

Flood Warning Systems

Client:- East Riding of Yorkshire Council

Project:- Cottingham Culvert Trash Screen monitoring

Background

East Riding of Yorkshire Council commissioned Hydro-Logic to install flood monitors in the village of Cottingham, near Kingston upon Hull. Residents in this area had been dramatically affected by the floods of June 2007. Extremely intense rainfall combined with already saturated land resulted in localised flooding which was made worse by the effects of easily blocked 'trash screens' at numerous culvert locations.

Tasks and deliverables

Hydro-Logic was engaged to provide a level monitoring and early warning system, delivering vital and timely notification of rising levels, initially at two culvert grille sites where the Council's Engineering and Drainage Team had most concerns about flood risk from blockages during storm conditions. Hydro-Logic's Isodaq telemetry systems include web-based data display systems which are easy-to-use with little training, whilst the field-based instrumentation require little routine maintenance. Visual confirmation of the cause of any suspected blockage is provided by cameras, configured for both day and night operation, providing images which can also be viewed from office or home locations.

Benefits and outcomes

Building on the successes of these first two systems, the Council then commissioned Hydro-Logic to install a further five level and rainfall monitoring systems as well outstations to monitor eight pumping stations. All the level, rainfall and pump status data is available to all the council's users via any PC or Tablet computer linked via the internet to Hydro-Logic's Timeview Telemetry servers. The camera pictures enable maintenance teams to be quickly and efficiently deployed to the most vulnerable locations so as to prioritise trash clearance work where it is most needed, thus reducing maintenance costs.

