

# London Borough of Hammersmith & Fulham

## VTX Air: Longitudinal Analysis v7

Updated: 2<sup>nd</sup> February 2024

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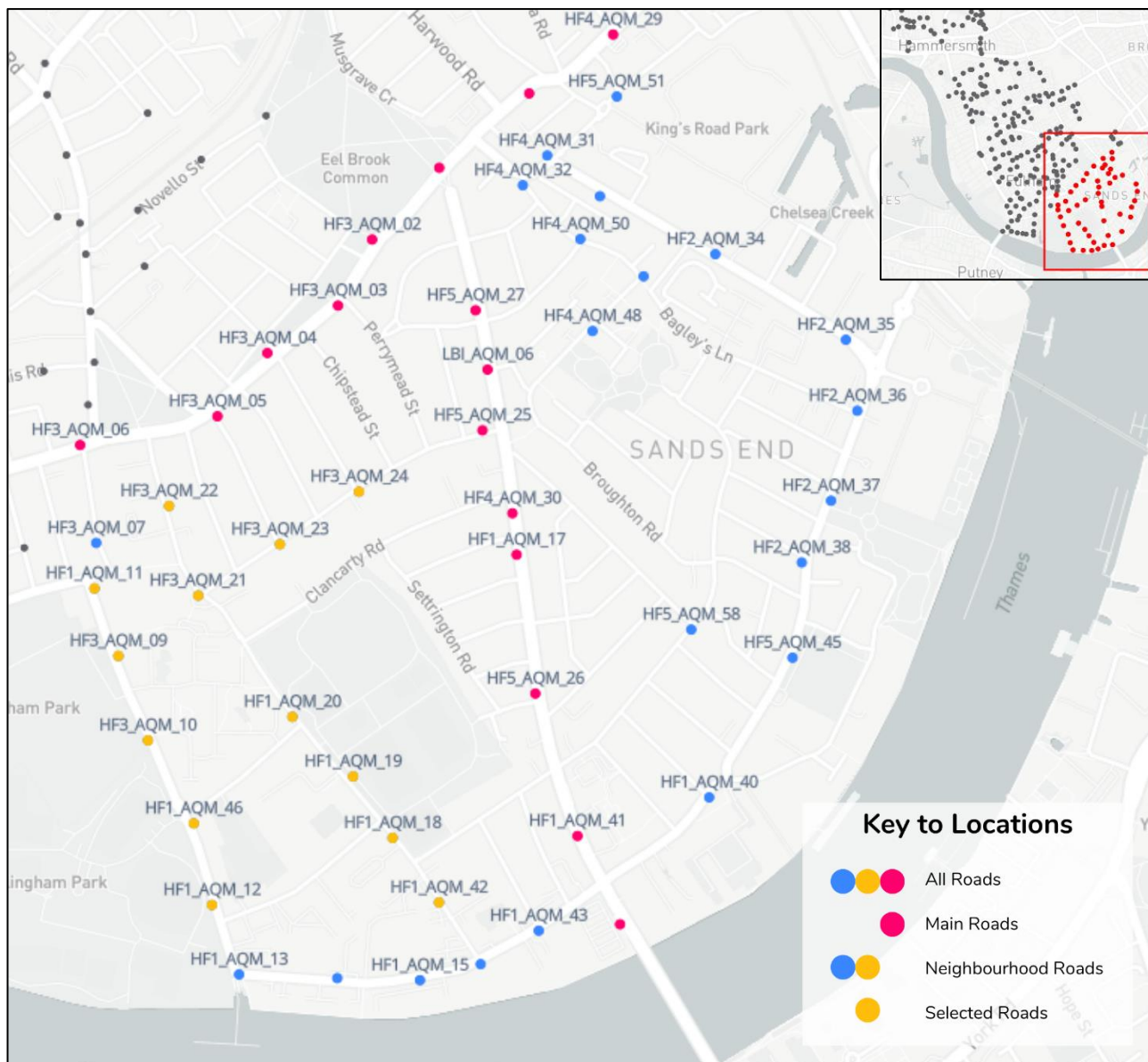
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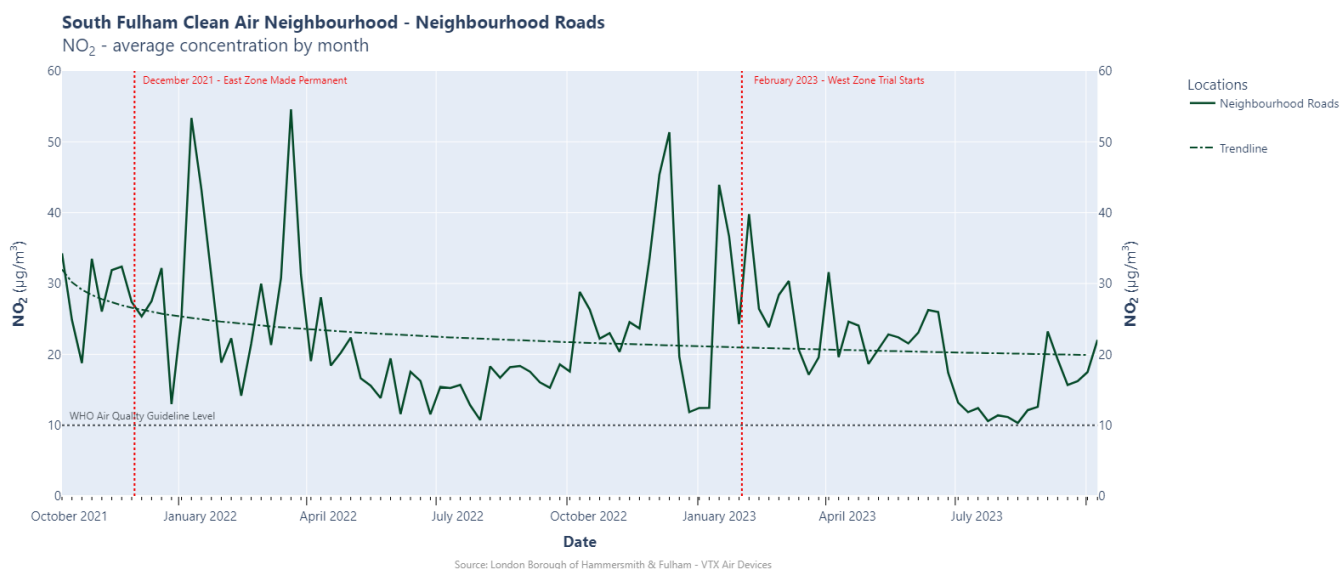
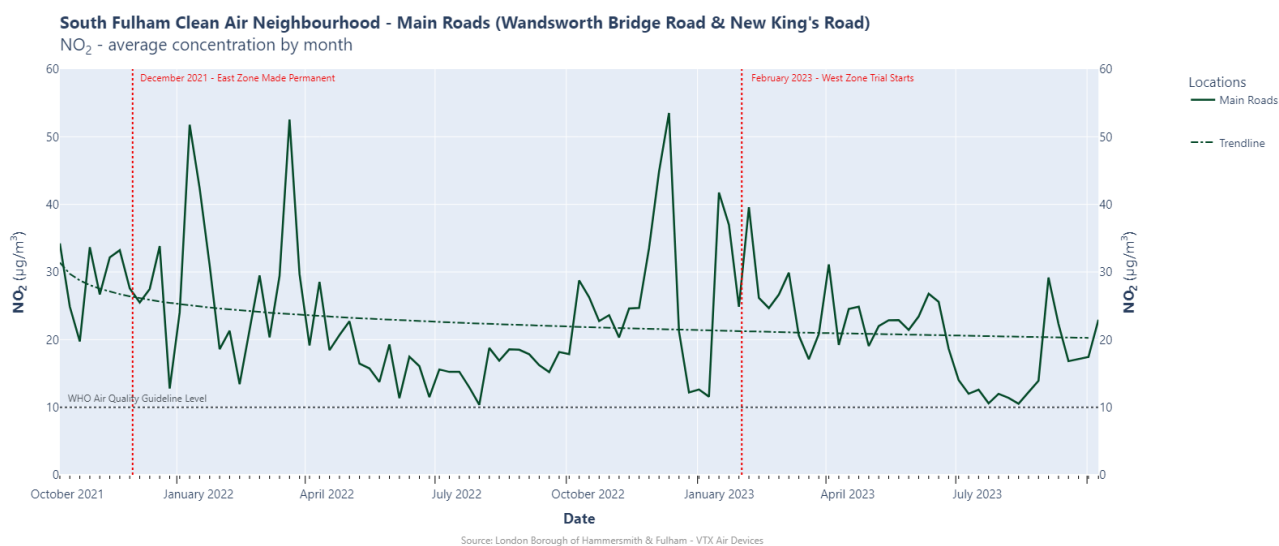
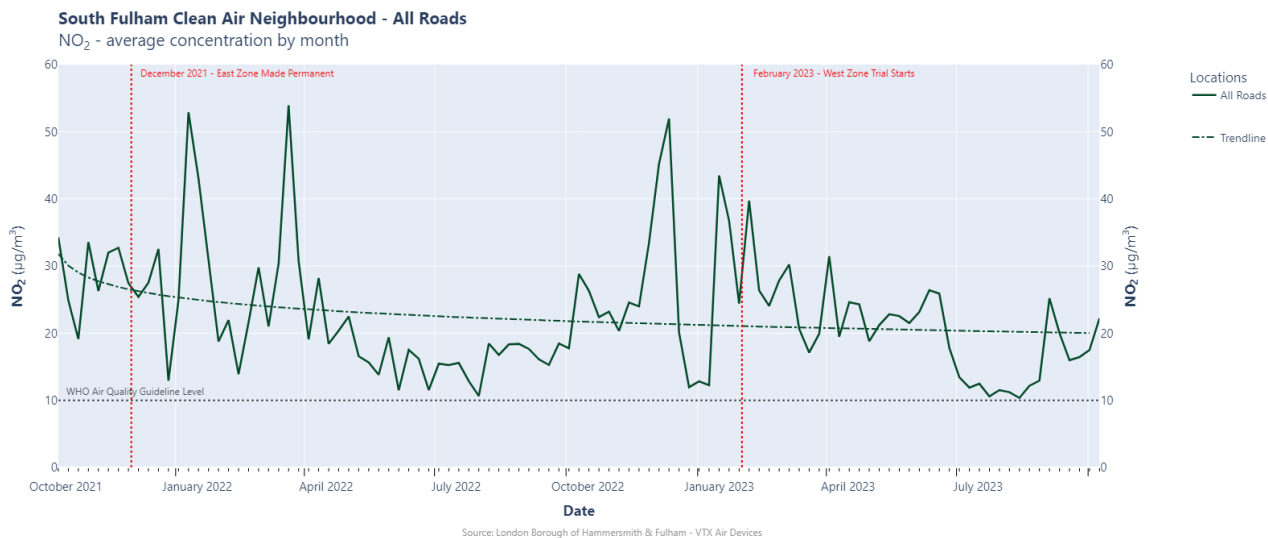
# Executive Summary

