

## **Climate Change, Environment, and Infrastructure Committee | Inquiry on the impact of Storms Bert and Darragh**

### **Carmarthenshire County Council Response - 31<sup>st</sup> January 2025**

#### ***Q1. Whether forecasting, warning, and alert systems were adequate.***

##### **Storm Bert –**

- We picked up the weather risk internally early Wednesday using our own weather monitoring systems. Later Wednesday and into Thursday, the Met office was clarifying the details that it was going to be a storm event. The weather warning matrix detailed a low likelihood of medium impacts, but the probability and the level of impact were in it seems understated.
- Friday the Met Office warning was very much the same, but they were stating that all of Wales was in for some very heavy rain.
- The Flood forecast centre, called it a little better stating low likelihood of significant impacts.
- Upon reflection, one could argue that the actual intensity of the actual storm was inaccurately predicted for Carmarthenshire and consequently the standard mechanisms of warning and informing were not implemented on a Dyfed Powys Local Resilience Forum (DPLRF) area basis.
- However, based on a yellow storm warning, Carmarthenshire County Council increased its out of hours highways and flood response resources to reflect a yellow graded storm event. It is accepted that accurate tracking of a particular storm's path and duration is difficult and no single agency can provide a full overview of the whole situation.
- Internal council planning and resourcing meetings (focussed on highways and flood response aspects of work) were set up as we would in any yellow storm warning, but based on the forecast there was no obvious need for a DPLRF initiated Pre-Emergency Assessment Teleconference (PEAT). We would not expect to do set up such for yellow warnings, as these are now quite frequent occurrences. For the same reasons, no LRF SCG/TCGs were called.
- Clearly, not all yellow warnings are the same and there will be different levels of impacts as indicated in the matrix used for probability and impact.

**Storm Darragh-** The early engagement for Amber and Red warnings ensured all agencies were notified well in advance of the storm's arrival. As a result, NRW via the DPLRF convened 2 PEATS, in advance of the storm, which resulted in a pre-planned SCG and TCG on the morning of the Storm's arrival. In addition, internal council silver level preparedness meetings were held in advance of the weather that included representatives from all internal council services that were likely to be affected and impacted by the storm.

Consequently:

- This afforded an opportunity to conduct early multi agency situational awareness updates and a joint assessment of risk both internally within the Council and across the DPLRF area.
- In respect of Carmarthenshire CC, the routine convening of the Extreme Weather Group (sits midday every Friday, or as required based on weather forecasts), provides a well-

established platform for the Authority to review and enhance elements of its contingency responses.

- In addition, specific internal silver level meetings were arranged that included representatives from services from across the Council.
- The use of the DPLRF's text alert notification mechanism affords a reliable system for convening TCG's and SCG's for all partners and was put to full use throughout the duration of Storm Darragh and during its aftermath.
- The timely use of the National Mobile Text Alert system greatly assisted in focusing the public's attention, ensuring they took the storms risks to life seriously.
- The transition to a red status for Storm Darragh certainly helped to focus the scale of the response and the prior knowledge on the National Mobile Text Alert system was a very useful indicator of the seriousness/severity of what was to be expected. This allowed us to plan on a much wider set of services and allowed us to make early decisions on which services to stand down or close.

## ***Q2. The resilience of infrastructure to storm-related impacts, including water and sewerage systems, electricity distribution infrastructure, and transport networks.***

### **Storm Bert-**

The impacts on infrastructure, utilities and transport networks were short lived for Carmarthenshire. Typical problems included incidents of collapses/damage to edges of carriageways that now require highway support works: Drains and culverts were affected and debris build up on some main river bridges caused issues, requiring specialist clearance equipment.

In terms of our assets, our flood monitoring telemetry and other data shows that flood alleviation and conveyance systems were at capacity and any more rain would have tipped us over into having to manage much more serious flooding. On the whole, our main flood mitigation assets escaped serious damage.

