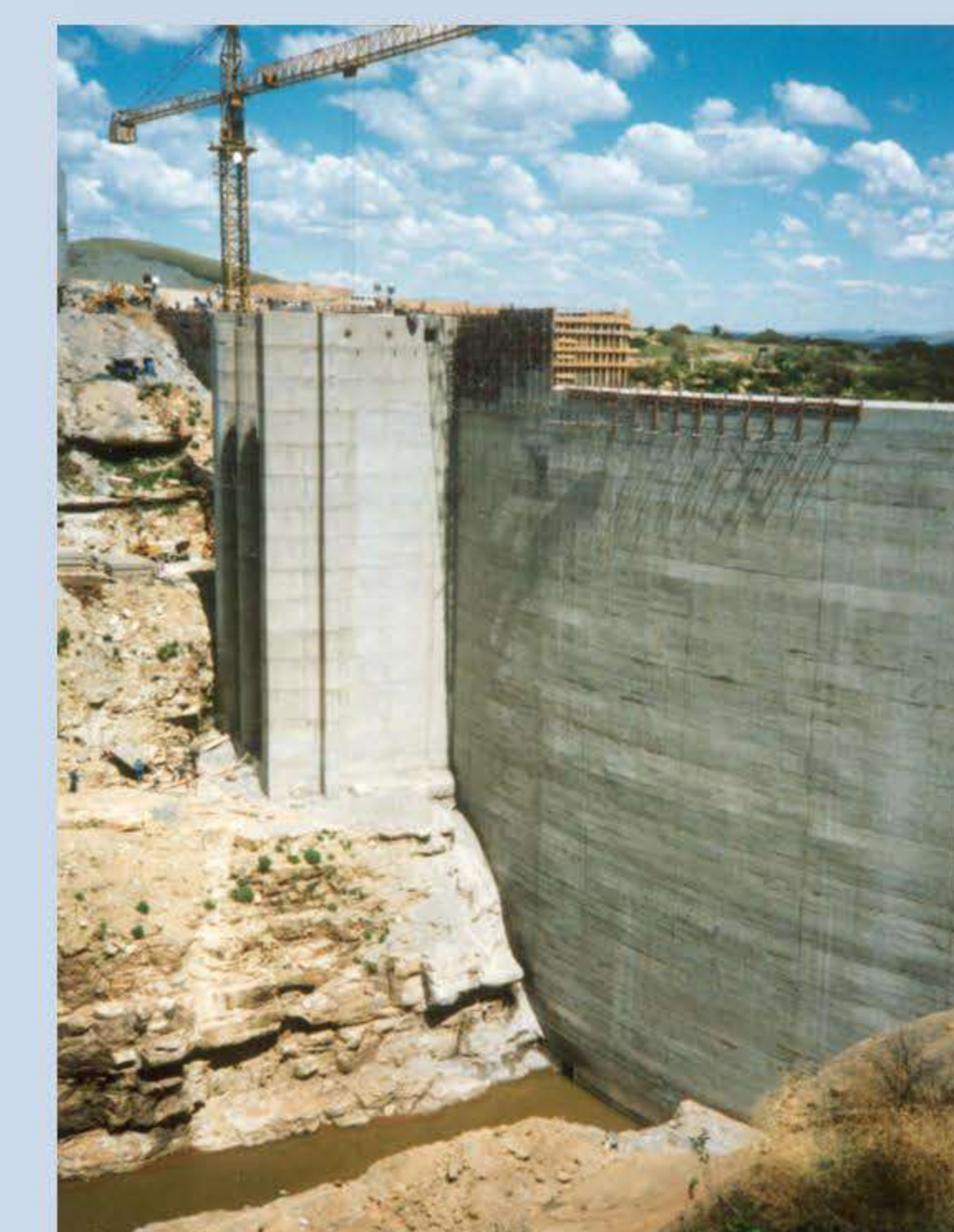


- 50% of the capacity can supply 1.2 million domestic users with water for 1 year (150 liter/person/day).
- The surface area is equivalent to 1230 rugby fields.

A combined gravity and arch dam (the first arch gravity Roller Compacted Concrete dam in the world) on the Riet Spruit, near Wepener was completed in 1989 to assist in meeting the water demand for Bloemfontein, because of the reduced capacity of the Welbedacht dam due to siltation. In order to prevent siltation as experienced at the Welbedacht Dam, the Knellpoort Dam is an off-channel storage dam with a relatively small catchment area. Water from the Caledon River is pumped to Knellpoort Dam via a two km long canal.



1987 during construction.



Upstream view.



Foundation preparation.



Concrete meets rock.

| KNELPOORT DAM (29.782172 S; 26.889168 E) | | |
|--|---|--|
| Completed: 1989 | River: Buffels River. | Capacity: 136.2 million m³ |
| Type of dam: Combined concrete gravity – arch dam. | | |
| Length of wall (top): 200 m | Length of dam (longest distance from wall to inflow): 7 km | |
| Nearest town: Wepener | Surface area: 985 ha | |
| Water use: Domestic and industrial. | | |
| Capacity compared to the present capacity of the Welbedacht Dam: > 8 times | | |

References, literature and photos:
References: https://en.wikipedia.org/wiki/Knellpoort_Dam;
<https://plak.co.za/moreinfo/19535/knellpoort-dam>
Photos: DWA;