- The initial analysis has been restricted to looking at those devices situated within the South Fulham Clean Air Neighbourhood (both eastern and western zones) as these devices are the earliest deployed, having provided data since mid-2021, offering insight over the longest period possible.
- The charts show data for each pollutant for which data was collected and shows data for 4 categories of device locations within the South Fulham Clean Air Neighbourhood area:
  - **All Roads** - all device locations.
  - **Main Roads** (Wandsworth Bridge Road and New King's Road) - device locations where no traffic restrictions exist.
  - **Neighbourhood Roads** - device locations where restrictions on traffic have been imposed through enforcement cameras. Neighbourhood Roads includes additional charts highlighting **Selected Roads** data from the devices from Studdridge Street, Peterborough Road and Broomhouse Lane.
- In general, it is clear to see that there has been an overall year-on-year improvement in air quality across the whole neighbourhood since the devices began collecting data. The only exception to this is Ozone (O<sub>3</sub>) which appears to be staying at similar levels year-on-year but remaining below the World Health Organization Air Quality guideline level.
- In general, air quality has improved across the South Fulham Clean Air Neighbourhood and the data suggests that these interventions have not simply moved the poor air quality to roads where no restrictions exist.
- Comparative data from the HF5 AURN site at Hammersmith Gyratory would suggest that there has been an improvement in air quality across a wider area, but that the rate of improvement has been greater within the South Fulham Clean Air Neighbourhood.
- For clarity, the World Health Organization Air Quality Guideline Levels (WHO AQG Level) for each pollutant have been added to each chart but not the interim target levels.
- For ease of analysis, **HF1\_AQM\_11** has not been included in the calculation of monthly averages owing to some erroneous O<sub>3</sub> readings for a two-week period in December 2022. The device does however appear to currently be returning readings as expected before and after that week.
- In addition, outliers with a z-score greater than 3 have been removed from the analysis to handle erroneous data that had been calibrated using invalid temperature and humidity data.

