a priority catchment and the Free State Provincial Office is currently arranging for training on this so that these license application can be captured on the system as part of the piloting of this system. Once on the problems with the dummy billing has been sorted out, the system will be implemented in full.

Sub-Indicator (Alignment with Target Gap Reports)	**Projects being implemented towards Target**	**Gaps identified by the Region**	**Activities being implemented in support**	**Data management requirements**
SDG 6.3: – Improve water	Monitoring of final effluent quality from WWTW	WSAs does not have sufficient capacity to	Monitored final effluent released by 103 WWTWs in July-Sept 2021	DWS monitors submission of

quality, wastewater treatment and safe reuse	Conduct Green Drop Task Team meetings within WSAs	effectively monitor DWQ. Access to accredited laboratories is a challenge. Lack of proper Operation and Maintenance plans for WTWs and implementation thereof Lack internal skills at municipal level for operation and maintenance of the plants	and again in Oct-Dec 2021. Green Drop Task Team meetings were held with 19 WSAs. 1 Meeting per WSA in July-Sept 2021 and 1 Meeting per WSA in Oct-Dec 2021. Letters sent to WSAs as rectification support towards Spillages and pollution incidents	data by 19 WSAs on IRIS system
	Issue Directives in an attempt to reduce pollution when cases are reported to Regulations	Limited resources to conduct pollution incidents investigations	Directives issued: City of Matlosana LM: Klerksdorp WWTW Mangaung Metro: Botshabelo WWTW Matjhabeng LM: Fiskaal Street Pump Station Welkom Mangaung Metro: Bloemspurit WWTW Letsemeng LM: Koffiefontein WWTW	
6.3 by 2030, improve water quality by reducing pollution, eliminating	Brandfort bulk sewer Lindley bulk sewer	Inadequate capacity to properly monitor all projects under implementation	Quarterly performance evaluations conducted with Implementing Agents to engage	Spatial interpretation by means of GIS for all projects and the impact thereof

dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and increasing recycling and safe reuse by x% globally	Metsimaholo Bulk sewer (Upgrading of the Denneysville WWTW) Mafube Bulk Sewer Metsimaholo upgrading of Oranjeville WWTW Moqhaka refurbishment of Kroonstad WWTW Ngwathe upgrading of Koppies/Kwakwatsi WWTW Matjhabeng refurbishment of Theronia WWTW Masilonyana refurbishment of Winburg sewer pump station and WWTW Phumelela upgrading of outfall sewer line and revamping of pump station #3 and WWTW in Warden/Ezenzeleni Kopanong upgrading of Philipolis WWTW		on project implementation challenges	

Support needed from the SDGWG

Support in raising issues regarding financial and human resources for the internal laboratory in Free State. The functions of the laboratory to be included in the Directorate: Regulations, Compliance and Enforcement. All these will assist that the laboratory participates in accreditation schemes.

Task Team leader must assist in outlining the need for additional capacity to properly implement and monitor water and sanitation infrastructure projects

Covid 19 Impact

No impact, wastewater quality was monitored uninterrupted during July to December 2021.

SDG 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

Situation analysis of the Province

The Regional Bulk Infrastructure Grant (RBIG) is intended to develop new, refurbish, upgrade and replace ageing bulk water and sanitation infrastructure of regional significance that connects water resources to infrastructure serving extensive areas across municipal boundaries or large regional bulk infrastructure serving numerous communities over a large area within a municipality.

The Water Services Infrastructure Grant (WSIG) is intended to provide water and sanitation services and reduce backlogs.

The above grants are implemented under the Regional Bulk Infrastructure Programme (RBIP) to ultimately improve access to water supply and manage wastewater disposal

by increasing the number of households with access to reliable, safe drinking water and sanitation services.

Through the RBIG and WSIG programmes 4 projects are currently under implementation aimed at Water Conservation and Water Demand Management (WCWDM).

