South Africa

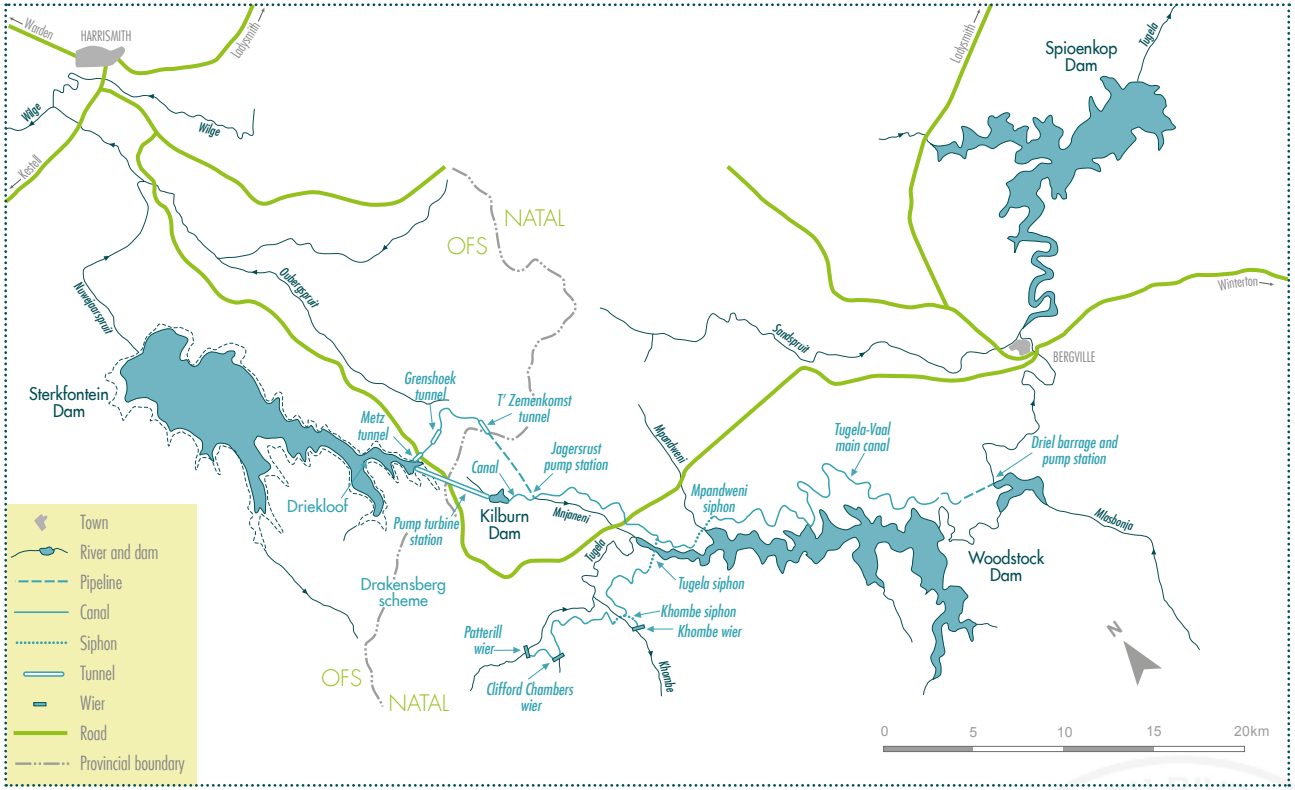
THUKELA–VAAL TRANSFER

LOCATION

There are two schemes which transfer water from the Thukela Basin to the Vaal River currently in operation, namely the Thukela–Vaal Transfer Scheme, also sometimes called the Drakensberg Pumped Storage Hydro-electric Scheme, and the Zaaihoek Transfer Scheme. The larger of the two is the Thukela–Vaal Transfer Scheme, which involves Woodstock Dam, Driel Barrage, Kilburn Dam, Driekloof Dam, Sterkfontein Dam and a number of pump stations, pipelines, canals and tunnels. The Zaaihoek Transfer Scheme is dealt with separately.

DESCRIPTION

Run of river flows in the upper Thukela tributaries are conveyed by gravity, at a peak rate of 4 m^3/s to the Jagersrust pumping station. Water is also pumped from the Driel Barrage at a peak rate of 19 m^3/s to Jagersrust. Jagersrust then pumps at a peak rate of about 20 m^3/s to Kilburn Dam. From Kilburn it is pumped by Eskom to Driekloof Dam in the Upper Vaal Water Management Area from where it flows directly into Sterkfontein Dam. Woodstock Dam, upstream of the Driel Barrage provides the storage to regulate the flow into Driel. Refer to the schematic in the Introduction.



General layout

PURPOSE

Eskom uses the Kilburn and Driekloof dams for their Drakensberg Pumped Storage Scheme and transfers additional water for the Thukela–Vaal water transfer scheme.

Click here to get the Thukela–Vaal Project brochure