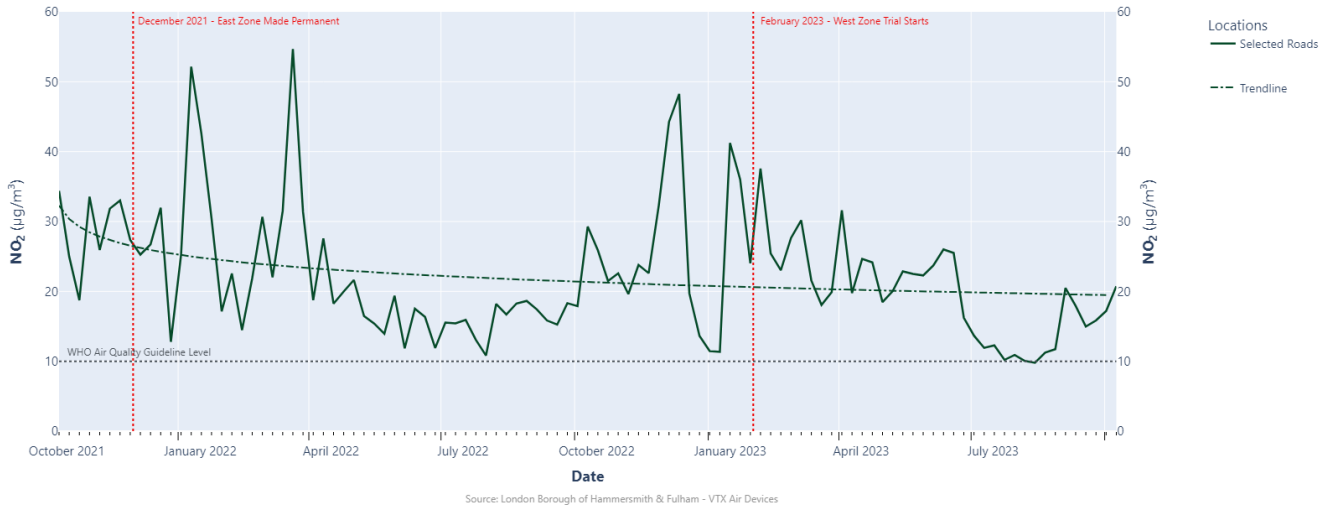
# Device Locations



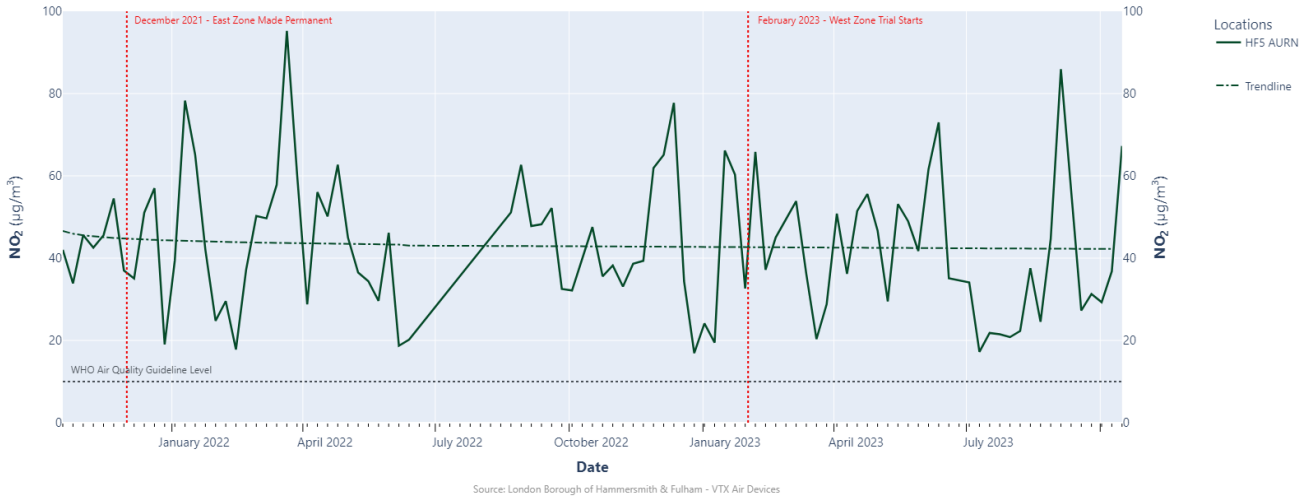
# Nitrogen Dioxide (NO<sub>2</sub>)



**South Fulham Clean Air Neighbourhood - Studdridge Street, Peterborough Road and Broomhouse Lane**  
 NO<sub>2</sub> - average concentration by month

