



ROOIBERG DAM

COORDINATES (degrees, minutes, seconds)

LATITUDE	LONGITUDE
29° 24' 53" S	21° 12' 38" E

LOCATION

Rooiberg Dam is situated on the Hartbees River near Kenhardt in the Northern Cape, South Africa, in quaternary D53A.

DESCRIPTION

Rooiberg Dam is an earth dam, with a full supply level of 1,700 m. The dead storage level and bottom of the reservoir are at 1,671 m.

PURPOSE

Rooiberg Dam was constructed to supply irrigation demands.

PHYSICAL INFORMATION

Dam name	River	Quaternary catchment	FSC* (million m ³)	FSA (km ²)	Owner	DWA code	Wall height (m)	Wall length (m)
Rooiberg	Hartbees	D53A	3.65	3.13	Kenhardt Municipality	D5R001	8	1,210

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



ROOIBERG DAM

Year of completion	Demands/abstractions (million m ³ /a)			1:50 yield (million m ³ /a)	Maximum spillway capacity (m ³ /s)
	Domestic	Irrigation	Other		
1900	Unknown	Unknown	Unknown	Unknown	Free overspill

AREA-CAPACITY RELATIONSHIP

Elevation (m)	Storage (million m ³)	Surface area (km ²)
1,705	4.38	3.49
1,700	3.65	3.13
1,696	2.92	2.73
1,690	2.19	2.30
1,680	1.46	1.81
1,675	0.93	1.19
1,671	0.00	0.00

OPERATING RULE

The Rooiberg, Vanwyksvlei, Loxton and Modderpoort dams are operated as a sub-system, known as the Hartbees River Sub-system. The operating rule for this sub-system allows the dams to supply the demands imposed upon them until the dams reach their respective minimum operating levels.

