

BOEGOEBERG DAM

COORDINATES (degrees, minutes, seconds)

LATITUDE	LONGITUDE
29° 02' 32" S	22° 12' 07" E

LOCATION

The Boegoeberg Dam is situated on the Orange River, near Prieska, which is approximately 150 km upstream of Upington in the Northern Cape, South Africa, in quaternary D72C.

DESCRIPTION

Boegoeberg Dam is a gravity dam with a rock foundation. The dam has a full supply level of 884.6 m and a dead storage level of 875.3 m. The bottom of the reservoir is at 874.9 m. The dam's capacity has decreased from its original capacity of 34.7 million m³, to the current 20.7 million m³ due to siltation.

PURPOSE

The dam was commissioned to supply water for irrigation. It supplies the Boegoeberg Irrigation Scheme, including the 172-km-long main canal off the dam with a capacity of 9.76 m³/s. Via the Noord-Oranje Canal along the Orange River, water is supplied to the Noord-Oranje Irrigation Board and the Gariiep Settlement. Water is also supplied to the Rouxville West Scheme (now part of the Boegoeberg–Karos Government Water Scheme) via the left bank. Canal losses are estimated at 20 million m³/a. However, return flows are 12 million m³/a and therefore net losses are only approximately 8 million m³/a.

PHYSICAL INFORMATION

Dam name	River	Quaternary catchment	FSC* (million m ³)	FSA (km ²)	Owner	DWA code	Wall height (m)	Wall length (m)
Boegoeberg	Orange	D72C	20.74	7.42	DWA	D7R001	12	622

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



Boegoeberg Dam (© S Crerar)



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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		
1929	Unknown	102	Unknown	Unknown	18,400

AREA-CAPACITY RELATIONSHIP

Elevation (m)	Storage (million m ³)	Surface area (km ²)
884.6	20.74	6.90
884.3	18.93	6.53
883.6	14.70	5.55
883.2	12.59	4.98
882.8	10.71	4.46
881.7	6.50	3.22
880.9	4.26	2.40
879.7	2.02	1.40
875.3	0.01	0.00
874.9	0.00	0.00

