



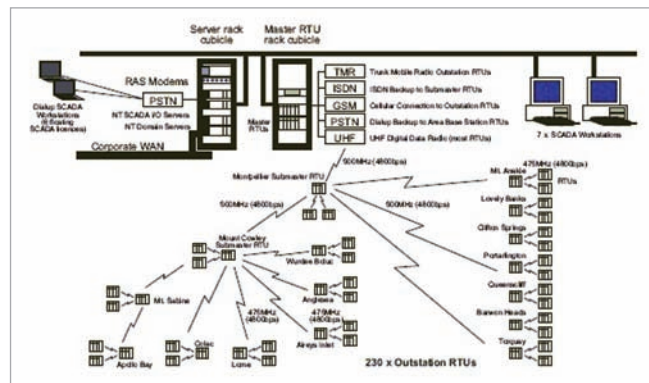
## Barwon Water SCADA System Upgrade

### About the Customer

Barwon Water is a statutory authority in the State of Victoria, serving a population of more than 250,000 people. Their service area covers 8,100 km<sup>2</sup> and includes Geelong and the Bellarine Peninsula, along the coast to Apollo Bay, and rural areas including Colac. Barwon Water also manages 20kms of the Barwon River through urban Geelong.

### Our Challenge

In March, 1999, three project partners, Ci Technologies, Semaphore and Jones & Jones Engineering won a AUSS\$2M contract to upgrade and significantly expand the Barwon Water (located in Southern Victoria) telemetry system. The project included 230 RTUs, a wide area radio communications network using 16 UHF base stations (900MHz, 9600bps digital links and 475MHz, 4800bps analog links), engineering services and supply of 13 Citect licenses.



Overview diagram of the communications network.

### Kingfisher RTU Solution

Dual redundant master RTUs using CP-21 processors with Ethernet connections to the Citect. Comm's to submaster RTUs at Montpellier and Mt. Cowley is digital radio with backup ISDN & PSTN. Comm's to area base stations is also digital radio with PSTN backup. Comm's to outstation RTUs is analog radio (4800bps FFSK). PC-1 style outstation RTUs, DNP3 protocol and exception based communications ensure a system response across the network of better than 20 seconds.

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