

Stormwater Levels Controlled and Flooding Eliminated for Australian Water Authority

RESULTS

- Flooding prevented in storm conditions
- Creek no longer runs dry
- Maintenance of water levels in all conditions
- Reduced start-up time with easy installation and on-site programming



The 3100s' were easy to install and program and provide stable signals

APPLICATION

Water levels in stormwater creeks

CUSTOMER

An Australian Water Authority

CHALLENGE

A water authority in Australia needs to control and maintain the water level in a stormwater creek, which normally drains to the sea.

The creek runs through a housing estate. During storm conditions, the level in the creek can rise dramatically causing local flooding in the estate and during dry conditions the creek runs dry, leading to unpleasant smells. The surface of the water in the creek gets very turbulent, particularly under storm conditions when waves of up to 1 metre can travel up or down the creek.

SOLUTION

The authority installed two creek water channels with penstock control gates and two large pumps which are used to maintain the water level in all conditions.

Four Rosemount® 3100 Ultrasonic Level Transmitters have been installed, two either side of each penstock gate to monitor the level across the penstock and control the gate. (Note: The gates are not installed in the figures (right), but the guide runners are clearly shown). To eliminate excessive turbulence at the measurement points, the 3100s' have been installed on 5" diameter stilling tubes.

The Rosemount Ultrasonic level transmitters are easily configured on site with existing LCD display and push button programming.

In this application the 3100s' provide a stable level signal to the penstock control equipment, and were chosen because of their programming simplicity and ease of installation.



Figure 1 Two 3100 transmitters mounted on 5" diameter 316 stainless steel stilling tubes.

Figure 2. 3100 transmitter located on the upstream side of the two channels and pen-stocks. (Penstock gates not installed at time of photo).

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