



Love Lambeth Air - Air Quality Mapping in Lambeth

Lambeth Council commissioned Mapping for Change to help run a citizen science project on air quality.

The Love Lambeth Air project provided local people with the materials and support required to collect measurements for nitrogen dioxide (NO₂) across Lambeth. This was the first exercise of its kind and sought to create a more granular picture of air quality in areas not previously monitored.

More than 30 residents were consulted on specific air quality issues, the suspected sources of pollution and the areas they thought worst affected. This formed the basis for the site selection. A total of 34 locations across Lambeth borough were monitored for NO₂ levels. Diffusion tubes were changed monthly over a six month period. The data was then analysed, and the results were published on the Community Air Quality Map.

Below is a summary of the results and more details can be found online (see the right panel).

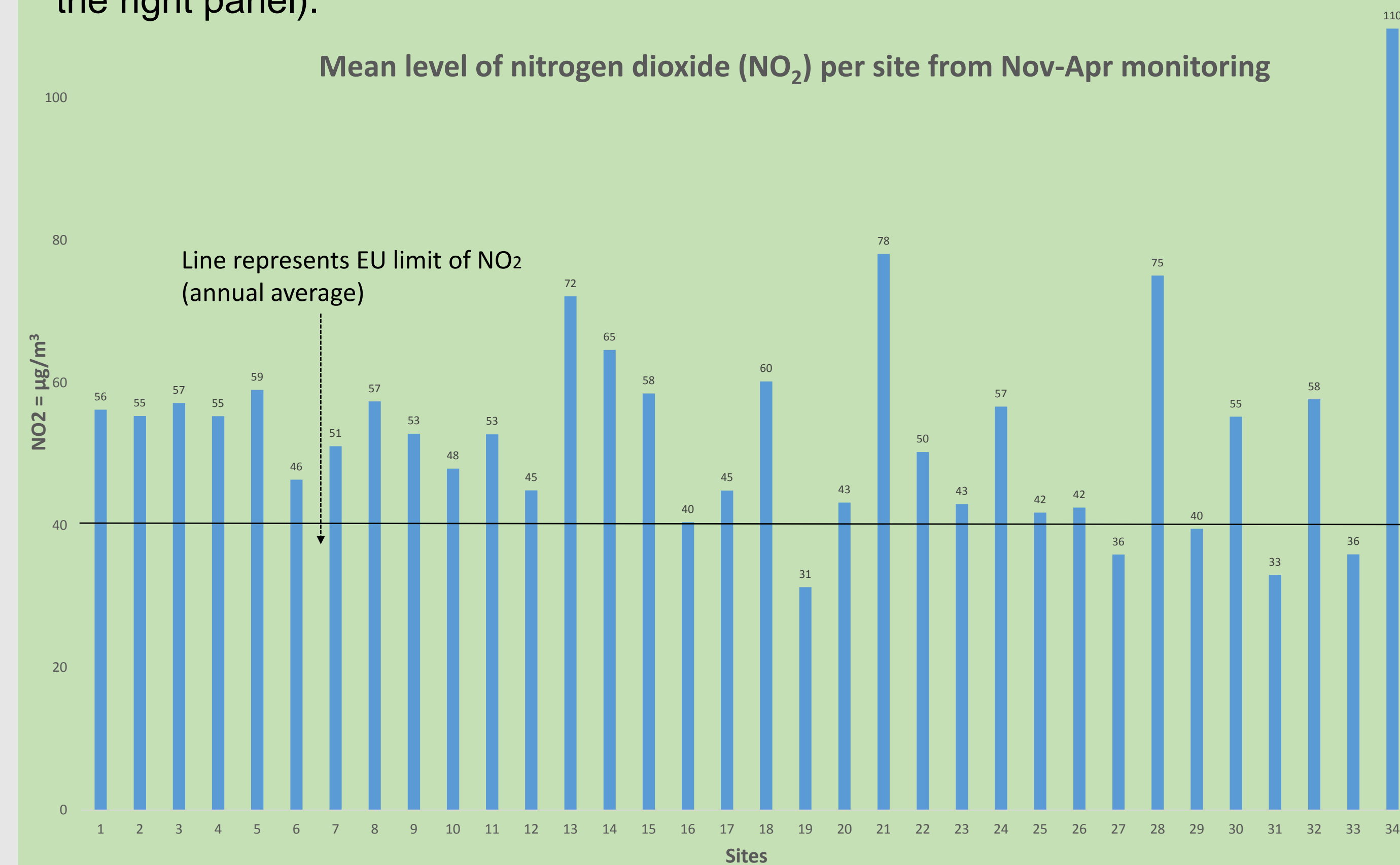


Fig. 1 – The graph uses data collected over six months. Some months diffusion tubes were missing from sites - no corrections have been made to account for this.

