

## Activities and Impacts

### **Present and Future Flood vulnerability, risk and disadvantage: A workshop to test theories between communities at risk and their levels of flood resilience.**

#### **Background**

The report, 'Present and future flood vulnerability, risk and disadvantage: A UK assessment' by Sayers and Partners for the Joseph Rowntree Foundation, highlights how floods interact with social vulnerability across the UK to create flood disadvantage, an issue which will be exacerbated by climate change. The report and its associated data can be found at <http://www.sayersandpartners.co.uk/flood-disadvantage.html>

The report highlights a series of recommendations for policymakers including:

- Adopt new indicators to highlight the risks faced by the most socially vulnerable (including a new Neighbourhood Flood Vulnerability Index (NFVI), a Social Flood Risk Index (SFRI) and a measure of Relative Economic Pain (REP).
- Use these new indicators to better target support for the most socially vulnerable in flood investment decisions.
- Ensure flood risk management policy actively supports inclusive growth.
- Better reflect the disproportionate long-term flood risks faced by vulnerable neighbourhoods in national and local planning policy.

#### **Purpose of the Pilot**

This pilot aimed to test the outputs of the 'Present and Future Flood vulnerability, risk and disadvantage' project to establish if they can be used in a practical way at a local scale to help target flood risk management interventions with disadvantaged communities. In doing so, it considered:

1. Does the output data from the Present and Future Flood vulnerability, risk and disadvantage' project make sense?
2. Is the methodology tested in the workshop a useful approach that can be replicated?

Pilots in Rochdale and Kent were selected to test these questions, as these correspond with areas identified in the report as suffering particular flood disadvantage – cities in economic decline, coastal areas and places where capital schemes are unlikely to meet cost:benefit criteria for flood risk management schemes.

#### **Activities**

At initiation, a planning process set out activities and milestones. This was undertaken by National Flood Forum staff through regular Skype meetings over the project period. Note that staff are based across the

country so that coordinated activity tends to be done virtually. Documents were created, shared and stored on a cloud based system.

The project plan in the application was followed with only minor adjustments:

1. Liaison with Sarah Lindley of the University of Manchester to access the datasets from the Sayers et al 2017 project; July to December. The datasets were made available in Excel format.
2. Discussions with Rochdale and Kent partners to select the most suitable areas and approaches for the pilot; June to August.
3. The preparation of a project brief to use to work with partners and stakeholders; August and September.
4. Manipulation of the Sayers et al 2017 data to convert it from Excel to spatial maps by joining it with Ordnance Survey maps in the open source mapping software 'QGIS'; July to October.
5. Selection of the most appropriate datasets to use in each workshop.
6. Selection of additional datasets from the pilot areas to provide additional insights.
7. Design and planning of the workshops; August to October
8. Work with stakeholders to encourage participation and to bring in different sectors; August to October.
9. Half day workshops in Kent on 16<sup>th</sup> October and Rochdale on 26<sup>th</sup> October.
10. Evaluation of the workshops and the development of recommendations; November and December.
11. Report and case study writing, leading to 7 recommendations; November and December.
12. Uploading of reports to the NFF website and dissemination through the NFF bulletin; January 2018.
13. Uploading of the case study on to Climate Just website; January 2018.

## Conclusions

1. The methodology developed for this project was successful in identifying flood disadvantage and in particular the fine grained detail linked to the causes of the disadvantage.
2. The workshop approach outlined in this report brought practitioners together from different sectors to discuss flood disadvantage. However, some issues identified were sector specific. For example, social renting, caravan sites and insurance. The workshop methodology used in this project could be used to identify and start to address such sector specific issues in relation to flood disadvantage.
3. The Isle of Sheppey Pilot demonstrated that vulnerability and flood disadvantage existed in the area and that there were a lot of small scale projects needed that would potentially never get funding. The pilot approach could therefore be used to identify where need exists in areas such as this and to help target interventions, such as supporting the development of flood action groups.
4. The methodology outlined in this report demonstrated that the approach of combining data with local knowledge and skills provides a much more informed discussion about flood disadvantage than using data alone.

5. The scale of data presented in the Sayers et al (2017) report was useful as part of a scoping exercise, helping to generate discussions on a range of flood disadvantage issues. However, it was not sufficiently detailed to base decisions on. It is recommended that additional finer scale data should be included to help inform discussions, including the ability to explore how sub-group characteristics, or the relationships between variables, differ between localities.
6. Some of the data presented in the Sayers et al (2017) report was outdated due to its nature and origin. Particular datasets were found to be misleading and not a true representation of reality, because changes had occurred since the data was collected, therefore representatives found it difficult to use the information. It is recommended that the data should be used in conjunction with other current sources of data and local knowledge held at the local level.
7. The workshop approach brought practitioners together from different sectors to discuss flood disadvantage. This was key in furthering the discussion and identifying socio-economic drivers for flood disadvantage at a local scale. However, it is recommended that this methodology is developed further to increase the participation of local representatives from non-governmental organisations.

## Impacts

The pilot supported the contention in the Sayers et al report 2017, that areas such as Rochdale and the Isle of Sheppey do have flood disadvantage. This is well recognised in Rochdale with a series of flood risk management and other programmes in place. In the Isle of Sheppey the cost:benefit calculations are unlikely to make this a priority for flood risk management activities.

The pilot has led to a number of impacts and potential impacts:

1. Insurance issues discussed in the Rochdale workshop has led to a potential collaboration between Rochdale MBC and Flood Re to target insurance uptake.
2. The approach and lessons learned from the pilot were input in to the UK conference of the EU Interreg FRAMES, Flood Resilient Areas by Multilayer Safety Approach on 8<sup>th</sup> November. This generated considerable interest from delegates and is likely to feature further.
3. Dissemination of the results of the pilot took place through a variety of routes, including:
  - a. Presentation at Sustainability West Midlands Climate Just conference on 4<sup>th</sup> January 2018
  - b. A presentation that included the work of the pilot at the Anglian Lead Local Flood Authorities meeting on 7<sup>th</sup> November.
  - c. Dissemination through the National Flood Forum bulletin.
  - d. Loading the outputs of the pilot on to the National Flood Forum website.

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