### **Storm Darragh -**

- The most impacted infrastructure being the electricity supply system (National Grid), followed by the transport network. However, water and sewage systems were all impacted partly due to the impacts of loss electricity to their operating systems. Carmarthenshire was disproportionately adversely affected by the power outages, with thousands of people particularly in rural areas not having the power restored for in excess of 3 to 4 days, with significant numbers still without power into the 5<sup>th</sup> day.
- The severity, duration and direction of the wind highlighted the vulnerability of 'overland' power lines to this type of weather event; power lines were impacted as a direct result of the wind exposure or the impact by falling trees. The volume and size of trees falling on

to the carriageway also constituted a particular challenge in returning the road network to normality during and after the storm. The Highways operational teams which contained both council and privately contracted “chainsaw gangs” were constantly deployed, even during the height of the storm, only withdrawing when their dynamic risks assessments exceeded permissible risk levels. This carefully managed dynamic assessment of risks ensured the Highways teams were able to clear the main arterial networks as soon as practicable, enabling emergency and other essential services to utilise the main routes. However, clearing of the non-essential routes took several days and was in part reliant on private landowners who assisted in clearing fallen trees on the lesser used roads.

- The challenge with the scenario of reacting to events within the height of the storm was that some agencies retracted their response services whilst others continued. This is a very tricky balance of keeping our teams safe and working to allow emergency responders and essential service providers to access patients and facilities. Carmarthenshire’s response was continuously utilising dynamic risk assessments.
- Infrastructure issues included collapses/damage to edges of carriageways, consequently, highway support works are required: Debris build up on main river bridges requiring specialist clearance equipment: the volume of trees brought down by the storm had an adverse impact on the highway and transport network.

### ***Q3. The impact on communities, and the response role of community and third sector organisations.***

**Storm Bert-** Low impacts, although early engagement with Red Cross and 4x4 Wales Response ensured assets from these respective voluntary networks could be called upon if required.

Some communities suffered worse than others due to the path of the storm and the geographical nature of the area.

Some communities believe that some of the problems were exacerbated by agricultural practices, where growing of maize crops results in a lot of bare ground which could increase the risk of run-off and soil erosion. There was evidence in some localities that there was significant volumes of suspended soil in the flood water, which in turn was deposited on highways and drainage infrastructure and caused blockages.

### **Storm Darragh**

- There were protracted and disproportionate impacts on communities across Carmarthenshire, largely linked to the loss of power and at times impeded access to the highway network. In communities which remained without power for extended periods, many local community groups were quick to set up community hubs to enable individuals to charge phones, receive hot drinks etc. This was supplemented by the formal ‘drop-in’, centres via Carmarthenshire County Council Leisure Centres and town council halls.

- The British Red Cross and 4x4 Response Wales local representatives were consulted prior to commencement of the storm and their local contact details distributed amongst CCC operational staff. Although this remained primarily a contingency, a single 4x4 Response Wales unit was utilised during the storm to facilitate transportation of a nurse to a rural location.

#### ***Q4. The response of public and private authorities***

##### **Storm Bert**

The response from a local authority perspective was scaled up in accordance with the yellow category weather warning to address highway issues and incidents of flooding. No multi-agency meetings were stood up as the warnings remained in yellow status.

##### **Storm Darragh**

- In respect of public authorities, the County Council shouldered a significant share of the burden of responsibility; the demands across the Council services were so great it necessitated the restructuring of Council assets to ensure the most impacted departments were able to function for what became extended periods of time. This was particularly challenging for the Highways, Leisure, Social Care, Property Services, Call Centre and Home Care teams. All these departments were required to work extended hours and adopt additional responsibilities. The Property Service divisions continue to have ongoing challenges and pressures because of the backlog of works.
- Home Care staff adopted alternative working practices and extended hours in order to reach vulnerable / elderly patients. This included covering the additional significant demands generated by the National Grid's, Priority Customer Registration database.
- **Private Business / Utilities Companies'** responses were all adversely impacted either directly or indirectly because of the loss of power. National Grid power outages had the most protracted impact on Carmarthenshire. Power company representatives that attended the TCG's & SCG 's appeared to have limited information due to the scale and severity of the damage caused by the storm. Consequently, there was a lack of clarity on their recovery position, repair timelines changed constantly and didn't reflect the information provided to the public. The provision of community welfare hubs by the National Grid was slow to deploy and poorly publicised. However, the worse aspect of the utilities' response related to the Priority Customer data base which detailed the location of vulnerable customers; this aspect was severely flawed. The datasets were inaccurate, out of date, definitions of vulnerability were not compatible with NHS / social care definitions and the sheer volume of data produced thousands of names, resulting in council assets being redeployed to screen the data in order to compare with Council and health board records. This caused unnecessary delays and on several occasions and diverted operational staff away from their responsive work in order to check address which did not either exist or in one case, the customer had passed away years before.

