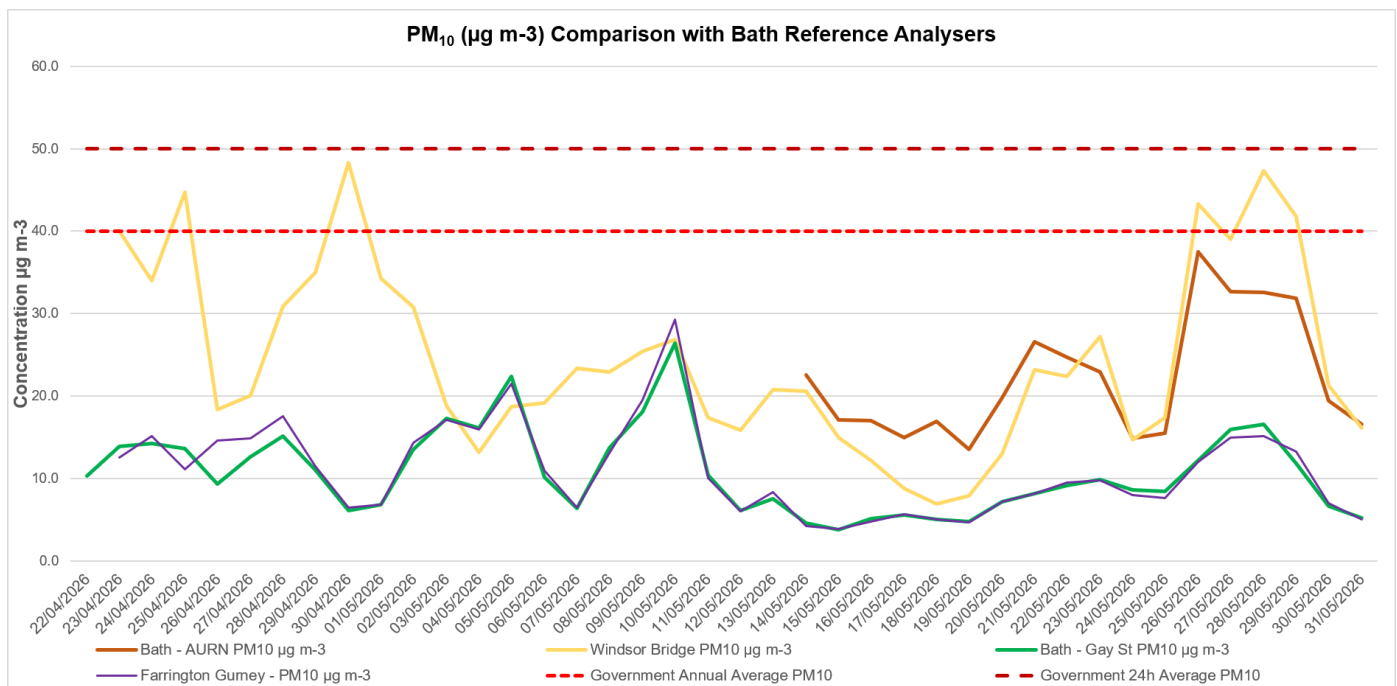
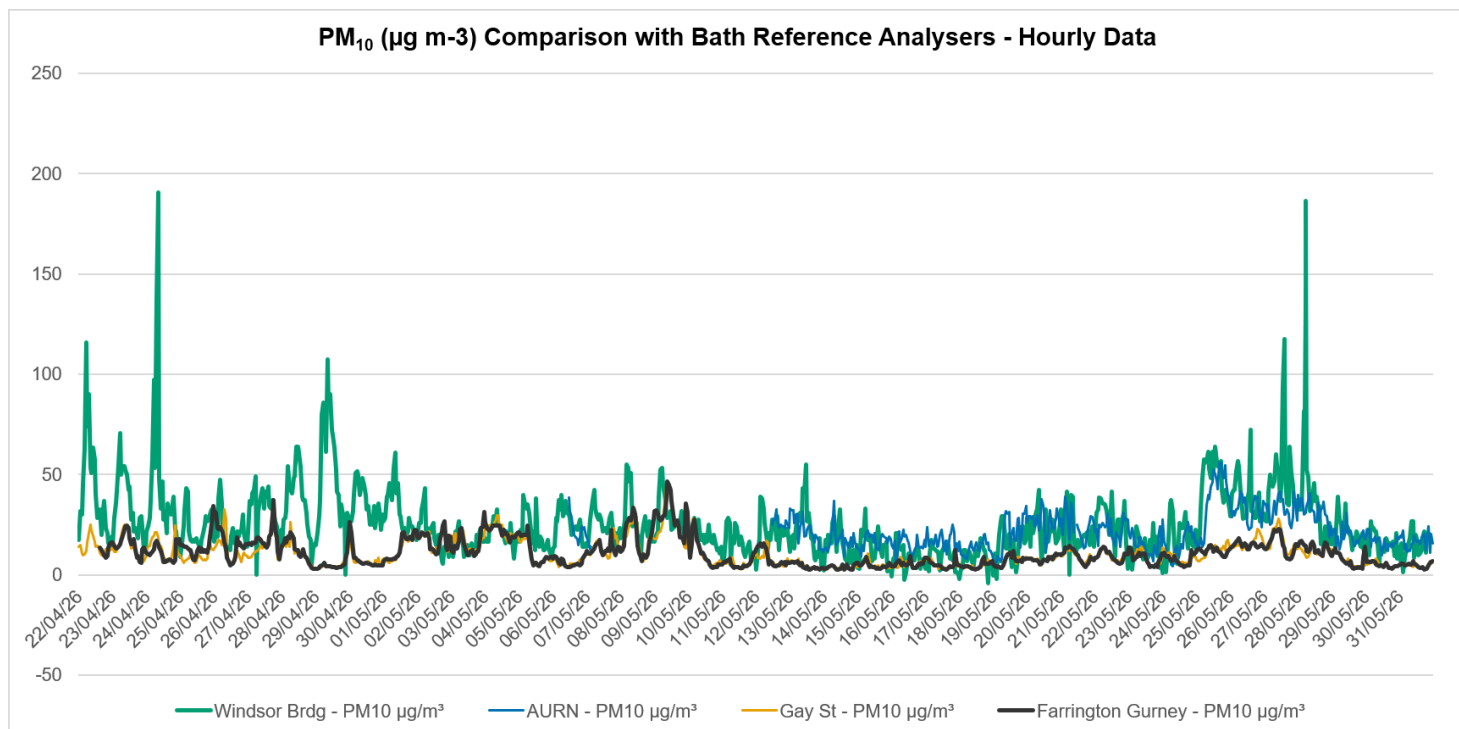


