# Sandbag Policy

A policy for the distribution of sandbags in Carmarthenshire during flooding incidents.

# September 2022



#### 1. Practical steps for property owners

- 1.1 When your home or business is at risk of flooding there are a number of steps you should take to protect your property. Understanding your flood risk is paramount, and information is available from this Authority and Natural Resources Wales.
- 1.2 Natural Resources Wales have produced flood maps that highlight areas at risk of tidal flooding, river flooding and/or surface water flooding. This information can be viewed at <u>NRW flood maps</u>. In addition, a flood warning service is provided by NRW. This is an automated alert, sent via phone or text, when river flooding is predicted. For more information on this service see <u>NRW flood warning and alerts</u>.
- 1.3 To further help homeowners and businesses assess their flood risk, we have developed a Flood Risk Management Plan (FRMP) for Carmarthenshire that highlights the risk from surface water and ordinary watercourses. This can be viewed at <u>FRMP</u> <u>part-1</u>. In addition, we have identified 50 high-risk areas which are at greatest risk of flooding. These areas are called 'policy unit areas' and can be viewed at <u>FRMP part-2</u>.
- 1.4 Owners of properties and businesses that have a history of flooding or are identified as at risk of flooding are therefore encouraged to take ownership of their flood risk and manage that accordingly. You will need to identify points of water entry to your home and/or business. In the event of a flooding incident, you will then be aware of the need to block doorways, drains, vents and other openings against water ingress and redirect the flow of water where you can. These properties and businesses are recommended to install flood proofing and/or property level protection measures (PLP), sign up for NRW flood warnings and alerts, and develop a flood mitigation plan so they have a practical strategy in place for when flooding events occur.
- 1.5 Information on flood proofing your property or business, PLP methods and preparing for flooding can be found at the following links
  - The Homeowners Guide to Property Flood Resilience and;
  - <u>A Business Guide to Flood Resilience</u>

Both contain a useful summary of suppliers and home flood defence products currently available. Local suppliers include Floodgate Ltd in Carmarthen, MM Engineering in Port Talbot, Screwfix in Carmarthen and Swansea, and B&Q in Carmarthen, Llanelli and Swansea.

## 2. Sandbags

- 2.1 Sandbags have been used over many years as a means of blocking entry points and redirecting low flood flows away from properties and businesses. They are best used as an emergency measure as they can keep low volumes of floodwater out of properties for short periods and redirect shallow flows. Therefore, sandbags are of limited use as a long-term effective means of flood preparedness, mitigation and prevention, hence their use in emergency situations only.
- 2.2 Although sandbags can be useful in an emergency, they have limited function during flood events, their effectiveness against deeper flood water and standing water is debatable and recent studies have highlighted their limitations. They will only keep out small volumes of water, are heavy and awkward to use, leak water, accumulate pollutants, degrade over time and are difficult to dispose of. There are many articles and studies online supporting this position, some of this information is referenced below:
  - The advantages of sandbag alternatives UK Flood Defence Alliance
  - <u>Comparing sandbags and plastic flood barriers (www.safesitefacilities.co.uk)</u>
  - Laboratory Testing and Evaluation of Expedient Flood-Fighting Barriers, (nrc.gov)
- 2.3 From a property and business owner perspective, installing flood proofing measures, property level protection and having a flood plan is in place are the most effective ways of reducing the damage from flooding. In the absence of such measures, as a short-term temporary solution only, owners of properties and businesses at risk are encouraged to keep, where possible, their own stock of empty sandbags, or alternatives, together with sufficient stocks of sand to fill the bags at times of potential flooding. Sandbags and sand can be readily provided by most DIY shops and hardware stores and sandbag alternatives are available from a number of local and online providers.

2.4 The Council continue to use sandbags where they can be effective on a temporary emergency basis during flood events to redirect shallow water primarily in connection with or relating to its own highway and infrastructure assets.

#### 3. Alternatives to Sandbags

3.1 Although traditional sandbags can provide a useful short term function during flood events, they are relatively ineffective compared to modern alternatives that include:

Flood Barriers are designed to block the small gaps under and around front and back doors.



These can be purchased and retrofitted to almost any existing property door. When slotted in place they create a waterproof seal, which can be very effective if the flood water does not rise too high.