***Q5a. Whether relevant organisations have learnt lessons following previous winter storms, particularly Storm Dennis in 2020, and how these lessons inform the current approach.***

- CCC internal mechanisms for early warning and informing aligned with extreme weather events has greatly improved and is a direct result of lessons learnt from previous storm events (Callum and Dennis). As a minimum, weekly meetings are held to assess potential emergencies. When appropriate, formal advanced meetings – internal silver preparedness meetings are held with representatives across key departments and divisions within the Council. The same is true for the DPLRF, which convenes a daily emergency planning officer multi agency meeting which enables professional discussions to take place, and facilitates an early escalation as required, resulting in PEAT's or TCG/SCG activations.
- CCC Highways and Flood Defence & Coastal Protection teams have implemented policies, plans and procedures over the long term and include infrastructure improvements, engagement with vulnerable communities that have resulted in the formulation of local flood protection groups in some specific areas. Similarly, social care teams have, when finances have allowed, purchased equipment which is more resilient to the effects of interruptions to power supplies, such as air mattresses which can remain inflated for extended periods. Also, a key learning from previous storms such as Callum and Dennis was the installation of power connection points in Carmarthenshire run care homes that allow mobile temporary generators to be plugged into the building's power network. Further assessment of our sheltered home schemes is being undertaken with a view to installing similar connections as funding allows.

However, lessons remain to be learnt; the communications networks were extremely vulnerable to loss of power supply and this included the Police Airwaves network following the loss of masts in specific areas of the force.

National Grid's priority customer data base was a problem as already set out – such issues were highlighted as a potential problem during the National Power Outage exercise about 2 years ago, but they remain an issue.

Also, we need to ensure consistency of response amongst responder agencies where some agencies continued to work through the storm utilising dynamic risk assessments, whilst others pulled back from responding until the storm conditions had subsided significantly. Clearly this is a difficult position and each agency must decide its position for itself. Nonetheless, this situation has the potential to create tensions amongst other responders, particularly those who rely on highway access to reach vulnerable communities and individuals.

***Q5b. Using the case studies of Storms Bert and Daragh to gain an overarching view of the current storm preparation and response framework in Wales and identifying any gaps.***

Current gaps and suggestions:

- We need to find a joined-up way of easily and quickly sharing data with respect to vulnerable clients amongst responder agencies that address concerns about data sharing founded on our duties under General Data Protection Regulations (GDPR). We need to clarify our respective agency positions and develop protocols that would allow data sharing to happen quickly. This would avoid protracted discussions during the response phase to a storm and delays whilst clearance to share relevant data is sought.
- Overland power cables are vulnerable to extreme weather events, the loss of power has an immediate and widespread impact on everyone in the community, with the impacts exacerbated the longer it takes to put people back on supply. Most other response related issues were resolved within 24 hrs of the storm Darragh dissipating, with most local authority services back to business as usual by the Tuesday after the storm. The exception to this was the failure of large sections of the power supply network. In addition, the confusion over the list of vulnerable clients held continued to represent a significant risk and therefore constitutes a major gap in our future preparedness.
- The nature of our road networks and associated assets means that structures, highways and drainage systems are often and frequently overwhelmed by the intensity of the storms we face. The public believe this is something we can control, but that is impossible given the intensity of storms that we experience. This needs to be better communicated.
- We need to engage with agricultural unions/representatives to better understand how we can work together to address issues of pluvial run-off from fields, even if they are sometimes perceived issues by communities. Longer term, nature based flood mitigation solutions may be appropriate.
- Carmarthenshire County Council's ability to maintain a resilient highway network able to overcome the challenges faced by what appears to be an increasing number and intensity of extreme weather events is a challenge and made more so by limited funds for repair and maintain our infrastructure.
- Often, more focussed or localised storms cause significant damage to a locality or community, yet government financial help to individual householders is not offered in the same way as when happens in larger events. This can create a feeling of inequality amongst those severely affected by localised storms. Clearly this situation presents a delicate balancing act for Government and a communication challenge for local authorities.

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