Residents perception of air quality in Lambeth at the start of the project

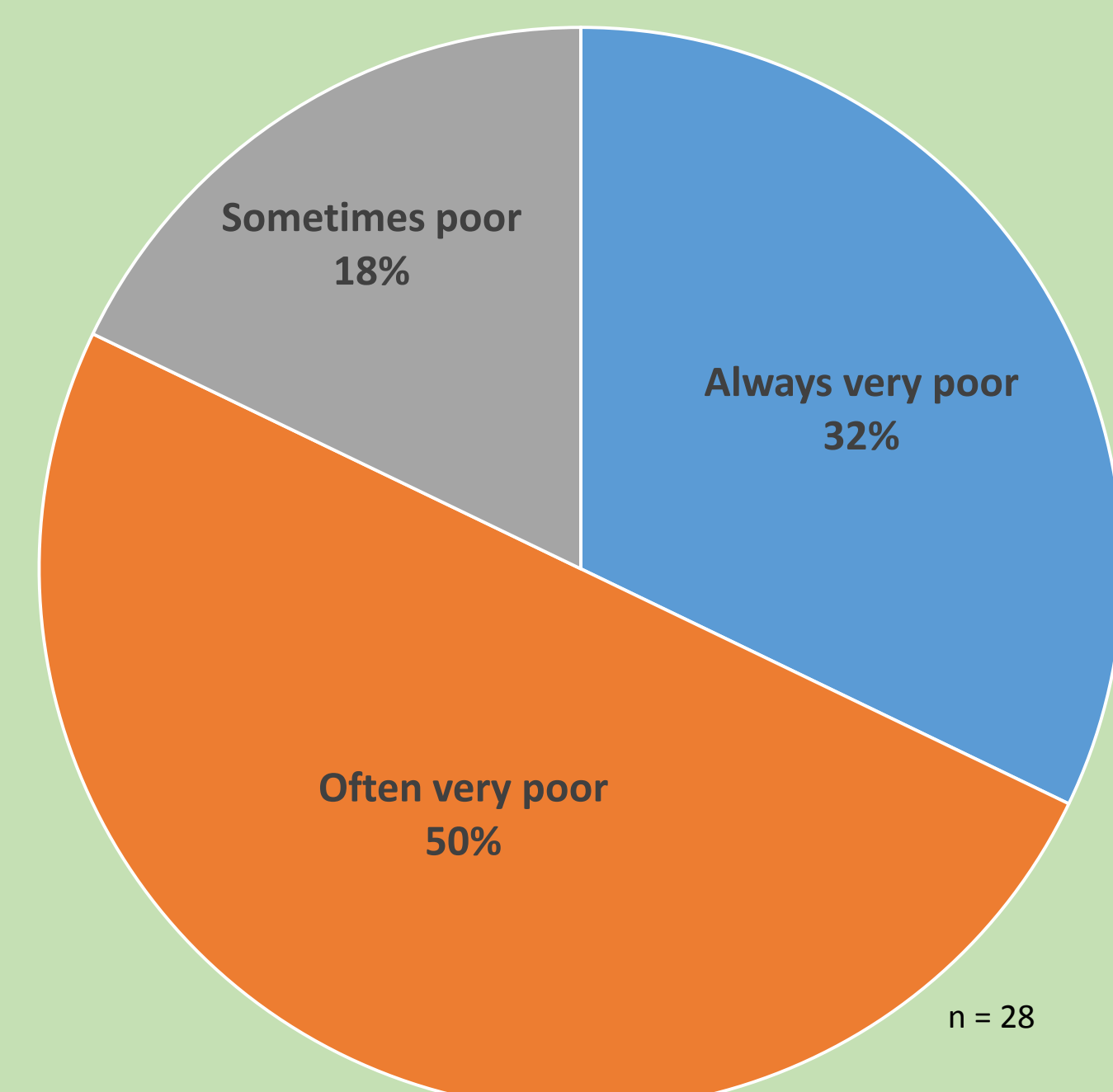


Fig. 2 – Perceptions expressed by residents in relation