Shon Sheffrey Reservoir – Labyrinth overflow and replacement of masonry spillway

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SYNOPSIS  Lack of adequate freeboard and concerns over ability of a masonry spillway to pass the design flood were resolved by providing a labyrinth weir and replacing the masonry spillway. The existing spillway was evaluated using computational fluid dynamics and the design was tested by physical modelling. The design rehabilitated the reservoir by providing improved freeboard and durability to withstand the design flood.