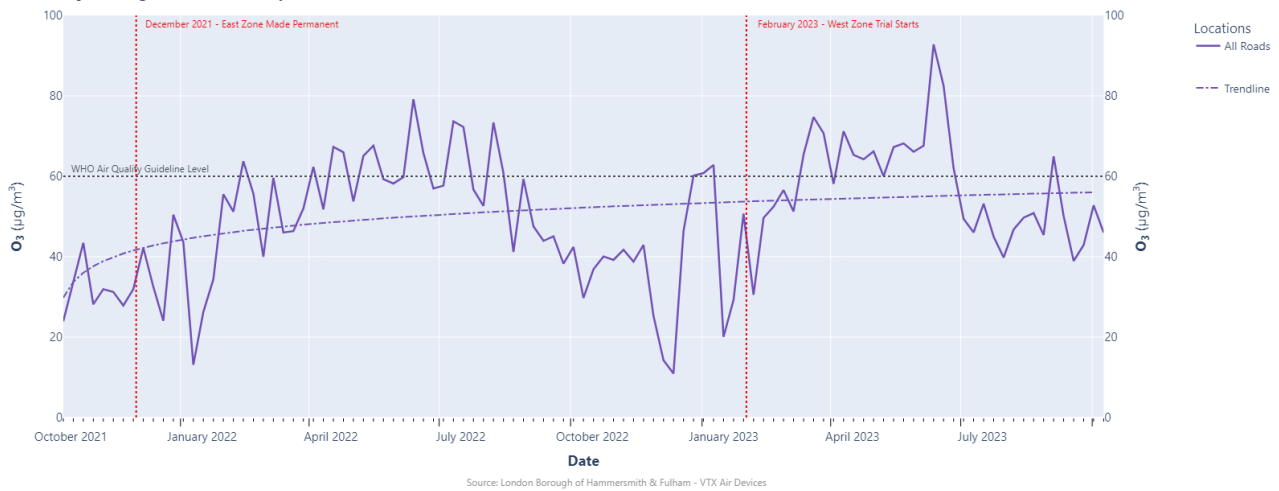


**South Fulham Clean Air Neighbourhood - HF5 AURN @ Hammersmith Gytratory**  
 NO<sub>2</sub> - average concentration by month

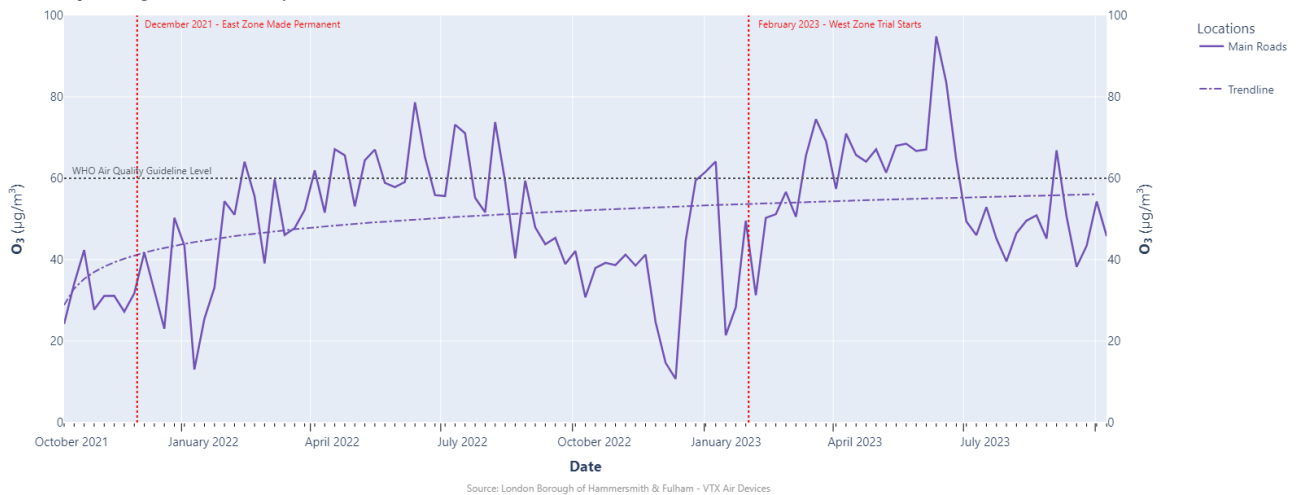


# Ozone (O<sub>3</sub>)

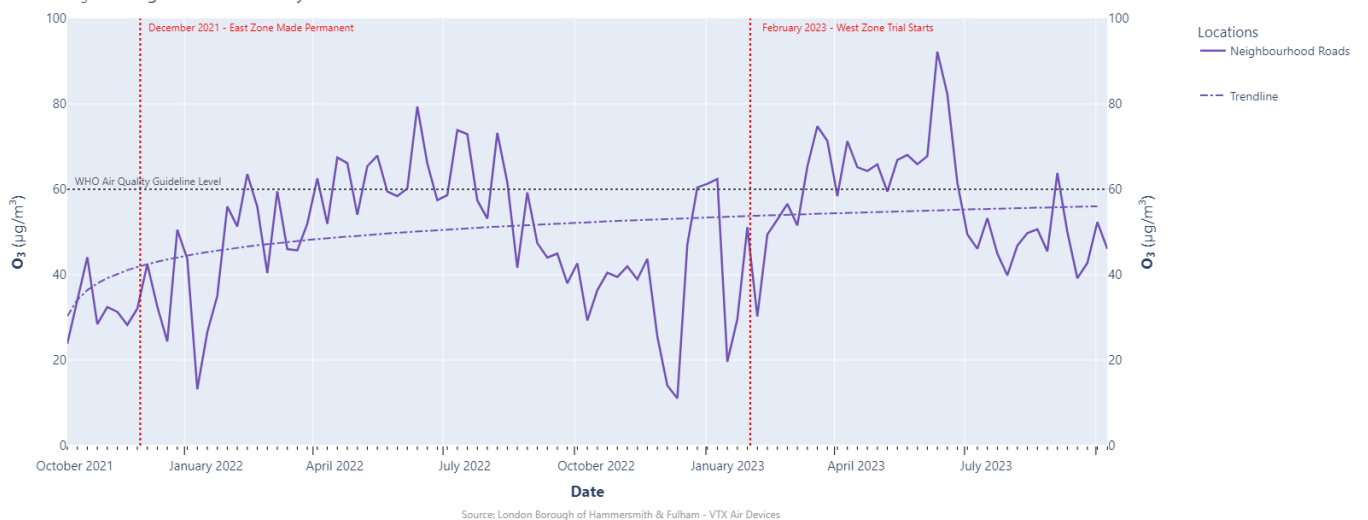
**South Fulham Clean Air Neighbourhood - All Roads**  
O<sub>3</sub> - average concentration by month



