

FLOODING SCRUTINY PANEL –16TH APRIL 2024

Report by the Head of Contracts (Leisure, Waste and Environment)

ITEM 8 PREVENTION AND RESPONSE / RECOVERY

Purpose of Report

To update the panel following the last meeting in accordance with the recommendation below

“The Head of Contracts; Leisure, Waste and Environment to prepare a report on the differences between prevention and response / recovery for consideration at the Panel’s meeting to be held on 16th April 2024;”

Prevention

Find below 10 examples of flood prevention measures which could/have been introduced in some locations.

1. Introduce better flood warning systems

Improve flood warning systems giving people more time to act during flooding, potentially saving lives. Giving advance warning and pre-planning can significantly reduce the impact from flooding.

2. Modify homes and businesses to help them withstand floods

According to many experts, the focus should be on “flood resilience” rather than defence schemes. Concreting floors and replacing materials such as MDF and plasterboard with more robust alternatives. Waterproofing homes and businesses and moving electric sockets higher up the walls to increase resilience.

3. Construct buildings above flood levels

Conventional defences could be supplemented with more innovative methods to lower the risk of future disasters.

4. Tackle climate change

Climate change has contributed to a rise in extreme weather events.

5. Increase spending on flood defences

6. Protect wetlands and introduce plant trees strategically

The creation of more wetlands – which can act as sponges, soaking up moisture – and wooded areas can slow down waters when rivers overflow. These areas are often destroyed to make room for agriculture and development.

7. Restore rivers to their natural courses

Many river channels have been historically straightened to improve navigability. Re-meandering straightened rivers by introducing their bends once more increases their length and can delay the flood flow and reduce the impact of the flooding downstream.

8. Introduce water storage areas

Following the severe flooding of 2009 a £5.6 million flood alleviation scheme was established in Thacka Beck, on the outskirts of Penrith, Cumbria. More than 675 metres of culverts underneath the streets of Penrith were replaced and a 76,000m³ flood storage reservoir – the equivalent of 30 Olympic sized swimming pools – was constructed upstream to hold back flood water. The risk of flooding from the beck was reduced from a 20 per cent chance in any given year to a one per cent chance, according to Cumbria Wildlife Trust.

9. Improve soil conditions

Inappropriate soil management, machinery and animal hooves can cause soil to become compacted so that instead of absorbing moisture, holding it and slowly letting it go, water runs off it immediately. Well drained soil can absorb huge quantities of rainwater, preventing it from running into rivers.

10. Put up more flood barriers

Temporary barriers can also be added to permanent flood defences, such as raised embankments, increasing the level of protection.

Preparation

It may not be possible to prevent flooding, but it is possible to prepare for and manage the consequences.

Many local authorities in conjunction with Local Resilience Forums have developed specific flood management plans. These provide an overview of the risks, roles and responsibilities, and potential actions. They facilitate a coordinated response to a flood, which will help protect life and wellbeing and to manage property and environmental damage.

A flood emergency plan will typically include:

- aim and objectives
- overview of flooding and specific risks
- information sources
- roles and responsibilities
- response and implementation, covering locations at risk, triggers, timescales, resources and equipment and places for safe evacuation
- recovery
- communication process
- contact lists of organisations, contractors and others.

- Some plans also focus on communication, liaison with other agencies and training through running simulations.

It is also good practice to engage with local communities with regards to flood insurance. Ensuring that local communities have adequate flood insurance is imperative to ensure that property and possessions are covered, and that the recovery process is as painless as possible.

On the Ground Management

The Civil Contingencies Act 2004 defines two categories of responders, each with different duties. Category 1 responders are the main organisations involved in most emergencies at the local level. They are subject to the full set of civil protection duties. Category 1 responders are known as core responders and include the following organisation:

- Local authorities
- Police forces
- Fire services.
- Ambulance services

The main response to flooding on the ground will be for category 1 responders to act together. The responses of the different organisations should be set out in an emergency plan. These will primarily relate to the risk, triggers and the roles and responsibilities identified.

At a point, which they will decide, the police commands will hand over responsibility to the local authority, which is responsible for aftermath and recovery.

Recovery

The recovery and clean-up period often involves more effort than the time during the flooding itself. Certainly, recovery times are likely to be much longer than the flood duration. There will be a number of challenges for the local authority to deal with, including:

- inspection of and cleaning road surfaces to ensure they are safe before they are reopened.
- advising residents on reoccupying their properties
- offering advice about drying equipment and drying out
- dealing with accommodation problems
- supporting individual and general community recovery.
- temporary or short-term housing

Review and future preparation

LRFs (comprising relevant Category 1 responders) to a flooding emergency, should take the opportunity to review procedures following an event. This review process, carried out in conjunction with other stakeholders, should be used to:

- review processes and procedures
- inform decision making
- inform future preparation

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