



PARASYN HELPS RURAL NSW BEAT THE BIG DRY

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Major System Overhaul and Expansion Completed for Murrumbidgee Irrigation

PARASYN has completed a major update and expansion of the SCADA system used by Murrumbidgee Irrigation, a key supplier of water to rural New South Wales. The Murrumbidgee is one of New South Wales longest rivers, flowing 500 kilometres across the southern half of the state before feeding into the mighty Murray-Darling system on the Victorian border. Throughout its length the river's precious water acts as the lifeblood of the communities it meanders through, being widely used for town water supplies, electricity generation, mining operations and irrigation, all vital to the rural economy.

Murrumbidgee Irrigation (MI) is one of the rivers major users, managing the river's flow to irrigate 3,624 square kilometres of NSW including the highly fertile plains of the Riverina region. To monitor and manage the flow of water both along the river and into the farms and stations it serves, Murrumbidgee Irrigation has for a number of years employed a SCADA system at the centre of its operations. PARASYN had previously supplied MI's with Remote Terminal Units (RTUs) for its growing operation and more recently conducted a comprehensive audit of the companies system in preparation for a planned expansion of the SCADA operation.

The audit highlighted a number of areas which needed to be addressed to accommodate the expansion and PARASYN were subsequently engaged to undertake all necessary work to complete the project. This included substituting the existing 'ladder logic' with the more efficient sequential polling from two master RTUs and the introduction of 'exception polling' to ensure abnormal conditions are immediately relayed to MI operators. In addition PARASYN improved the Human Machine Interface (HMI) to make it easier to interpret and monitor, with clear operator alerts to indicate alarm conditions.

These modifications allowed the major expansion of the system to take place seamlessly with an initial addition of an extra 104 monitoring points, more than four times as many as had previously been employed across the operation, while the modified system has been designed with significant head-room to accommodate any future expansion. Most importantly it will also allow Murrumbidgee Irrigation to store comprehensive event information which can then be used to compare trends across historical data, crucial to maintaining both a constant flow of water to MI customers and in preserving the long term environmental health of the Murrumbidgee River.