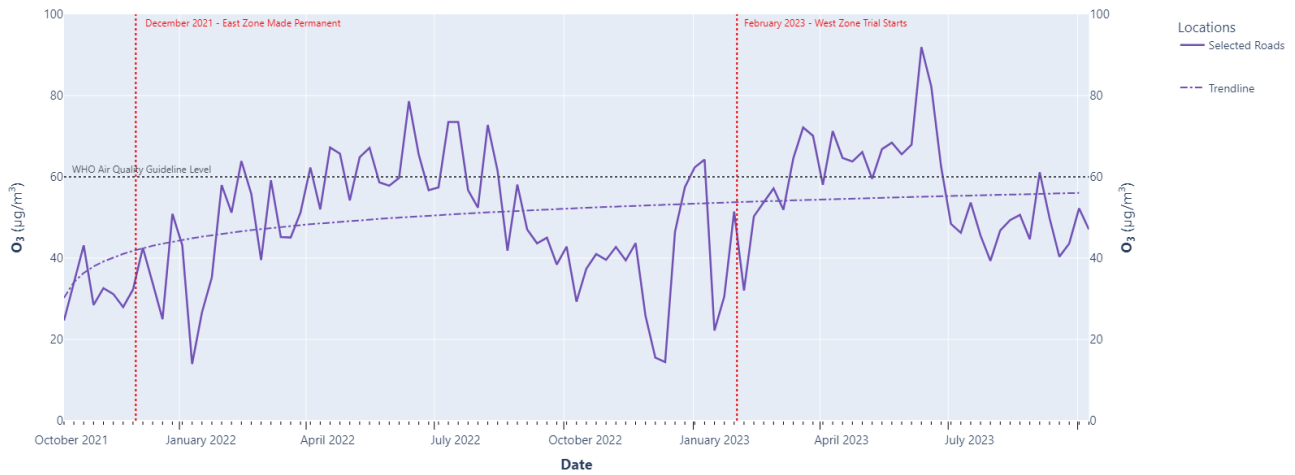
**South Fulham Clean Air Neighbourhood - Main Roads (Wandsworth Bridge Road & New King's Road)**  
O<sub>3</sub> - average concentration by month



**South Fulham Clean Air Neighbourhood - Neighbourhood Roads**  
O<sub>3</sub> - average concentration by month

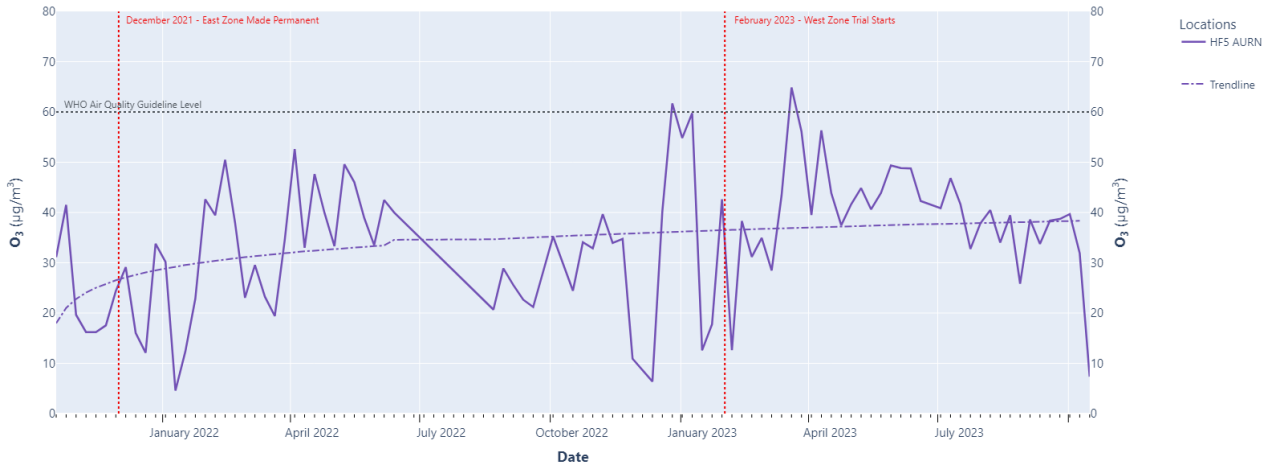


**South Fulham Clean Air Neighbourhood - Studdridge Street, Peterborough Road and Broomhouse Lane**  
 O<sub>3</sub> - average concentration by month



Source: London Borough of Hammersmith & Fulham - VTX Air Devices

**South Fulham Clean Air Neighbourhood - HF5 AURN @ Hammersmith Gytratory**  
 O<sub>3</sub> - average concentration by month

