Geophysical Research Abstracts Vol. 20, EGU2018-53, 2018 EGU General Assembly 2018 © Author(s) 2017. CC Attribution 4.0 license.



## Public perceptions of flooding and pollution in Greater Manchester

Maria Lorono-Leturiondo (1), Paul O'Hare (1), Simon Cook (2), Stephen R. Hoon (1), and Sam Illingworth (1) (1) Manchester Metropolitan University, Manchester, United Kingdom (maria.lorono@stu.mmu.ac.uk), (2) School of Geography, University of Dundee, DD1 4HN, Scotland (UK)

In recent years, flooding and pollution have become a real threat for many major cities. The local administration in Greater Manchester, for instance, has highlighted the need to reduce floods when possible, and manage their impact when flooding is inevitable. It has also set the priority to reduce carbon emissions and to adopt low-carbon lifestyles.

The existing lack of awareness and engagement, as well as the discrepancies in understanding between experts and the public, have been explained with the "deficit model". This model has at its centre the argument that if the way in which 'non-experts' understand risk differs from that of the 'experts', this is due to public ignorance and an inability of the public to understand the science behind risk. The modern sociocultural approach to risk perception, which draws on anthropology, sociology, and geography, explains that information alone is not enough to increase public awareness, understanding or preparedness of the public, and that social, cultural and political factors are key determinants of how people understand, perceive and relate to risk. Similarly, many times the difference of perception is not due to a lack of information or capacity to comprehend scientific and technical issues, but due to other involved factors. Level of trust in a source, the technical language used by the experts, or previous experiences of flooding and pollution, are only some of the factors that influence perception and communication.

Following the aforementioned sociocultural approach, our study explores factors influencing perception in Greater Manchester, as these are locally engrained. Through a survey study involving 300 Greater Manchester residents and 50 experts, we explore public perception of environmental hazards and we compare it with that of the experts. Agreeing with what reports and experts have identified, flooding and pollution are perceived as the main environmental concerns by Greater Manchester residents. This study also looks at how the "non-experts" perceive the human contribution to these hazards, the degree of trust they place in different sources, information consumption habits, and how these hazards are perceived in relation to other non-environmental threats. We look at how perception changes across areas in Greater Manchester where flooding and pollution present different levels of threat. We also explore how other sociodemographic factors, such as age, influence perception.

Ultimately, our aim is threefold: first, to identify the many publics there are among Greater Manchester residents; second, to ascertain the extent to which "expert" and "non-expert" perception differs, and to explore the sociocultural factors behind any discrepancies; and last, to consider the implications this might have for communication practices.