Farrington Gurney Particulate Matter Data compared against Bath (24/4 – 31/05)

A request to monitor the air quality in Farrington Gurney has been raised regarding complaints of air pollution near Farrington Gurney - particulate matter (PM₁₀, PM_{2.5}). To determine if could be a problem with particulate matter a Zephyr monitor has been installed, and this is the 1st month of data collected near Sunnyside.



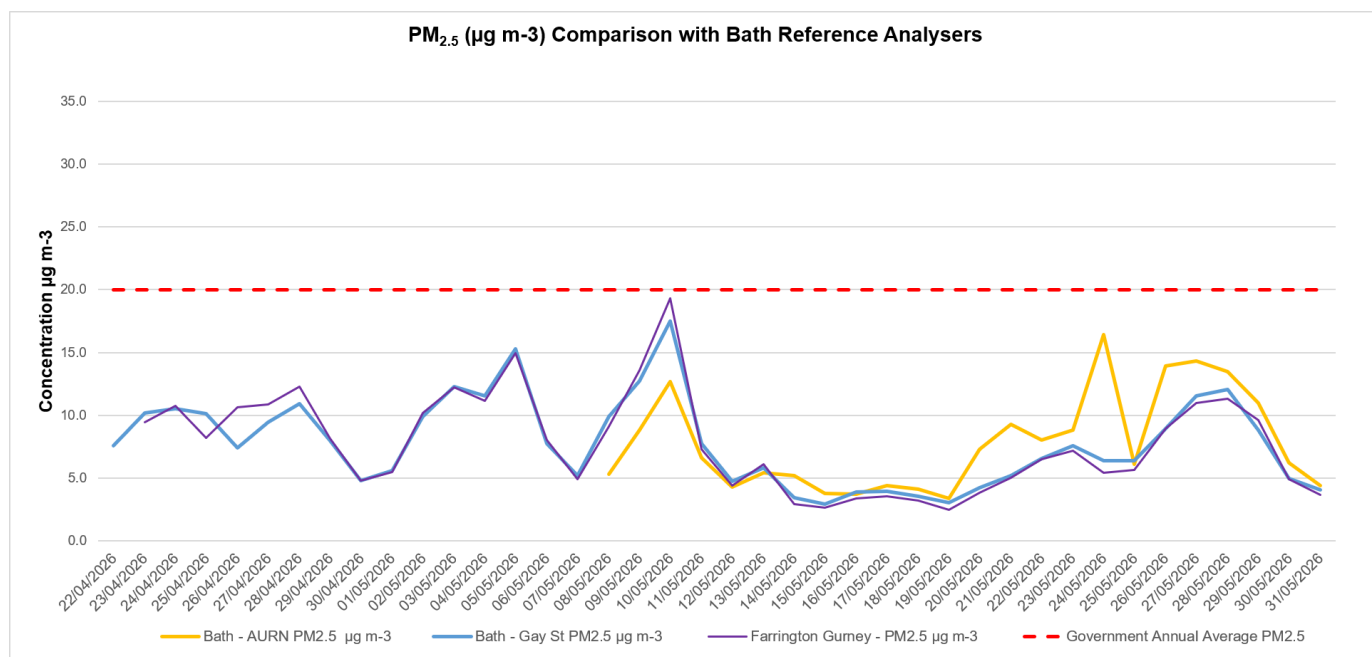
Graph 1: Daily averaged PM₁₀ data for the monitoring period from 23 of April to the 31 of May, Bath air quality monitors comparison with Farrington Gurney.



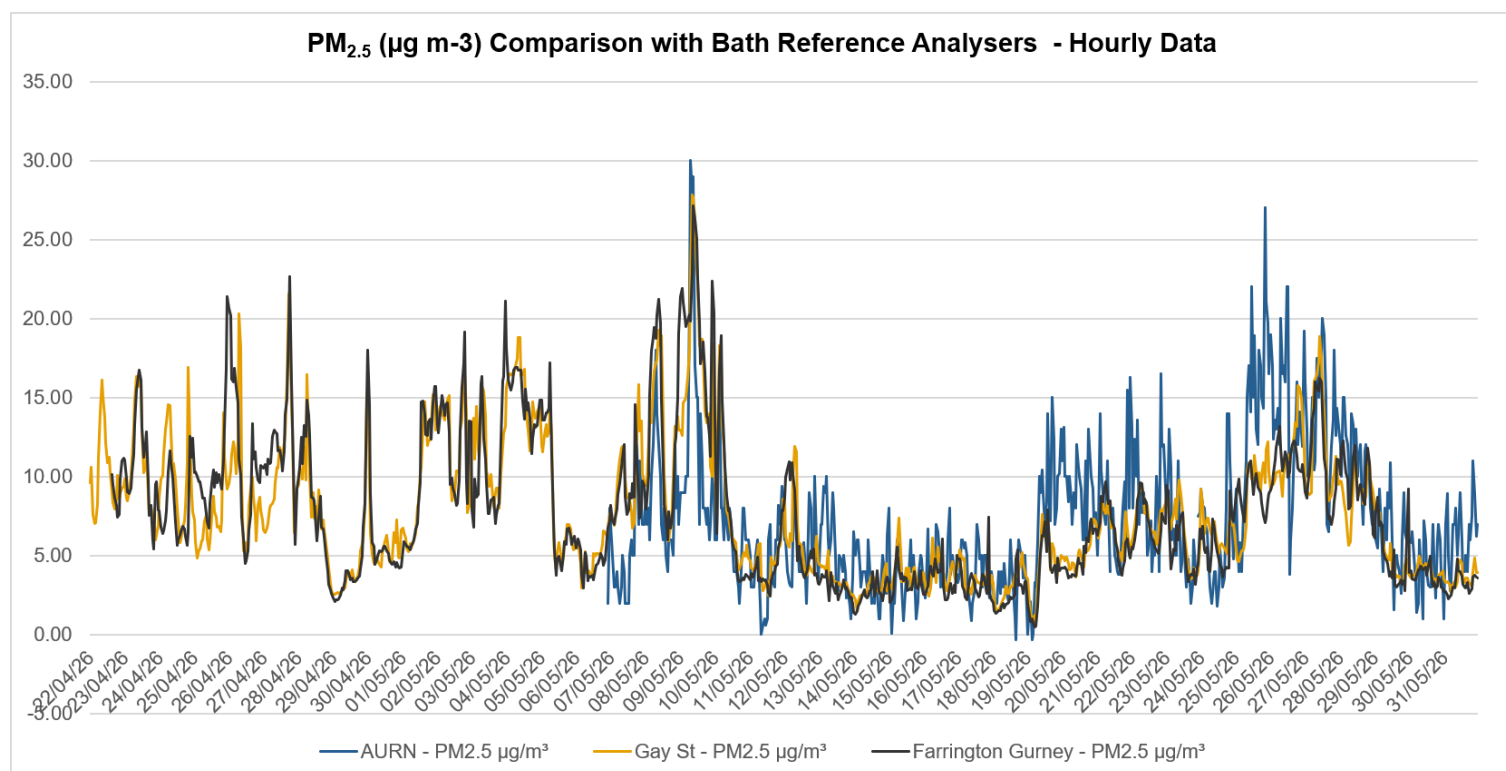
Graph 2: Hourly averaged PM₁₀ data.