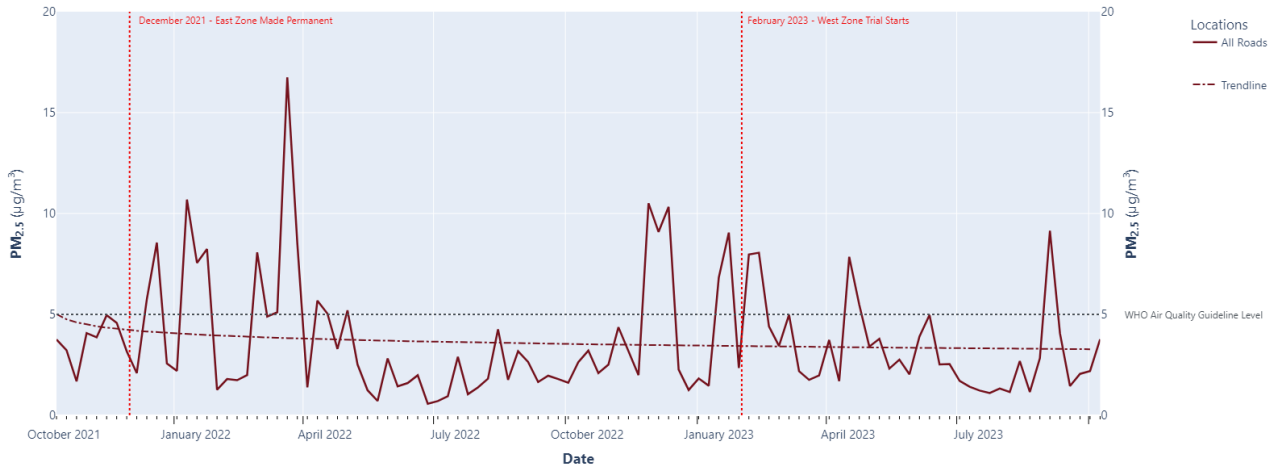


Source: London Borough of Hammersmith & Fulham - VTX Air Devices

# PM<sub>2.5</sub>

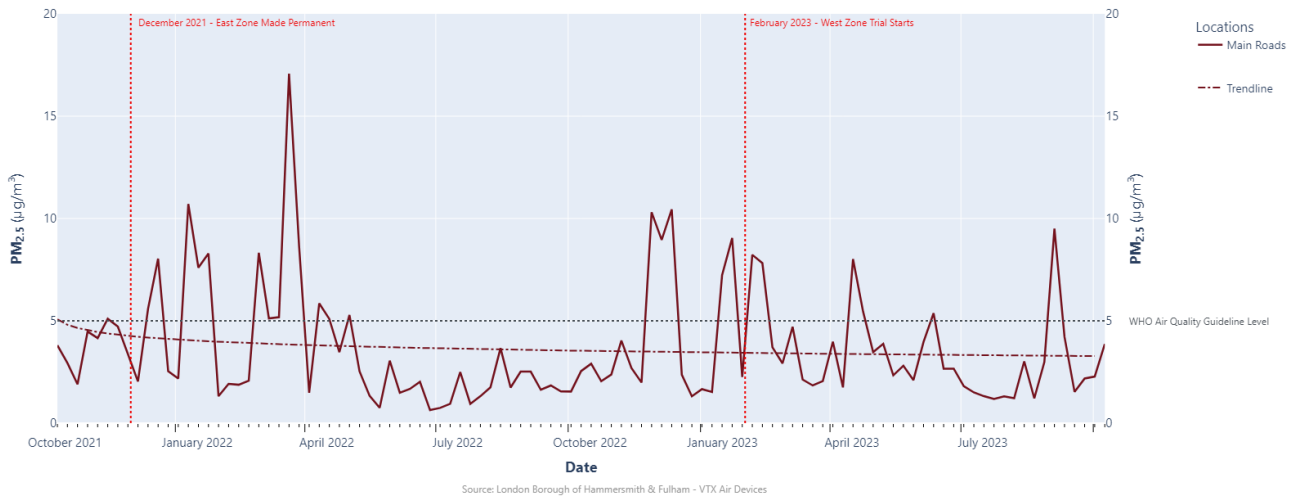
## South Fulham Clean Air Neighbourhood - All Roads

PM<sub>2.5</sub> - average concentration by month



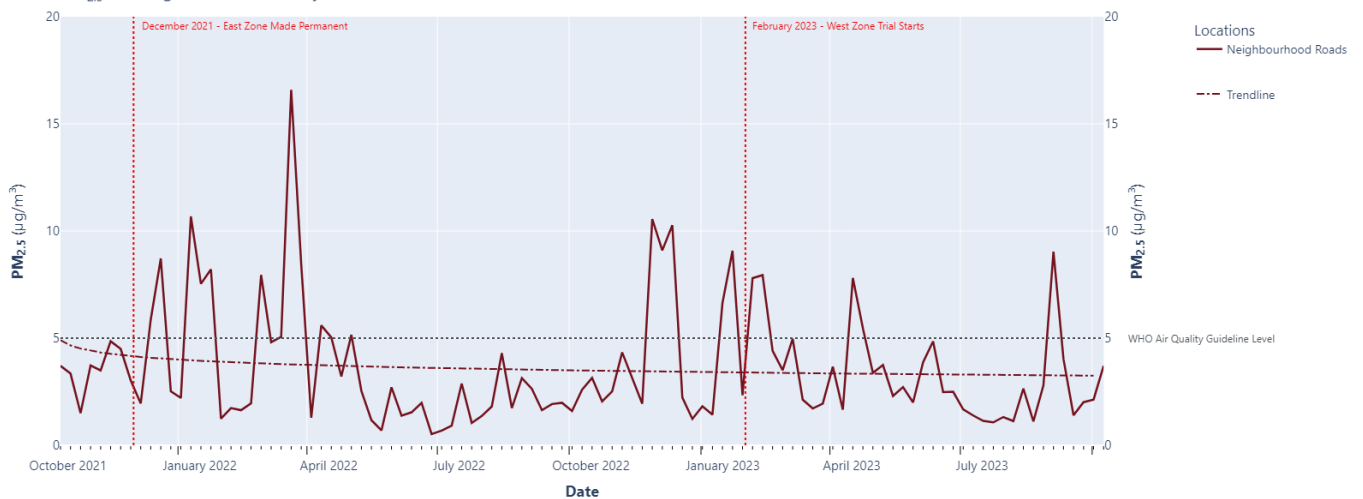
## South Fulham Clean Air Neighbourhood - Main Roads (Wandsworth Bridge Road & New King's Road)

PM<sub>2.5</sub> - average concentration by month



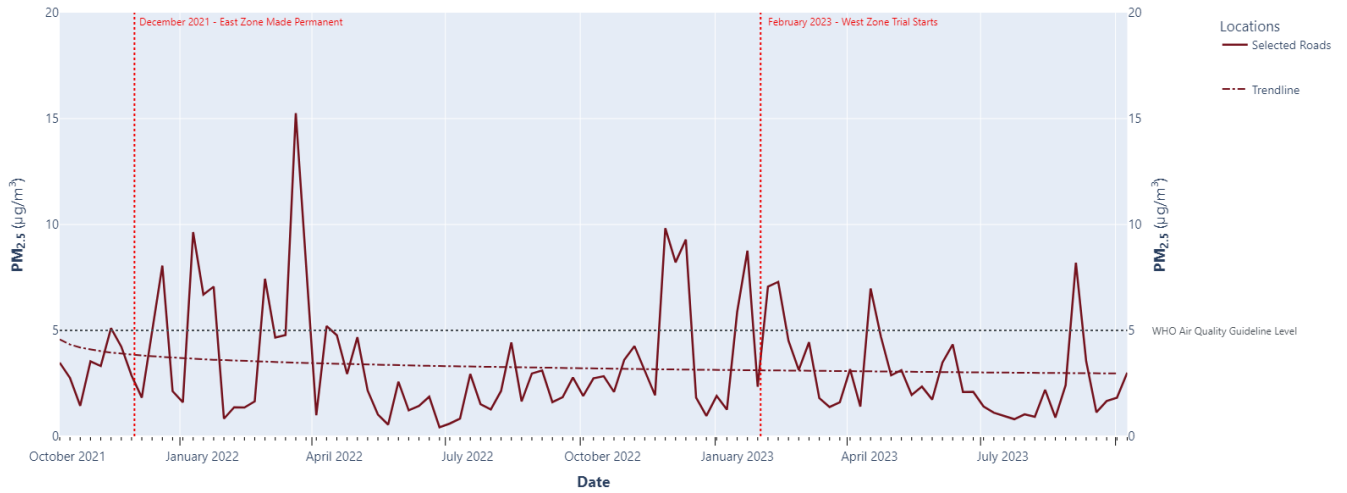
## South Fulham Clean Air Neighbourhood - Neighbourhood Roads

