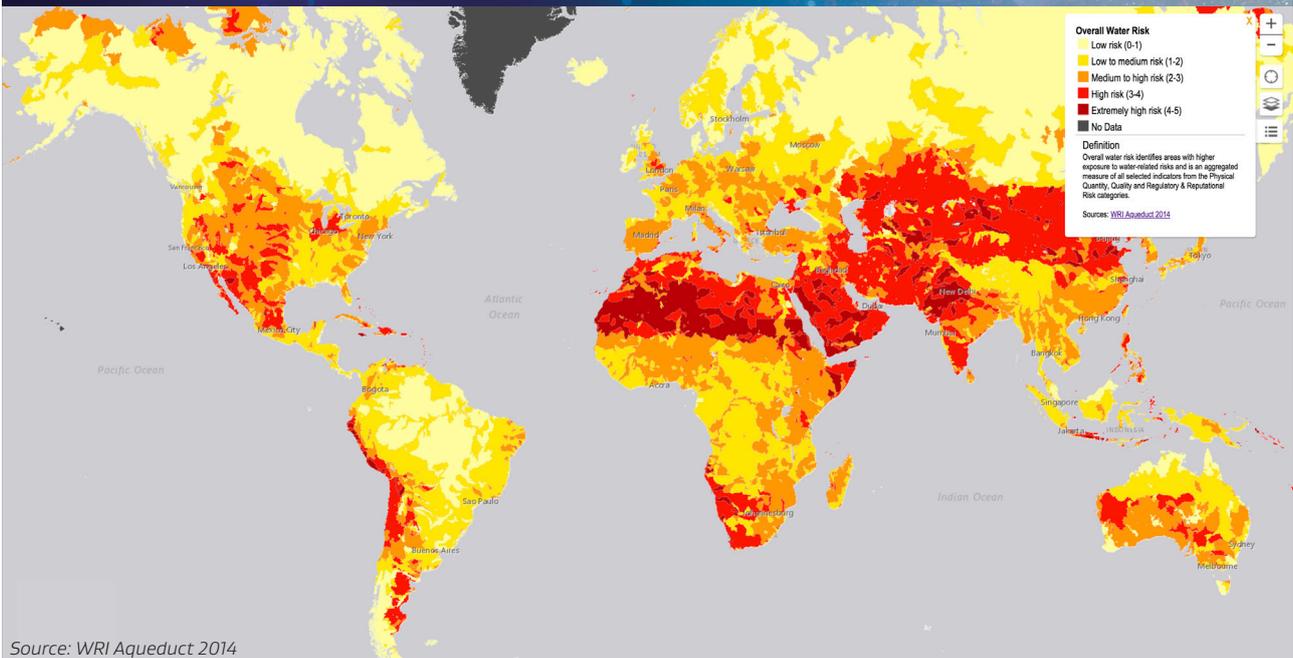




# RESPONDING TO THE WATER SITUATION IN SOUTH AFRICA



Source: WRI Aqueduct 2014

The World Economic Forum’s 2018 Global Risks Report ranks ‘water crisis’ in the top five most pressing risks that the world faces. Water risks are amplified in water scarce regions and in companies with large and complex footprints.

Water risks are largely influenced by location. In terms of Sasol’s operations, South Africa is particularly exposed, while Europe and North America are less so. Given that 88% of our total water use incurred is at our South African operations, we are deeply committed to responsibly managing our impacts on this precious resource.

South Africa’s water situation is under continued pressure as demand for water escalates due to population growth urbanisation, unabated water losses, climate change and delays in implementing new water supply infrastructure.

**Due to the risks faced by us with regards to water in South Africa, we are focusing on the following key areas to reduce our exposure:**

### The implementation of direct operation interventions

In order to reduce demand for both river water and potable water, in line with our 2050 roadmap to reduce our overall water demand, we are investigating alternative sources of water.

In 2018, we concluded the process of setting context-based, voluntary potable water reduction targets. During this process potable water use for each business was assessed, and we determined whether a commitment to an improvement could be made. This process took into account the operating model entities’ commitments and growth requirements.