<u>Flood Doors/Windows</u> can be installed instead of standard wooden or PVC external doors and windows. These operate like normal doors/windows and can protect properties from floodwater up to approx. a metre in depth.



<u>Gel-filled Bags</u> – these resemble traditional sandbags but are filled with gel. Once laid in position each bag will absorb approx. 20 litres of water and inflate, forming a barrier against flood water. They are easy to store, handle and position, as they are light and easy to stack when dry. Some gel-filled bags can be reused; others can be easily split and the

environmentally friendly materials safely disposed into the soil\*.



\*-refer to manufacturer's guidance on reuse and disposal.

<u>Anti-Flood Air Bricks</u> are retro-fitted to replace existing air-bricks. Most of the time they function as normal air-bricks, but when they become wet a water tight seal is produced, and they become effectively blocked, preventing water passing into properties via this route.



<u>Covers/Barriers for Appliance Vents or Air Bricks</u> many designs are available which are inexpensive, unobtrusive, and will block flood water entering properties through these entry points.



## 4. Our response to flooding incidents

- 4.1 The Authority's primary response will be to flooding incidents originating from the highway or other Council owned assets, and non-main river sources. (Main Rivers are governed by Natural Resources Wales.) This response may include deployment of sandbag alternatives or sandbags on the ground. In the event of severe weather and where there is a genuine risk of flooding we will manage sandbag supplies or alternatives at key predetermined identified strategic locations/sites.
- 4.2 At no time will business/property owners or members of the public be allowed to collect sandbags directly from any of the council depots. This is for safety reasons.
- 4.3 Approximately 40 sandbags (1 pallets) or alternatives will be deposited at strategic sites around the county immediately preceding a storm, and CCC businesses and residents can collect as required. Subsequent disposal of used sandbags will be the responsibility of the home or business owner. Pre-deliveries of sandbags to individual properties and businesses cannot be accommodated.
- 4.4 Our Press Officer will issue a statement to the press outlining the sandbag policy and the strategic locations at the beginning of Autumn of each year. The strategic sandbag deposit locations will be reviewed annually. Additional sites may be added or existing sites removed at any time based on specific risk or actions, as agreed by the Director of Environment.
- 4.5 It should be noted that the sandbag provision at the identified or designated sandbag drop-off sites consist of a limited supply for those properties in the vicinity of the identified area as an additional resource to any arrangements that individual property owners should make. The Council response in a storm event is prioritised according to risk. Protection of life is paramount, along with safeguarding our key assets and infrastructure in the process of discharging our statutory responsibilities. These aspects of dealing with emergencies must be the Council's priority. Sandbag allocation to the strategic locations will be based on this prioritisation. Therefore, property owners should not rely on this limited provision, but instead prepare their own defences.

4.6 The Council should not be wholly relied upon to provide help and assistance during a flooding incident. However, there will be occasions where flooding is unexpected, or affects new areas, and the Council will help as far as its resources allow. Any assistance that it provides will be prioritised to protect and save lives, reduce injuries and protect strategic council assets and property.

## 5. How to report a Flood Incident

- 5.1 All flooding incidents should be reported. Accurate information is needed to ensure that we and our partner organisations (Natural Resources Wales, Dwr Cymru Welsh Water etc.) understand who is being flooded and the severity of that flooding. Non-reporting of flooding incidents can result in us being unaware of issues and as such limits our understanding of flood risk. This in turn prevents us from having the necessary information to help manage flood risk in future, including risks managed by partner organisations.
- 5.2 If the flooding is coming from the road, a small tributary or stream, is surface or ground water, or you are unsure of where the water is coming from, it can be reported online at <u>CCC report flooding</u>. If this is not possible then you can call us on 01267 234567. In an emergency, outside of office hours (Monday to Friday 08:30 18:00), please call Delta Wellbeing on 0300 333 2222. The Council's response will depend on the prevailing circumstances, its corresponding priorities at the time and the resource available.
- 5.3 If the flood is being caused by a main river or the sea you can call Natural Resources Wales on 03000 65 3000.
- 5.4 If you have a water mains leak or flooding from a sewer you can call Dwr Cymru Welsh Water on 0800 052 0130.