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SEWER SENSOR PREVENTS POND POLLUTION

Residents and wildlife in a Welling park are set to benefit from a range of improvements to local sewers.

Thames Water is investing £235,000 in a two-part project, which will reduce the risk of floods from sewers and protect Danson Park lake from pollution.

Nine properties have in the past been affected by floods when intense storms have overwhelmed sewers. The first part of the project involves work to replace 300 metres of pipes, increasing the capacity of the sewer network to cope with such downpours.

In the second part of the project, company engineers have devised a novel solution to prevent pollution entering the pond in Danson Park, which is home to wildlife and used by local residents for recreation.

Engineers will install a sensor inside the local surface water sewer, which collects rainwater from nearby roofs and roads, and discharges it into the pond. The sensor will monitor water in the pipes for the presence of pollutants including ammonia, which is found in sewage.

When the sensor detects pollution it will send an electronic signal to activate a valve further down the pipeline, diverting the polluted water into a separate sewer. This will ensure that any pollution is diverted away from the rainwater sewer leading to the pond, and is instead channelled through the foul sewer to the local sewage works for treatment.

Pollution prevention experts from Thames Water last year completed an investigation which revealed plumbing mistakes at 40 local homes that were polluting the pond.

Faulty connections by plumbers and home DIY enthusiasts had led to toilets, washing machines and household appliances being plumbed into rainwater sewers leading to the pond. They should instead have been connected to foul sewers that take household waste to sewage works for treatment.

The householders carried out corrective work on their drains, and the Environment Agency confirmed that the quality of water in the lake improved as a result.

Stephen Ebbs, Thames Water's Project Manager, said: "This work will all but remove the possibility of floods from sewers affecting local homes.

"We're installing the new sensor and diversion system to ensure that any pollution entering the surface water sewers doesn't jeopardise the success of the clean-up work to date.

"The system is the first of its kind in our region."

Work on the project will start on 10 January and be complete by June.