Sub-Indicator (Alignment with Target Gap Reports)	**Projects being implemented towards Target**	**Gaps identified by the Region**	**Activities being implemented in support**	**Data management requirements**
6.4 Sustainability increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water	Mafube WCWDM Masilonyana Theunissen WCWDM Maluti-a-Phofung WCWDM Mantsopa WCWDM Phase 2 Hobhouse Creating awareness through media and other platforms for public education programmes	Inadequate capacity to properly monitor all projects under implementation Municipalities do not have the capability to manage project of a larger scale in house. Insufficient advertising from the Department to reach target.	Monthly site visits are conducted to track the progress of the projects being implemented. Monthly information on water balance is submitted by Mangaung Metro Creating awareness on public education programmes in the following towns: Nala LM: Wesselsbron - 07 Oct 2021	Spatial interpretation by means of GIS for all projects and the impact thereof. Monthly reports on water use efficiency must be submitted when WCWDM projects are implemented.

			Matjhabeng LM: Odendaalsrus - 08 Oct 2021 Kopanong LM: Fauresmith -12 Oct 2021 Phillipolis -14 Oct 2021 Various media articles were published on relevant topics, including flash-flooding and to create public awareness on the dangers of drowning	

Support needed from the SDGWG

Task Team leader for SDG 6.1 must assist in outlining the need for additional capacity to properly implement and monitor water and sanitation infrastructure projects

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

Situation analysis of the Province

A program is in place to generate and collect hydrological data in the neighboring country of Lesotho. The approval of the annual international travel submission was put on hold and because of this, international travel was stopped. Covid-19 rules prohibited travel to other countries. Because of the travel constraints, hydrological data could not be collected and data logging equipment could not be serviced. The resulted in data being lost because of flat batteries. Approval was granted for international travel and the Hydrology component is arranging the visits to get equipment operational again and to start generating hydrological data.

The Catchment Management Forum meetings take place on a quarterly basis. Water Sector Stakeholders, such as the following, participate in these Forums, DWS, DAFF, DMR, CoGTA, DEA, DoH, Mining Companies, SALGA, Local Municipalities in the Catchment, District municipalities in the Catchment, Water Boards Water User Associations NGOs/ CBOs/ Rate Payers Associations etc. Participation from municipalities is not consistent and needs to improve.

From July 2021 to December 2021 a total of 30 Licenses and 9 GA's were finalized. In the Agriculture sector 24 Licenses and 4 GA's were finalised. In the Industrial sector 4 Licenses and 4 GA's were finalised. And in the Mining sector 2 Licenses and 1 GA were finalised.

Sub-Indicator (Alignment with Target Gap Reports)	**Projects being implemented towards Target**	**Gaps identified by the Region**	**Activities being implemented in support**	**Data management requirements**
6.5 by 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	Hydrology operates a number of gauging stations in Lesotho as part of the LHWP. Data is independently generated by both parties and this data is shared after it is collected. No formal agreement exists.	Insufficient funds to procure hydrological equipment. Insufficient budget for international travel. Permission for international travel takes long. Maximum allowable accommodation rates as per Supply Chain rules make booking impossible.	Try to get international visit approval in place before the financial year starts. Fixed dates of visits to collect data make bookings easier. Source accommodation for officials in time. Submissions to exceed maximum accommodation rates are done before trips. Proper communication	Reliable data logging equipment to generate data at gauging stations. Back-up data logging equipment to ensure data is generated. Reliable real time systems to ensure data is transmitted. Back-up systems to improve data security.

		Safety of officials.	with Lesotho counterparts before visits are done.	
	Planning forums with HO is revived	Inadequate capacity to attend to all planning engagements	Project matrix is available for all current and future projects implemented	Spatial interpretation by means of GIS for all projects and the impact thereof
	Stakeholder Engagement on water quality and other water related issues	Participation by municipalities in this forum is not consistent and needs to improve.	The Department coordinated and participated in the following Catchment Management Forums during this period, namely: Schoon Koekemoersprui t on 28 July 2021; Modder Riet on 19 August 2021; Orange Kraai on 1 September 2021; Sand Vet on 16 September 2021; Wilge on 16 November 2021. Issues of water quality, licensing etc form part of discussions during these forums were	

			also part of the agenda.	
	Water use licenses are issued to ensure sustainable withdrawals	More effective abstraction control will be implemented	From July 2021 to December 2021 a total of 30 Licenses and 9 GA's were finalized. In the Agriculture sector 24 Licenses and 4 GA's were finalised. In the Industrial sector 4 Licenses and 4 GA's were finalised. And in the Mining sector 2 Licenses and 1 GA were finalised.	Capturing of all licenses on the e-WULA system and keeping proper records of abstraction practices

Support needed from the SDGWG

Task Team leader must assist in ensuring that sufficient funding for equipment and accommodation is allocated annually.

