

# RUSTFONTEIN DAM

COORDINATES (degrees, minutes, seconds)

LATITUDE	LONGITUDE
29° 16' 15" E	26° 37' 00" S

## LOCATION

Rustfontein Dam is located near Thaba Nchu in the Free State, South Africa, in quaternary catchment C52A in the Upper Orange Water Management Area.

## DESCRIPTION

Rustfontein Dam is a concrete gravity dam, with a full supply level of 1,373.0 m and dead storage level of 1,356.3 m. The bottom of the reservoir is at 1,354.0 m.

## PURPOSE

Rustfontein Dam provides water for domestic, industrial and irrigation purposes.

## PHYSICAL INFORMATION

Dam name	River	Quaternary catchment	FSC* (million m <sup>3</sup> )	FSA (km <sup>2</sup> )	Owner	DWA code	Wall height (m)	Wall length (m)
Rustfontein	Modder	C52A	72.60	11.60	DWA	C5R003	36	210

\* Live full supply capacity (ORASECOM, 2007a, WRYM datasets and DWA, 1990)



Rustfontein Dam (source: SA Dept of Water Affairs)



## RUSTFONTEIN DAM

Year of completion	Demands/abstractions (million m <sup>3</sup> /a)			1:50 yield (million m <sup>3</sup> /a)	Maximum spillway capacity (m <sup>3</sup> /s)
	Domestic	Irrigation	Other		
1954	22.25 †	Unknown	Unknown	Unknown	1,090

† DWA, Directorate of Hydrological Services correspondence, 2012

## OPERATING RULE

Rustfontein Dam is connected to Knellpoort Dam via a transfer tunnel of maximum capacity of 75.74 million m<sup>3</sup>/a. Losses of approximately 1.1 million m<sup>3</sup>/a are experienced.

## AREA-CAPACITY RELATIONSHIP

Elevation (m)	Storage (million m <sup>3</sup> )	Surface area (km <sup>2</sup> )
1,374.7	94.37	14.39
1,373.9	83.55	13.03
1,373.0	72.60	11.58
1,372.3	65.39	10.63
1,371.7	58.17	9.73
1,370.9	50.91	8.89
1,369.6	40.09	7.52
1,367.9	29.27	6.18
1,365.1	14.76	3.95
1,362.4	7.26	2.05
1,356.2	0.29	0.30
1,354.0	0.00	0.00

