

# KRUGERSDRIFT DAM

COORDINATES (degrees, minutes, seconds)

LATITUDE	LONGITUDE
28° 53' 00" S	25° 57' 30" E

## LOCATION

Krugersdrift Dam is located on the Modder River in quaternary catchment C52G in the Upper Orange Water Management Area, South Africa.

## DESCRIPTION

Krugersdrift Dam is a gravity concrete dam with earthfill flanks. The dam has a full supply level of 1,248.1 m. The dead storage level and the bottom of the reservoir is at 1,229.9 m.

## PURPOSE

The Modder River Government Water Scheme (operational since 1971), located just downstream of Krugersdrift Dam, supports downstream irrigation, including approximately 55 weirs which abstract water for irrigation. The capacities of the weirs vary from below 5,000 m<sup>3</sup> to 1 million m<sup>3</sup>.

## 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)
Krugersdrift	Modder	C52G	73.19	18.53	DWA	C5R004	26	3,114

\* Live full supply capacity (SANCOLD, 2009)



Krugersdrift Dam (source: SA Dept of Water Affairs)



## KRUGERSDRIFT 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		
1970	3.66 †	51.30 ‡	Unknown	Unknown	4,820

† Reservoir records for 2009 hydrological year (industry and town)

‡ WRC, 2008

## AREA-CAPACITY RELATIONSHIP

Elevation (m)	Storage (million m <sup>3</sup> )	Surface area (km <sup>2</sup> )
1,248.5	84.48	20.11
1,248.1	76.71	18.76
1,247.7	68.97	17.23
1,247.2	61.42	15.59
1,246.7	53.76	13.96
1,246.1	45.99	12.39
1,245.5	38.37	10.73
1,243.8	23.01	7.40
1,242.5	15.36	5.07
1,229.9	0.00	0.00

## OPERATING RULE

The dam is operated as part of the Krugersdrift Dam Scheme, which includes a series of approximately 55 storage weirs along the Modder River, from which water is released from the dam for the weirs to abstract water for irrigation purposes. The releases from Krugersdrift Dam are regulated so that they cascade down to fill the furthest downstream weir.

