Simplified schematic of Coolmunda Dam radial gate operation

The seven spillway gates are configured to respond to rising storage levels (1). The dam has a series of water chambers and counter weights (2) that are connected to the water in the storage.

When water fills the chambers the buoyancy of the water makes the counter weights lighter, which causes the gates to open (3).



Once the water level rises above full supply, the first of the seven gates will begin to open, followed by two gates and then the final four. The water chambers that control the gates are set at different levels so that the higher the water level the more gates open.

The gates will continue opening until outflows match inflows and the storage level stabilises.

