



AQUAFLEX- Working with Dairy Holdings to help reduce water use

Hydrocom have installed a system at Selwyn Dairy Farm (a Dairy Holdings farm north of Rakaia). The system comprises four double AQUAFLEX Soil Moisture sites, three Seametrics water meters and AQUACOM telemetry on this Roto Rainer irrigated farm. Dairy Holdings and staff of the Selwyn Dairy Farm are working with AQUAFLEX NZ this season on a project to improve their overall water use efficiency for their irrigation system. EECA (Energy Efficiency and Conservation Authority) are assisting with some funding for the project and will prepare a case study to show how the system saved water and energy at the end of the coming season.

AQUAFLEX NZ will be helping the Selwyn Dairy Farm manager Scott Searle and Dairy Holdings Ltd Farm Operations Manager Gary McGregor develop strategies to manage both timing and depth of application, but first an evaluation will be carried out on the irrigators to ensure they are working correctly and applying the correct application depths with the highest Distribution Uniformity (DU) as possible. This is key to being able to manage the system effectively.

AQUAFLEX NZ (one of the three member companies of the Hydrocom Alliance) has developed the AQUACOM Datalogging and Telemetry system which allows soil moisture and temperature data, flow meter information and many other parameters to be accessed in a timely fashion. This is the key to allowing Scott and his team to get the necessary information so they can monitor performance of the system.

In previous irrigation seasons Scott said, "We probably tended to keep the machines running more often than they should as we had no information about soil moisture conditions and had to operate using gut feeling. This coming season we hope to make significant gains, especially in the shoulder seasons when water demand is not as great."

The improvements in efficiency and money savings through moisture monitoring are becoming well known and EECA recently prepared a case study around soil moisture monitoring using AQUACOM and AQUAFLEX at the Lincoln University Dairy Farm and found full payback for two Dual sensor sites (with Radio Telemetry) in 1.25 years and this was only in terms of saved electricity and does not account for any other benefits such as reduced fertilizer leaching. We expect similar levels of return at Selwyn Dairy Farm as well.

The other Hydrocom Partners are also involved in the project. Watermetrics NZ providing water meters and installation and Boraman Consultants doing web data delivery as well.

Keep your eye out for future updates on progress with this project or feel free to call AQUAFLEX NZ on 03 384900 if you would like more information.



Scott Seale and Gary McGregor of Dairy Holdings at one of the AQUACOM telemetry sites.