**We have set a 5% potable water reduction target for the Sasol Group until 2020 against an agreed baseline.**

We have also invested in multiple water management best practices and recycling initiatives to reduce environmental risks, and indirectly reduce our demand on traditional water supplies.

At our Sasolburg Operations (SO), meaningful improvements in effluent management are being realised, in line with increasingly stringent water use licence conditions. To achieve this, we invested R7,3 million in the design and implementation of an improved disinfection facility for the Midland facility’s final effluent for the period June 2017 to April 2018. A further R10,5 million was invested from October 2016 to July 2018 in an optimised pH control system for the Sasol One final effluent discharge.

## Due to the risks faced by us with regards to water in South Africa, we are focusing on the following key areas to reduce our exposure: (continued)

In order to mitigate the risk of effluent overflow from our fertiliser effluent dams in Secunda, our Secunda Chemical Operations (SCO) invested R381 million in an ultrafiltration/reverse osmosis effluent treatment facility. The facility will allow us to recover fertiliser by-product for resale and reuse the treated effluent. In 2019, we will put in place a triple effect evaporator process, which will allow us to thermally treat the brine. This project commenced in July 2017 and will be commissioned in April 2019.

Above average rainfall experienced at our Secunda Synfuels Operations (SSO) has resulted in an unfavourable water balance over the ash water system and various measures have been adopted to mitigate the risk of overflow. SSO invested R24 million from July 2017 to September 2017 in one more train to serve the mobile reverse osmosis unit; helping to mitigate the risk of an effluent dam overflow. The treated effluent is used to produce condensate, and will offset 2ML/day of river water use. In 2019, we will further treat the effluent from the ash dams and reuse treated water to produce condensate; this should offset a further 6 ML/day of river water use. Currently SSO uses approximately 240 ML/day of river water.

Our global headquarters in Johannesburg targets a 5-star Green Star rating. To maintain this rating we need to conserve water. Accordingly, the building was designed to capture rainwater and grey water is harvested, treated and reused for irrigation of gardens and flushing of toilets.

### Partnering opportunities

With the scale of water-related challenges facing South Africa, we recognise the need to work collaboratively with a range of partners to bring about meaningful change in the water sector.

As a member of the Strategic Water Partnership Network (SWPN), we contribute to initiatives relating to water partnership projects with municipalities including skills development and capacity building.

We are also a partner to the Mine Water Coordinating Body (MWCB) which is a public-private platform established to encourage collaboration between the coal mining industry, government and other stakeholders to address the risks associated with effluent water created by the mining industry. Our Sasol Mining Operations have committed approximately R1,3 million over the next three years to the MWCB.

In addition, Sasol contributes expertise to the Water and Sanitation Sector Leadership Group (WSSLG), hosted by the Department of Water and Sanitation (DWS), specifically in response to the drought crisis in the Western Cape.

### Supporting municipalities

We are committed to working with local municipalities in their efforts to improve their water systems.

Our Sasolburg Operations (SO) supports the Metsimaholo local municipality (MLM) with the implementation of their water-related projects. In the period between July 2016 to June 2017, R2,9 million was invested in a water conservation and water demand management project. Through the implementation of an advanced water pressure reduction programme in the greater Zamdela area, a 23% reduction in water demand was achieved, enabling R9 million in savings. The intervention was monitored in 2018 and showed to be sustainable. In 2018, a further R2 million was invested for critical remedial upgrades at 11 sewerage pump-stations in MLM. This has helped MLM ensure effective delivery of sewerage to the treatment plant, thereby mitigating the risk of overflow, blockage and spillage and resultant health risks.

Our SSO provides support to the Govan Mbeki municipality (GMM). In 2018, we invested R1,1 million in a youth development programme in partnership with Cobra Watertech and the Rand Water Foundation. Sixty apprentice plumbers were enrolled in the programme and are now placed within the municipality and the Lekwa municipality for further training.

We also contributed R9,7 million from January 2017 to June 2018 to GMM towards Project Pakisa which had the objective to reduce water losses and increase water revenue. This intervention helped the municipality reduce demand by 3% resulting in a saving of R12 million/annum. In Leandra, in the Gert Sibande district municipality we also invested R15 million to help upgrade the pump station and sewage supply network in the area.