to the local air quality

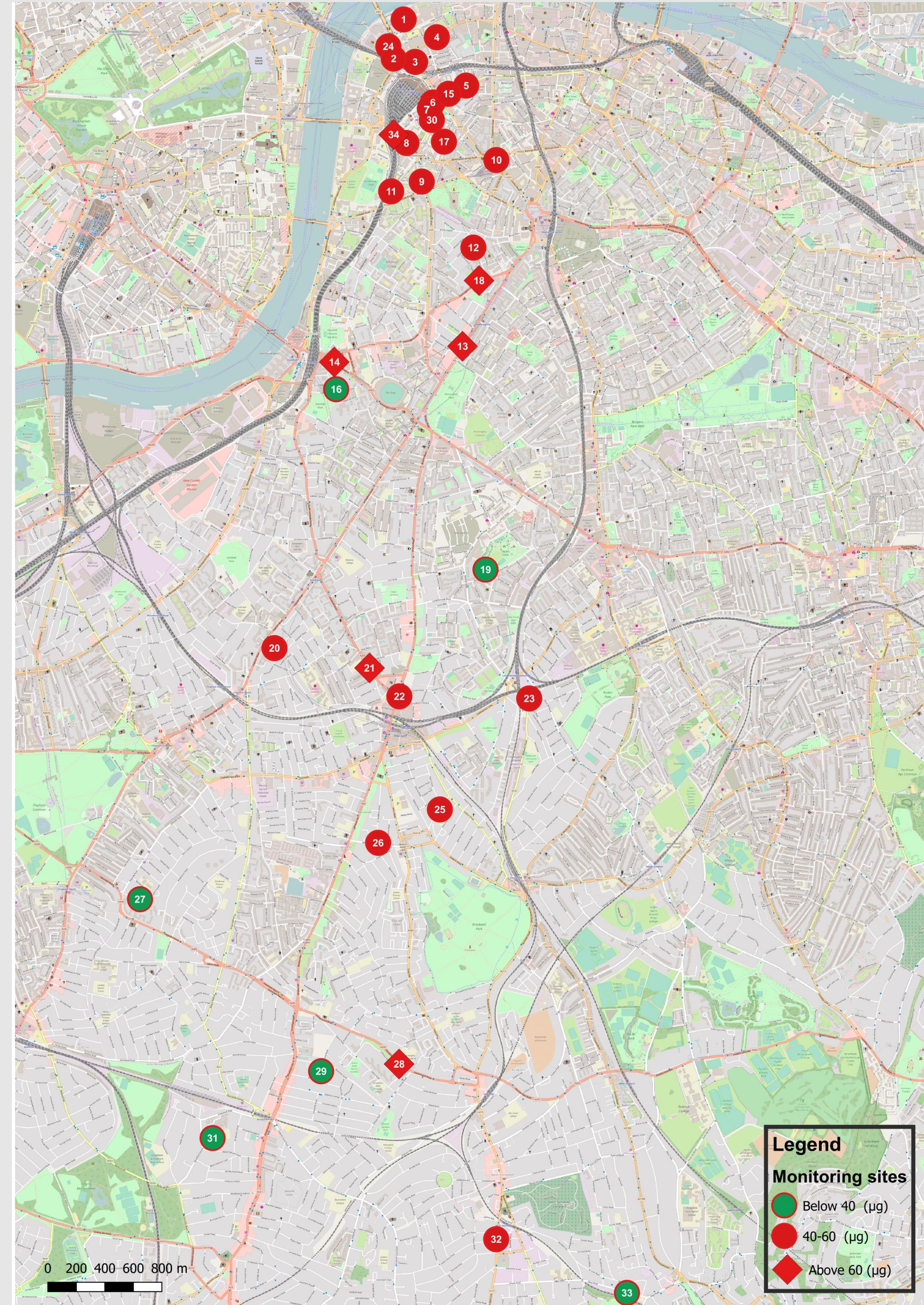


Fig. 3 – Map showing location of all 34 monitoring sites across Lambeth

Who is Mapping for Change?

