Granite outcrop at Kellerberrin, 2002

Description

This is a low wall made from slabs of granite at the base of a huge granite outcrop at Kellerberrin Hill, approximately 150 km along the route of the Golden Pipeline, 200 km east of Perth in Western Australia. It is designed to catch rain running off the rock. A second wall parallel to the first has created a channel or drain. The photograph was taken in 2002.

Educational value

This asset shows a system of walls and drains designed to catch rain falling on a granite outcrop - constructed in the 1890s in Western Australia's arid interior, the wall of stone slabs, built around the outer edge of the outcrop, defines a 195-ha catchment area; rain caught falling on and running off the rocks is prevented from dissipating into the soil at the base; the run-off is channelled to the lowest point at the base of the rocks where a dam stores the harvested water; in this particular system, a second wall parallel to the first, with slabs laid at an angle, acts as a drain to channel further run-off.

It is a method of supplying water in response to the need generated by gold discoveries in Western Australia - as prospectors in their thousands rushed to the arid fields, rock catchments were needed along the waterless track, as well as at the small settlements that sprang up; the Water Supply Department calculated that in the seven months between March and September 1894, 12,212 men passed through Southern Cross on their way to the fields and 5,048 men came back, which left 7,164 on the field; over the same period almost 15,000 horses also used the track, drawing on the same scarce water reserves.

It is an example of a rock catchment built by the contractors who were building the railway line to the gold fields (the government built others) - railway contractors built more than a dozen storage tanks and water catchments while extending the railway line to Southern Cross in 1894 and on to Coolgardie and Kalgoorlie in 1896; the water

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was used in their construction camps and train engines; J McDowell was the railway entrepreneur contracted to build the catchment at Kellerberrin in 1894 and the railway line to Southern Cross in the Yilgarn gold fields.
It highlights the slabs of rock used to construct the low wall surrounding the granite outcrop, which were harvested from the outcrop itself - cracks form in the rock face due to natural weathering, and wooden pegs driven into the cracks were moistened to force the rock slabs apart, thus forming rough square blocks; sometimes horses, with hessian bags around their hooves to stop them from slipping on the rock, towed metal sleds to carry the rock from the quarrying site to the wall construction site.
It is an example of an innovative method of conserving and storing fresh water in the arid eastern gold fields in the 1890s - in 1893, Fred Renou, Superintendent of Water Supply in WA's newly established Water Supply Department, investigated and reported on the water supply situation on the road to Coolgardie; he contended the only place to sink a dam was at the base of large granite rocks, using the rocks as watersheds; virtually all water in the area was saline with the exception of this run-off from rocks; with no permanent rivers, the prospectors in their thousands along the waterless track, and in the small settlements that had sprung up, relied on rock catchments and distillation of saline water.
It is typical of a water collection and storage system for the railways in the 1890s - steam engines used copious amounts of water; to prevent scale, steam locomotives' boilers required mineral-free water, which rock run-off provides; these systems were constructed for the railways in particular and water supply in general, hence they are often known as 'Railway Dams'; water from Kellerberrin’s dam was pumped to the railway line.
It features a location associated with obtaining water in WA's arid interior - in all likelihood for thousands of years Indigenous people and for more than a 100 years Europeans had collected water at such locations; wells and dams have been built at Kellerberrin at different times to utilise run-off from the rock; exploration parties searching for pastoral land in the 1860s, prospectors rushing by foot or coach to the gold fields in the 1890s, and labourers constructing the gold fields' water supply pipeline have all taken advantage of water running off the rock; water was the raison d'etre for every named point along the route to the gold fields; Kellerberrin had a caretaker living on site to protect the railway dam.

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Creator Gary Peters, photographer, 2002

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