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 Knelpoort Dam is an off-channel storage dam with a relatively small catchment area. Water from the Caledon River is pumped to Knelpoort Dam via a two km long canal.

**KNELPOORT DAM**

- **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/Knelpoort_Dam
- https://plak.co.za/moreinfo/19535/knelpoort-dam

Photos: DWA