Mapping for Change's seeks to empower communities through the use of mapping and the applications of geographical information. We work together with communities to help identify, understand and communicate local issues in order to create positive transformations in their environment.

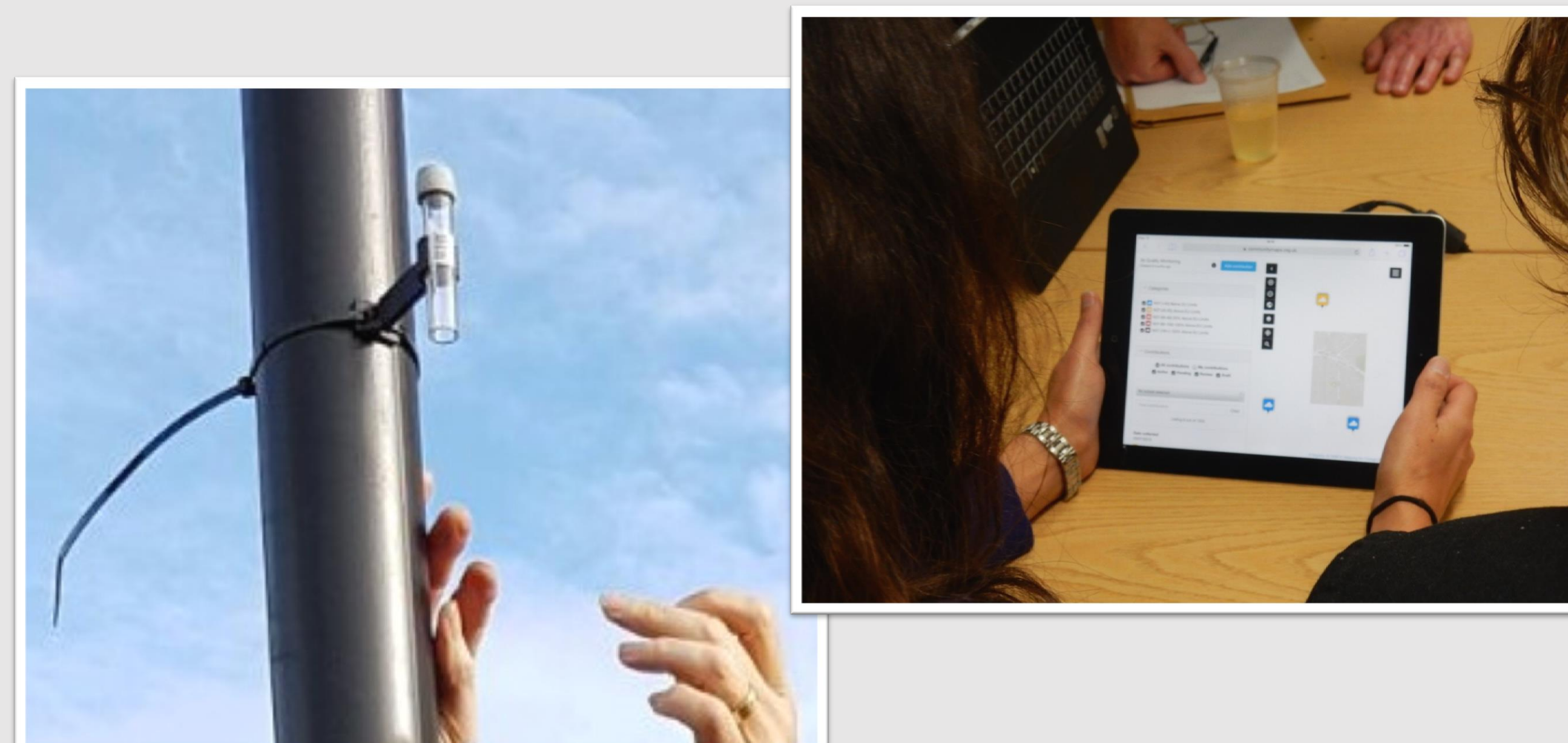


Fig. 4 – Monitoring activities

Putting the data online

The results obtained have been uploaded to the Air Quality Community Map. This map can be seen at <http://www.communitymaps.org.uk>