Data is missing for the AURN during the first half of the monitoring period because of maintenance on the enclosure with air quality equipment. Elevated PM₁₀ concentrations were observed during late April and late May, the peaks in late May are consistent with pollution episodes caused by the hot dry weather, which enhance dust generation and resuspension.

The PM₁₀ data is comparable between Bath and the Farrington Gurney location with a similar behaviour. The data for Windsor Bridge location shows high concentrations because of the proximity of the two construction sites.



Graph 3: Daily averaged PM_{2.5} data for the monitoring period from 23 of April to the 31 of May, Bath air quality monitors comparison with Farrington Gurney.



Graph 4: Hourly averaged PM_{2.5} data.

As mentioned previously, the data in the AURN is missing in the first half, because of maintenance. The data in Farrington Gurney shows the concentrations of a similar behaviour to the monitors located in Bath. This similar trend tells us the majority of the sources are of the wider regional area (e.g. agriculture, industry, Saharan dust),

with the differences between monitors showing a more localised sources (e.g. vehicles, local agriculture, industry and fuel/wood burning).

Site	Monitoring Period Average PM ₁₀ (µg/m ³)	Maximum PM ₁₀ 24-hour Mean (µg/m ³)	Monitoring Period Average PM _{2.5} (µg/m ³)
Farrington Gurney	11	29	8
Windsor Bridge (Lower Bristol Rd)	24	48	n/a
Zephyr - Jane (Gay Street)	11	26	8
Bath A4 Roadside - AURN (London Road)	22	38	8

Table 1: PM Monitoring Results: Zephyr analyser and comparison with Bath PM monitoring.

Table 1 shows the particulate matter concentrations at continuous analysers on Windsor Bridge, Bath A4 Roadside and Zephyr in Gay Street during the same monitoring period as the Farrington Gurney. The monitoring on Windsor Bridge had a period average of 24 µg/m³ for PM₁₀, whereas this was reduced to 11 µg/m³ as an average during the monitoring period on Gay Street and Farrington Gurney, with Bath A4 Roadside at 22 µg/m³.

All concentrations are well below the Government's annual average objective of 40 µg/m³. Table 1 also shows that the maximum 24-hour concentration at Farrington Gurney was 29 µg/m³, 38 µg/m³ at Bath A4 Roadside and 26 µg/m³ at Gay Street, compared with 48 µg/m³ at Windsor Bridge, which means the Government's 24-hour Objective of 50 µg/m³ wasn't exceeded.

The monitoring on Gay Street, London Road and Farrington Gurney recorded a period average of 8 µg/m³ for PM_{2.5}. All concentrations are well below the Government's 20 µg/m³ objective.