

MAZELSPOORT SCHEME

LOCATION

The Mazelspoort Scheme, located on the Modder River downstream of Rusfontein Dam, supplies water from Mazelspoort Weir to Bloemfontein.

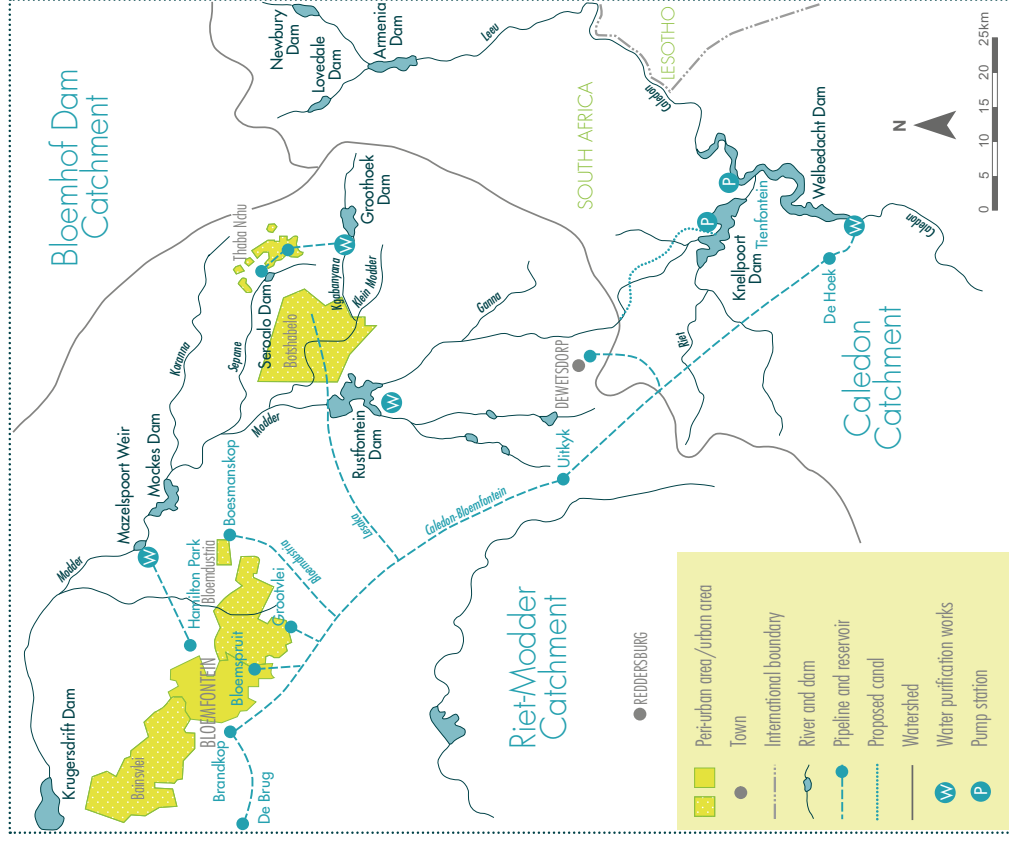
DESCRIPTION

Upstream of Mazelspoort Weir, water is released from Mockes Dam. Mockes Dam is supported by Rusfontein Dam as well as transfers from Knellpoort Dam. At the Mazelspoort Weir, water is pumped to a reservoir at Hamilton Park where it is treated at the waste water treatment works and used to augment domestic requirements in Bloemfontein. It is owned by the City of Mangaung.

The Mazelspoort Scheme, together with the Caledon–Modder Transfer Scheme, form one integrated supply system in the Modder River.

PURPOSE

The scheme serves to supply approximately 25% of Mangaung’s water requirements, with a net demand of 38 million m³.



Locality map (from map produced for ORASECOM Infrastructure Report, 2007)



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PHYSICAL INFORMATION: DAMS

Name	River	Live full supply capacity (million m ³)	Wall height (m)	Wall length (m)	Maximum spillway capacity (m ³ /s)
Mackes	Modder	6	18	713	991
Rustfontein	Modder	71	26	210	1 090
Knelpoort	Rietspuit	136	50	200	1 070
Mazelpoort Weir	Modder	n/a	Unknown	Unknown	Unknown

PHYSICAL INFORMATION: LOSSES

Description	Estimated losses (million m ³ /a)
Knelpoort to Rustfontein losses	2.07
Rustfontein to Mackes losses	2.10
Mazelpoort losses	1.92
Total	6.09