PM<sub>2.5</sub> - average concentration by month

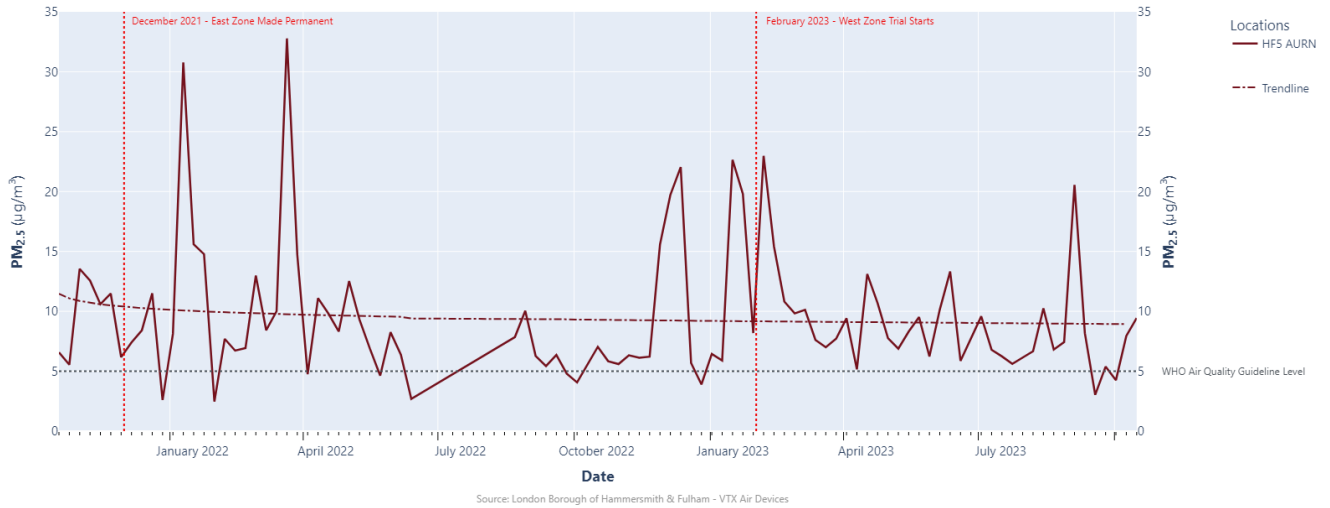




**South Fulham Clean Air Neighbourhood - Studdridge Street, Peterborough Road and Broomhouse Lane**  
 PM<sub>2.5</sub> - average concentration by month



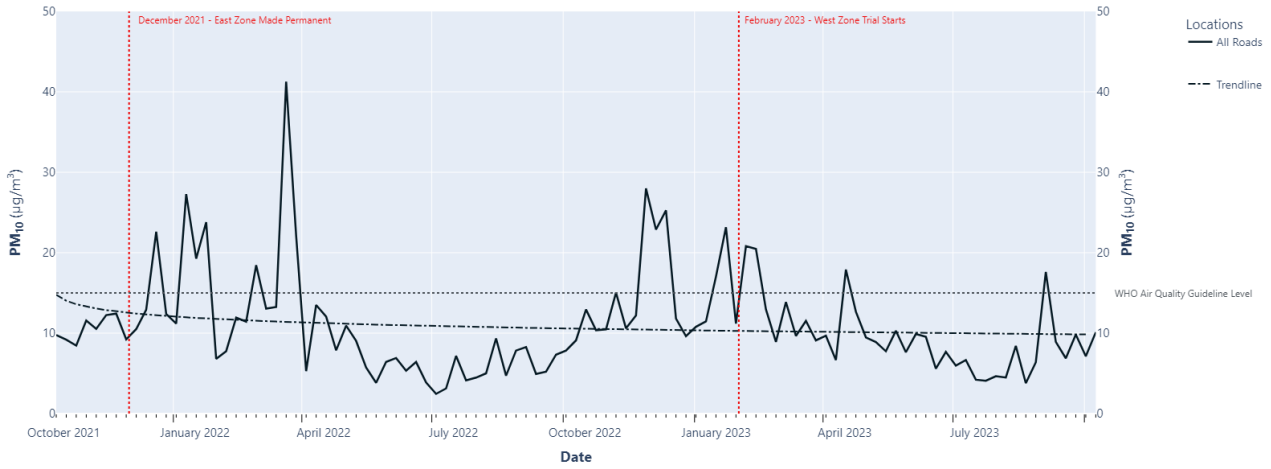
**South Fulham Clean Air Neighbourhood - HFS AURN @ Hammersmith Gyratory**  
 PM<sub>2.5</sub> - average concentration by month



