



Customer-centric approach delivers successful private pumping station adoption

Over the last 10 years, Grundfos, the world's largest pump manufacturer, has worked closely with Thames Water (TW) and the utility's other contractors in delivering the strategy and programme for the adoption of private small sewage pumping stations (SSPS) from householders.

"A pet burial in a domestic garden, and a house on an island accessible only by boat were just two of the challenges facing Grundfos and Thames Water as they worked tirelessly to deliver the adoption of private pumping stations into the utility's asset base." explains **Matt Taylor**, Projects Delivery Manager UK&I, Grundfos.

The driver for the project was legislation introduced by the UK Government on 1st October 2016, which meant Thames Water had to take over ownership and operation of some 2,500 SSPS's – doubling its assets overnight.



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Possibility in every drop

Prior to the transfer, property owners using a pumping station were responsible for the entire sewer, pipes and pumping station, right up to the point where it connected to the public sewer.



The Challenges

One of the challenges of this change was that no one knew how many private pumping stations there were in the catchment, or the size, specification, condition or location of these assets.

All gravity sewage pipes outside property boundaries had already been transferred to the water and sewage companies by an earlier change to legislation in 2011.

Transforming water together

In 2013, Grundfos started to develop a strategy to support water utilities with equipment, installation and servicing of soon-to-be acquired pumping station assets. The company reached out to Thames Water's procurement managers and were invited to trial an early adoption scheme, which involved carrying out the necessary work to make 200 newly adopted SSPS's safe and serviceable across a designated catchment.

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This pilot involved lots of face-to-face meetings with customers, which prompted Grundfos to promote a highly customer-centric approach, where homeowners would be looked after throughout the adoption journey. There were many complications to address, including instances where SSPS's were sited in people's gardens and driveways, with electrical controls in their sheds and garages.

In one instance the pumping station was under garden decking and the homeowner had no idea it was there, until sewage backed up. In another the equipment was in a chicken shed, and in yet another, the control panel was in a kitchen cupboard.

Health and safety was a constant challenge, with horrendous levels of disrepair observed. In one extreme case, an elderly lady was turning on the pump every morning to minimise its use and avoid spending money on it. The wet well covers were rotten and extremely dangerous.

The Solution

Given that the sites were on private property and sometimes in private homes, managing those customer relationships was a critical part of the job. Grundfos worked closely with Thames Water and undertook the job of speaking to each homeowner on their behalf.

A customer experience manager was employed as the first line of communications. They were responsible for making all the bookings.

The sensitivities involved were highlighted when a team arrived on site to carry out the civil engineering work for installation of a new wet well cover, control panel and kiosk plinth. Just as the digging was about to start, a teenage resident of the property yelled “No!” – and work had to stop. It turned out that the planned location was exactly where a much-loved family cat was buried and had to be changed.

Working alongside our partners

In the first phase of the work, Grundfos carried out 30 of the 100 SSPS upgrades alongside other contractors. In the second phase, 200 were awarded to Grundfos to deliver on behalf of Thames Water and the eight20 alliance.

The works are ongoing, with pumping stations still being found, and older ones requiring upgrades. Adopted pumping stations are coming to be seen as Grundfos’s forte. The company supported Thames Water operationally too, handling callouts for six months while the utility built its internal operational team.

One particularly challenging installation took place at a property on an island in the river Thames. Even getting to site to view the pumping station involved using the owner’s boat.

Rather than standard pumps and onsite controls, it was decided to use Grundfos’s Auto Adapt wastewater pumps complete with interface units, an all-in-one solution reducing the need for a control panel and float switches and including an intelligent level control.

Integrating radio communications also made sense on this occasion, because it meant technicians could communicate with the pumping station from the riverbank. At 25-30m distance the condition of the SSPS could be checked safely, without entering the property or visiting the island.

Initial reservations about the transfer of SSPS assets often melted away as the works commenced and new equipment was installed.

After installation of a whole new Grundfos system, including Grundfos remote monitoring, at his home in Tring, another customer accidentally tripped his electrics when he burnt some toast. This triggered the pumping station alarm, and within seconds the Grundfos engineer alerted him. The customer was both delighted and astounded at the capability of the new equipment and Grundfos’s quick response.

Summary

Since first being involved, Grundfos has carried out servicing, maintenance and installation of pumps and equipment at hundreds of sites, ensuring equipment is safe and serviceable. The work with Thames is ongoing.

The utility is the UK’s largest and operates across 13,000km², from parts of Gloucestershire in the

west, across most of London, to areas of Kent and Essex in the east. New assets are still being discovered and brought up to standard.

The delivery model has worked so well it has now been replicated within Wessex Water, with over 100 SSPS upgrades completed for customers.