



## Glenmaggie Weir Instrumentation

Client: Southern Rural Water

Date: 30/05/98

---

### Instrumentation

Installation of 12No. VW Piezometers, 1No. Water Level Sensor, Telemetry and Datalogging system.

Supervision of drilling and trenching subcontractors.

---

### Overview



Glenmaggie weir is founded on the local bedrock. Concerns had been raised as to the condition of the rock/concrete interface. This contract was conceived by SMEC to investigate whether piezometric pressures at the interface showed a correlation with the head of water contained behind the weir

The contract was between Geotechnical Systems Australia and Southern Rural Water. Drilling and trenching were carried out as subcontracts to Geotechnical Systems.

The piezometers were installed in percussion-drilled holes at the interface and backfilled with bentonite pellets and a non-shrink cement grout. Cabling was led away from the holes in a channel cut into the dam wall. These channels led to drill holes into the main gallery and then to a central datalogger location.

The datalogger used on this contract was a *dataTaker DT615* Geologger. Since the logging location was situated in the gallery, away from the office area a telemetry system was

employed to give both access at the offices and a dial in option to allow SMEC to collect and examine data. The logging frequency was daily with alarm thresholds set to increase the logging rate in the event of sudden changes in weir water level or piezometer reading.

---

### **Outcome**

The contract was completed successfully and Southern Rural Water is now operating the system.

---

| [Home](#) | [About](#) | [Projects](#) | [Services](#) | [Products](#) |