

What is the Blue Deal: Blesbokspuit Project?

The Blue Deal South Africa is part of the International Blue Deal Programme and is between (i) the Netherlands Ministries of Foreign Affairs and of Infrastructure & Water Management and all the Dutch Water Authorities and (ii) the South African national partners (DWS, MISA, WRC, and SALGA) and local project partners on a case by case basis.

The Blue Deal Programme focuses on supporting regional and national governments worldwide to strengthen good water management by sufficient knowledge and expertise, well-functioning organisations and cooperation with key stakeholders. The ambitious goal of the Blue Deal is helping 20 million people in 40 catchment areas around the world to gain access to clean, sufficient and safe water. The Programme will run from 2019 until 2030; with the first phase concluding in 2022.

The **Blue Deal: Blesbokspuit** project is one of the four South African Blue Deal local projects, with the focus on optimizing the health of the Blesbokspuit Wetland. The Blesbokspuit (BBS) wetland is located in the Upper Vaal catchment within the quaternary drainage area C21D near Springs Town, Ekurhuleni Metropolitan Municipality. It is located along the Blesbokspuit river, one of the largest tributaries of the Vaal River in the province of Gauteng. Following its international RAMSAR accreditation in 1986, the surface water quality of the BBS wetland deteriorated over the last ten years because of the invasion of water hyacinth, the impact of the municipality, industries and mining, and insufficient maintenance. The water quality and ecology of the wetland is threatened by various socio-economic activities. The wetland is for example fed by discharge water from paper mills and from (former) mining activities which adds heavy metals and large amounts of sulfides. In addition, the water hyacinth and reed are overgrowing the wetland, causing a negative impact on the water quality. In the Blesbokspuit Blue Deal project the factors that impact the water quality and ecology of BBS will be addressed on a practical scale and integral level during the next 12 years.

The Key Activities comprising Phase 1 (2019 – 2022) include the following:

Activity 1	Set up a monitoring programme for the BBS area on water quality: DWS will start reviewing the existing monitoring programme, explore opportunities for extra real-time and/ or innovative sensors, data software like Hydronet and deciding upon new monitoring locations with help of Dutch experts and other stakeholders.
Activity 2	Optimize the integrated Management Plan of the BBS area by GDARD: GDARD will work with Dutch experts to optimize the existing plan on the themes of reed management and the water hyacinth. In the next three years the integral management plan will be optimized by GDARD, DWS and Dutch colleagues. The goal of the management plan is to manage the reed and water hyacinth in such a way that is ecologically valuable, and the local community can re-use the harvested reeds and water hyacinth to craft innovative products.
Activity 3	Develop a business case on reed and water hyacinth management: GDARD and DWA will develop a business case aiming to make the management of reed and water hyacinth cheaper and more cost efficient. It is envisaged that this can be done in a manner in which local communities can profit from these activities and thus community members will be trained to do the harvesting of reed and water hyacinth.
Activity 4	Allocate and use budget for additional sensors and probes: DWS will allocate budget to buy extra sensors and probes to monitor the water quality in 2020.
Activity 5	Construction of a pilot bio-bed: Bio-beds are an innovative and natural technique to purify surface water using local materials and plants. The aim is to construct one or more bio-beds in the BBS area and monitor its contribution to the water quality of the wetland.

