

DAAN VIJJOEN DAM

COORDINATES (degrees, minutes, seconds)

LATITUDE	LONGITUDE
22° 26' 38.61" S	18° 57' 9.20" E

LOCATION

The Daan Viljoen Dam is located in the Black Nossob River in quaternary catchment D43A in Namibia.

DESCRIPTION

The Daan Viljoen Dam is a gravity concrete structure. It has a full supply level of 1,432.2 m, a dead storage level of 1,426.0 m and the bottom of the reservoir is at 1,425.5 m.

PURPOSE

Water is pumped from the Daan Viljoen Dam into the Tilda Viljoen Dam which is a pumped storage dam located next to the Daan Viljoen Dam.

PHYSICAL INFORMATION

Dam name	River	Quaternary catchment	FSC (million m ³)	FSA (km ²)	Owner	Wall height (m)	Wall length (m)
Daan Viljoen	Black Nossob	D43A*	0.43	0.19	NamWater	6.60	175

* ORASECOM, 2011



Daan Viljoen Dam (source: www.namwater.com)



DAAN VILJOEN DAM

Year of completion	Demands/abstractions (million m ³ /a)			95% assured yield (million m ³ /a)	Maximum spillway capacity (m ³ /s)
	Domestic	Irrigation	Other		
1958	0	0	0	None, augmentation of Tilda Viljoen Dam	+/-600

Sources: Personal communication with Hanjörg Drews, NamWater; ORASECOM, 2007

AREA-CAPACITY RELATIONSHIP

Elevation (m)	Storage (million m ³)	Surface area (km ²)
1,432.2	0.43	Unknown
1,430.0	0.12	0.11
1,428.0	0.02	0.08
1,427.0	0.00	0.06
1,426.0	0.00	0.03
1,425.5	0.00	0.03

OPERATING RULE

The Otjivero, Daan Viljoen and Tilda Viljoen dams are operated as a sub-system, known as the Molopo Sub-system Namibia. 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. Water should be transferred from Otjivero silt to Otjivero main. Otjivero water should be used first for topping up Tilda Viljoen Dam.