# PM<sub>10</sub>

## South Fulham Clean Air Neighbourhood - All Roads

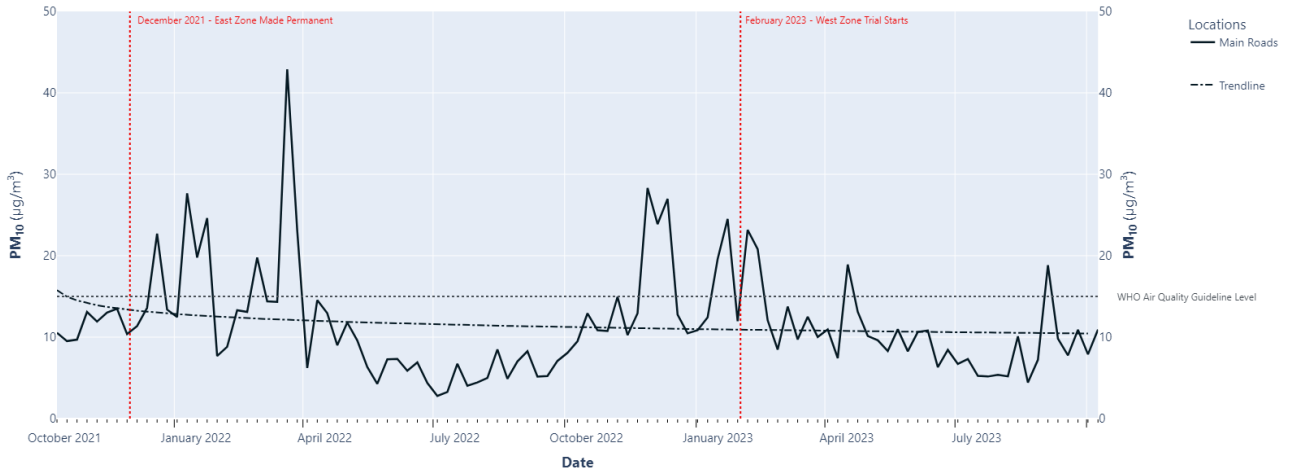
PM<sub>10</sub> - average concentration by month



Source: London Borough of Hammersmith & Fulham - VTX Air Devices

## South Fulham Clean Air Neighbourhood - Main Roads (Wandsworth Bridge Road & New King's Road)

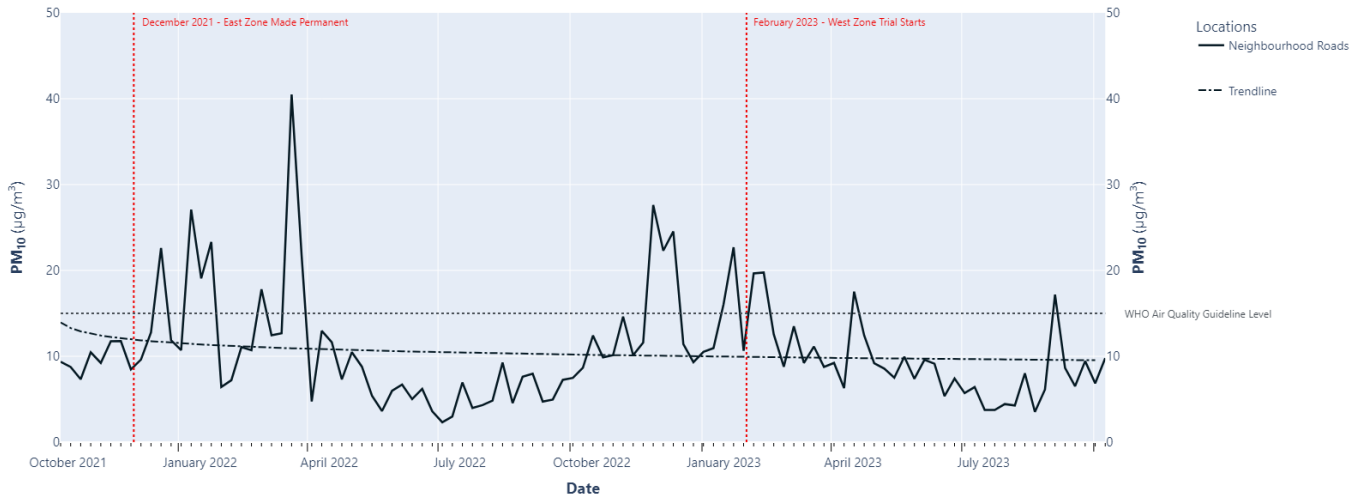
PM<sub>10</sub> - average concentration by month



Source: London Borough of Hammersmith & Fulham - VTX Air Devices

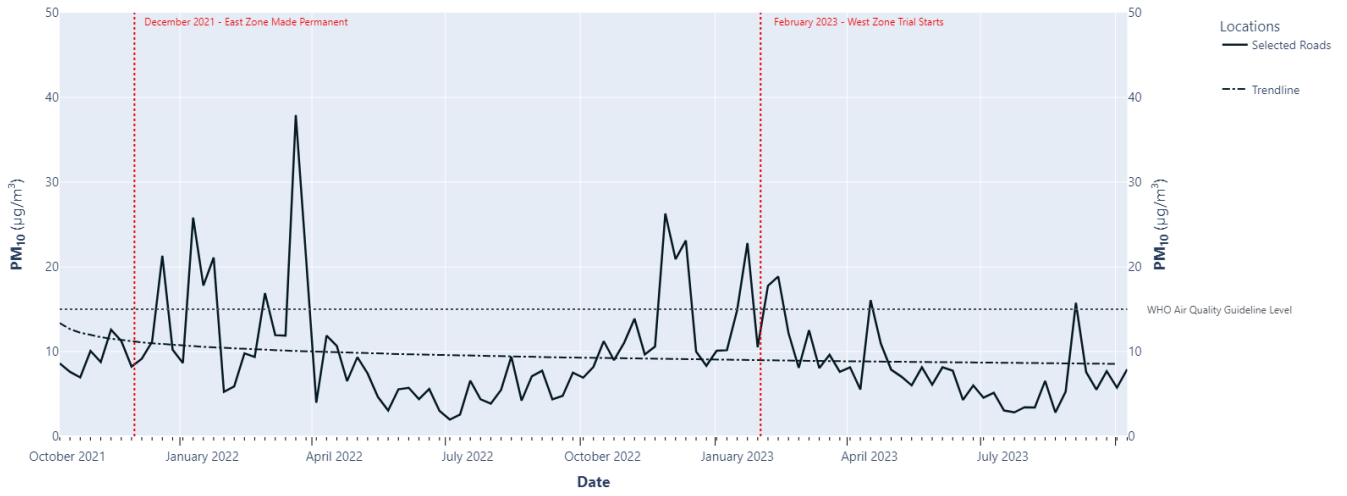
## South Fulham Clean Air Neighbourhood - Neighbourhood Roads

PM<sub>10</sub> - average concentration by month



Source: London Borough of Hammersmith & Fulham - VTX Air Devices

**South Fulham Clean Air Neighbourhood - Studdridge Street, Peterborough Road and Broomhouse Lane**  
 PM<sub>10</sub> - average concentration by month



**South Fulham Clean Air Neighbourhood - HF5 AURN @ Hammersmith Gyrotary**  
 PM<sub>10</sub> - average concentration by month