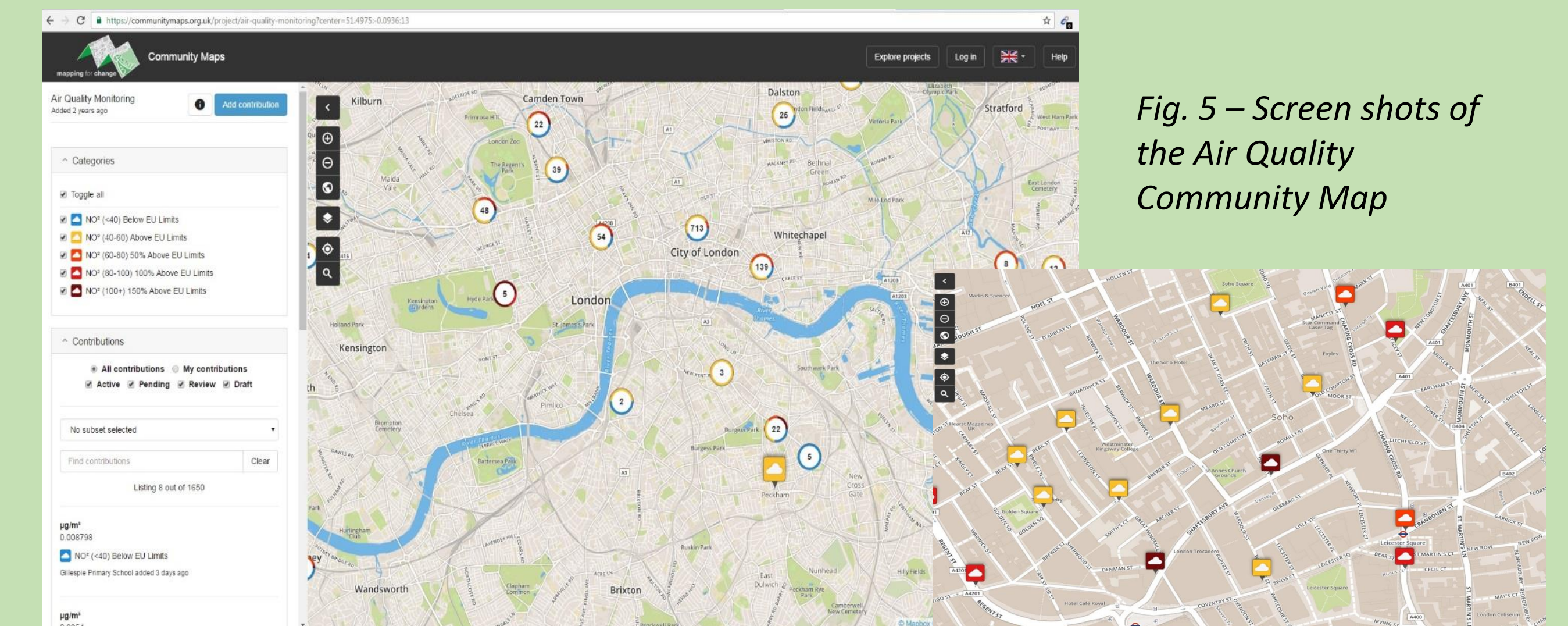


Fig. 5 – Screen shots of the Air Quality Community Map

Key findings from Lambeth

- Higher levels of pollution in the north of the borough in areas such as Waterloo
- Only 4/34 sites were within the EU legal limits (annual mean)
- One site located under Waterloo Bridge Road recorded 109 µg, exceeding the EU annual mean by more than 100%
- 85% of the sites show their highest reading in January 2017

What can you do next?

Communities have been monitoring air quality at over 2000 locations across London. The results have been shocking: 60% of locations have recorded measurements that exceed the EU annual limits for nitrogen dioxide. In 105 sites the levels recorded were more than double the legal limit.

Some communities have gone on to lobby in a bid to address the problem:

- After their monitoring efforts, the local community in Putney persuaded TfL to introduce hybrid and retro-fit buses sooner than planned.
- After a year of monitoring in the Barbican Estate, the local residents worked with City of London to use the results to feed into the Air Quality Strategy review and Low Emission Zone.



Fig. 6- Map showing the results and location of monitoring sites on the Barbican Estate