

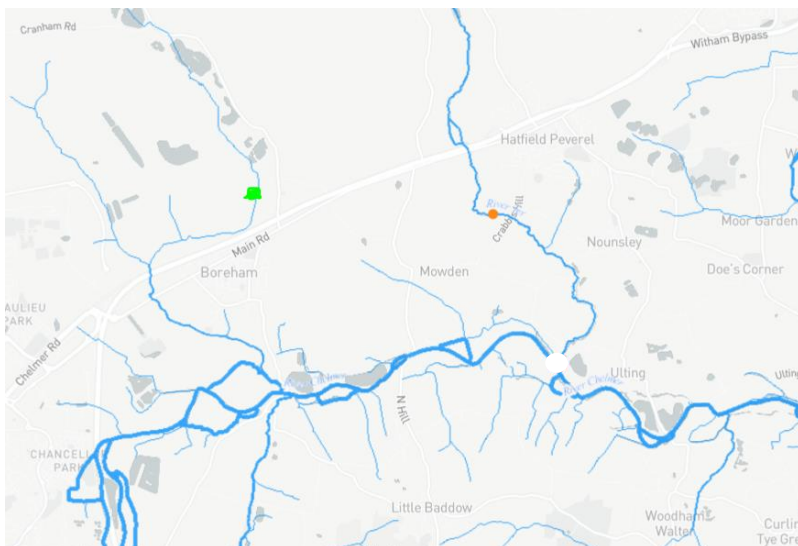
## Q95 Estimate

As stated in the H1 tool, there is no publically available Q95 data on the unnamed tributary of the River Chelmer that EMR Boreham discharges into and no sampling points on this waterway listed on the Water Quality Archive (<https://environment.data.gov.uk/water-quality/view/explore?search=&area=1-2&samplingPointType.group=&samplingPointStatus%5B%5D=open&loc=&limit=500>). Therefore, two nearby waterways of an apparent similar size were investigated (Sandon Brook at Sandon Bridge (<https://nrfa.ceh.ac.uk/data/station/meanflow/37013>) and the River Ter at Crabbs Bridge (<https://nrfa.ceh.ac.uk/data/station/meanflow/37003>) and were found to have Q95 flow rates of 0.034 m<sup>3</sup>/s and 0.035 m<sup>3</sup>/s respectively. Upon examining photos of the two nearby waterways (see below) and photos of the unnamed tributary that EMR Boreham discharges into, it appears that the unnamed tributary that EMR Boreham discharges into is less than half the size of the Sandon Brook at Sandon Bridge and the River Ter at Crabbs Bridge. Therefore, the Q95 for this unnamed tributary, when flowing, has been conservatively estimated as 30% of the known Q95 of Sandon Brook at Sandon Bridge. 30% of 0.034 m<sup>3</sup>/s is 0.0102 m<sup>3</sup>/s (10.02 l/s).

## River Ter at Crabbs Bridge

See, <https://nrfa.ceh.ac.uk/data/station/meanflow/37003>, Q95 given as 0.035 m<sup>3</sup>/s.

Approx. 3km from EMR Boreham discharge point (see Map 1.) is the river gauging point on a similar tributary of the River Chelmer. See Google images of the river below.



Map 1. Green dot showing EMR Boreham discharge point, orange dot showing Crabbs Bridge sampling station on the River Ter.

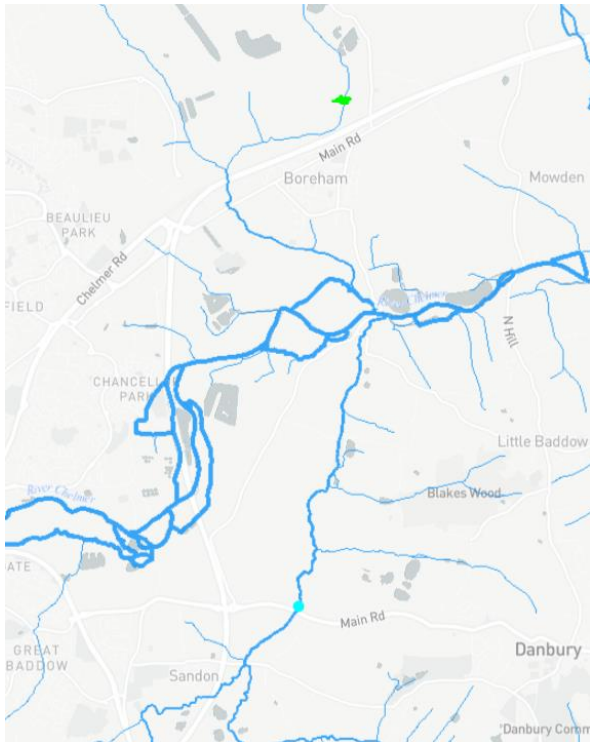
Google Images of River Ter at Crabbs Bridge (month and weather unknown):



## Sandon Brook at Sandon Bridge

See, <https://nrfa.ceh.ac.uk/data/station/meanflow/37013>, Q95 given as 0.035 m<sup>3</sup>/s.

Approx. 5.4 km away from EMR Boreham discharge point (see Map 2.) is the river gauging point on another similar tributary of the River Chelmer. See Google images of the river below



Map 2. Green dot showing EMR Boreham discharge point, blue dot showing Sandon Bridge sampling station on the Sandon Brook.

Google Image of Sandon Brook at Sandon Bridge (month and weather unknown):



Unnamed tributary of the River Chelmer that EMR Boreham discharges into

Photograph of discharge point in March following rain.



Google images where the unnamed tributary (that EMR Boreham discharges into) enters the River Chelmer (month and weather unknown).





As seen, the unnamed tributary of the River Chelmer that EMR Boreham discharges generally into looks smaller than the Sandon Brook at Sandon Bridge and River Ter at Crabbs Bridge, both of which look to be a similar size and is reflected in their similar Q95's.

Therefore, the Q95 for this unnamed tributary, when flowing, has been conservatively estimated as 30% of the known Q95 of Sandon Brook at Sandon Bridge. 30% of 0.034 m<sup>3</sup>/s is 0.0102 m<sup>3</sup>/s (10.02 l/s).