

Forehill RSZ Burst Main causing Significant Consumer Concern 18th July 2023

DWQR Inspector:
Andrew Kennedy

Event No. 13582

Event Category: Significant

Around 19:00 on 16 July 2023 Scottish Water were alerted to high flows from Forehill Water Treatment Works (WTW) and a loss of inlet flow to Cowsrieve Service Reservoir (SR), indicating a burst on a 15" cast iron trunk main. The burst main was located and isolated around 00:30 on 17 July 2023. Tankers were dispatched to supplement Cowsrieve SR whilst repairs were carried out, with the main being repaired around 13:30 on 17 July 2023 and forward flow restored once water was running clear in the inlet break pressure tank. Cowsrieve SR levels started to recover from 15:00 after having emptied earlier in the day.

Scottish Water received 106 customer contacts for 'no water' or pressure issues, 8 requests for bottled water and a total of 86 water quality complaints from the affected areas (although 8 of these appear to be duplicate records) between 17 July 2023 and 23 July 2023, most of which were received during the evening of 17 July 2023 and the morning of 18 July 2023 following recharge of the reservoir and downstream network. Three reactive samples were taken in the morning of 18 July 2023, with one sample failing for iron (256µgFe/l), manganese (281µgMn/l) and turbidity (4.1NTU), whilst a second sample failed for manganese (52.5µgMn/l). Resamples were taken, with all results meeting the required standards.

It is clear from the Scottish Water's event outcome report and timings of customer contacts reporting discoloured water, that this incident was caused by the remobilisation of sediment



and biofilm build-up within Cowsrieve SR and the downstream water mains following recharge of the network leading to transient discolouration. This may have been exacerbated by network tankering activities into Cowsrieve SR whilst at a critically low level.

The event has been categorised as significant. Scottish Water has identified two actions which DWQR accepts are appropriate and will monitor to ensure they are completed prior to signing off the incident. DWQR made three additional recommendations.

