POLIHALI DAM UPDATE



Polihali Dam and Appurtenant works

Like the majestic Mohale Dam, which was built during Phase I, both the Polihali Dam and the saddle dam will be concrete faced rockfill dams (CFRD). Mohale is a large dam. Standing at 145 metres high and with capacity to hold 950 million cubic metres of water at its full supply level, it was the largest of its kind in Africa at the time it was built.

Polihali Dam will be bigger.

The embankment will stand 166 metres high, have a crest length of 921 metres and a crest width of 9 metres. At its base, the embankment will be approximately 490 metres wide. Over 14 million cubic metres of rock, which will be quarried locally within the dam basin, will be compacted to form the embankment. The dam will create a reservoir on the Senqu and Khubelu rivers with a surface area of 5,053 hectares and a full supply storage capacity of 2,325 million cubic metres. The Polihali dam infrastructure includes a spillway, a compensation outlet structure and a small hydropower station.

The saddle dam will be 43 metres high and will have a crest length of 603 metres and a crest width of 9 metres. Its function is to raise a low point on the reservoir margin to prevent water from bypassing the Polihali Dam.

Just as the water from the Mohale reservoir flows through the interconnecting Mohale Transfer Tunnel to the reservoir at Katse, so will water from the Polihali reservoir flow through the Polihali Transfer Tunnel on its way to Katse, increasing the supply of water to the Katse reservoir and the subsequent amount of water available for hydropower generation at the 'Muela Hydropower station.

The current supply rate of water from Lesotho to Gauteng of 780 million cubic metres per annum will be increased incrementally to reach 1270 million metres per annum, as agreed by the two Governments. Polihali Dam is expected to contribute about 490 million cubic metres of water per annum to the system for delivery to RSA.

Work on the dam design commenced in 2017 and tender design was completed during 2020. Construction started in early 2023 following the completion of the construction procurement in late 2022. Completion and commissioning are expected in 2028.

The first milestone on the construction of the dam was the diversion of the Senqu River through the diversion tunnels ahead of the construction of the cofferdam upstream of the Polihali Dam wall on 4 August 2023.