Task Team leader must assist in outlining the need for additional capacity to properly engage on all planning forums

Covid-19 Impact

Due to the Covid 19 meetings are held virtually.

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

Situation analysis of the Province

The Directorate Resource Protection of the Department of Water and Sanitation (Free State) uses Bio-monitoring as a tool to determine the health of the aquatic ecosystems, surface water monitoring as a tool to determine the status of the rivers and uses groundwater monitoring as a tool to manage and sustain the groundwater resources within the Middle Vaal and Upper Orange Water Management Areas (WMA). The programmes aim to promote standardized and continuous monitoring and reporting of river ecosystem health, surface water quality and groundwater levels and quality. This situation analysis report contains a summary of programmes conducted/implemented within the Upper Orange and Middle Vaal WMAs. Standard river bio-monitoring and water sampling techniques are used to collect data from 21 REMP sites, 46 surface water quality points and 46 geo-sites for groundwater levels and quality monitoring. The groundwater and surface water quality samples are currently being sent to Integral Laboratories which is contracted with the Department until the allocated R 300 000 is exhausted. The short-term laboratory contract was signed in February 2021 and will expire on the 4th quarter of the financial year. However, procurement for the new laboratory contract is underway.

Monitoring for REMP is currently underway and two Scientific Technicians were managing and monitoring the Upper Orange and Middle Vaal WMA. However, the directorate bid farewell to one Scientific Technician in December 2021. The challenges faced with this programme is that there is not enough capacity to perform all the REMP indices such as (fish and geomorphology assessment) to have a complete picture regarding the ecological conditions of these rivers/sites, and also to have an EcoStatus rating of these monitored sites. Currently, only macroinvertebrates, riparian vegetation and habitat assessments are being conducted together with running the associated models required to generate the ecological categories of the monitored sites as compared to reference conditions.

The Provincial Office is currently monitoring 53 surface water-sampling points. However, there are points that were previous registered under the DWS FS: WQM (Water Quality Management) section that no longer exists. These points will have to be reviewed and included on the 53 surface water points that are monitored as per the RWQOs and RQOs for those specific resource units. A meeting is to be held with Head Office officials regarding the Optimisation of monitoring networks in the Free State

region. This meeting will assist the region in re-aligning the monitoring points with the current sections as per the approved organisational structure.

In terms of groundwater monitoring, the groundwater level monitoring programme within the Free State Province has three routes where this programme is implemented. The programme has a total of 46 geo-sites which fall on the national groundwater monitoring network, these geo-sites are monitored monthly for groundwater levels.

Sub-Indicator (Alignment with Target Gap Reports)	**Projects being implemented towards Target**	**Gaps identified by the Region**	**Activities being implemented in support**	**Data management requirements**
6.6 by 2030 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	Implement the National Wetland Monitoring Programme	Not enough capacity and skills to perform wetlands monitoring and management.	No activities being implemented towards achieving this target.	No baseline monitoring data available therefore this programme will have to be created from scratch/the beginning.
	River EcoStatus Monitoring Programme (REMP).	Not enough capacity to monitor all sites and REMP indices (such as FRAI and GAI) therefore there is limited data on the other indices, which are being performed by the Region.	Macro-invertebrates, riparian vegetation and habitat assessments are currently being conducted by the Region.	REMP data is captured on models and they are run annually in order to detect change from reference conditions. MIRAI for macro-invertebrates, VEGRAI for riparian vegetation and IHI for habitat assessment. The

	Surface water quality monitoring compared to RWQOs and RQOs	The FS-Resource Protection section is currently reviewing the WMS points, which were previously registered as belonging to DWS FS: WQM. Since the WQM section is no longer in the FS structure, the WMS points need to be reviewed. No long-term laboratory contract for continuous monitoring of rivers.	Currently, a short-term laboratory contract is in place and surface water monitoring has commenced in February 2021, this function will continue until the allocated funds for the laboratory services are exhausted. 53 Surface water quality points where monitoring is occurring though there are laboratory services challenges. Internal laboratory belonging to Water Services Regulation is also being utilized when the short-term Lab contract lapses. Internal laboratory is not registered on WMS therefore results cannot be uploaded.	biomonitoring data from SASS 5 field sheets is uploaded on FBIS (Freshwater Biodiversity Information System) database. A departmental database, like the old RHP database, is required to store national data. Surface water quality results needs to be uploaded on WMS; uploading of the results obtained from the contracted laboratory will be uploaded as soon as the monitoring points are reviewed and the lab is registered on WMS. The results generated from the internal laboratory cannot be uploaded on WMS as it is not SANAS accredited.
	Groundwater monitoring programmes	No dedicated personnel (Geo-Hydrologist)	46 geo-sites monitored on a monthly basis	Groundwater levels

	for both water levels and water quality	under the Resource Protection structure to perform these functions therefore, assistance was attained from Institutional Establishment Directorate but the targets are reported under Water Resources Support Directorate.	for groundwater levels. 39 groundwater points monitored for water quality bi-annually.	information is captured on field spreadsheets and sent to Head Office to be uploaded on HYSTRA. Groundwater quality data is also sent to Head office to be uploaded on WMS.

Interaction with Task Teams:

Annual REMP meetings chaired by Ms T. Mthombeni to discuss annual REMP results and deviations from previous financial year. Discussion of the State of the Rivers Report. The Annual REMP meeting was however not held this year due to challenges faced by Head Office.

Implementation of bi-annual Integrated Regional Water Quality Monitoring Forum which aims to incorporate all stakeholders monitoring our water resources and data sharing. Optimisation of the National Water Resource Monitoring Networks workshop was held on 16 July 2021.

Support needed from the SDGWG

Task Team leaders should assist the Water Resources Support Directorate with attaining funds for a long-term laboratory contract or inclusion of the Free State Region in the National Laboratory Contract scheme done by Head Office with a laboratory contract cycle of 3 years.

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

Situation analysis of the Province

Public participation seeks to influence and share control over development initiatives and the resources which affect communities. It seeks to empower communities and promote transparency and involvement communities in decision making. The department conducts public participation activities as per projects that the Department is implementing and also as per DDM. Public participation activities are therefore conducted in order to ensure that stakeholders at provincial and district level are aware of the work that the Department in supporting municipalities.

Sub-Indicator (Alignment with Target Gap Reports)	Projects being implemented towards Target	Gaps identified by the Region	Activities being implemented in support	Data management requirements
6.b Support and Strengthen the participation of local communities for improving water and sanitation management	Coordination of Public participation activities within the region		3 Public Participation Activities: The Department conducted and participated at a Public Participation engagement held in Phumelela LM on 11 August 2021; another Public Participation event was held on 07 October 2021 at Odendaalsrus, Matjhabeng LM, followed by another Public Participation	

			event that took place on 18 November 2021 in Zastron, this was conducted as part of the World Toilet Day Celebrations	
	Participate in Water Sector Forums at District Municipal level		2 Water Sector Forum Engagement - The Department participated at the Thabo Mofutsanyana District Water Sector Forum held on 22 September 2021 and on 30 November 2021.	
	Coordination of School Education Programmes		5 Schools were monitored in Thabo Mofutsanyana District on 11 and 12 August 2021 3 Schools in Thabo Mofutsanyana were monitored on 30/09/2021 2 Schools were monitored in Mangaung Metro on 29 October 2021	
	Public Education Programmes		7 Public education programme activities were conducted as follows:	

			Vredefort / Ngwathe LM on 12 August, Ladybrand / Mantsopa LM on 19 August and Thaba Nchu / Mangaung MM on 26 August 2021. On 07 October 2021 in Odendaalsrus, , 08 October 2021 in Wesselsbron, 12 October 2021 in Fauresmith and on 14 October 2021 in Phillipolis	

Support needed from the SDGWG

Task Team leader for SDG 6.1 must assist in outlining the need for additional capacity to properly engage on all planning forums

Covid 19 Impact

Despite the Covid 19 Regulation, the Department has been able to coordinate both Public Education and Public Participation Activities. The school's programme has been negatively affected by the Covid 19 Epidemic. The Department has not been able to mobilise schools to participate in Departmental Programmes that includes schools partaking in competitions coordinated by the Department.

Conclusion

The Free State Provincial Office have implemented the actions that are set out in the approved Provincial Action Plan and will continue to do so in the coming year.

There are some challenges to implement the actions identified from the Gap Report, such as human resources and financial constraints. Therefore, additional resources would be required to address some of the gaps identified.