

RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL

CABINET

18TH DECEMBER 2020

REVIEW OF THE COUNCIL'S RESPONSE TO STORM DENNIS

REPORT OF THE CHIEF EXECUTIVE IN DISCUSSION WITH THE LEADER OF THE COUNCIL (COUNCILLOR A MORGAN)

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1. PURPOSE OF THE REPORT

1.1 The purpose of the report is to provide an overview of the Council's response to Storm Dennis and set out a series of recommendations for Cabinet's consideration that enhance the Council's short term and long term response to extreme weather events and which limit the impact of flooding on those communities most at risk.

2 **RECOMMENDATIONS**

It is recommended that Members:

- 2.1 Note the action taken by the Council in respect of Storm Dennis:
 - 2.1.1 Before the Storm;
 - 2.1.2 During the Storm;
 - 2.1.3 Immediately after the Storm;
 - 2.1.4 In the days and weeks following the Storm;
 - 2.1.5 The longer-term response to repairing and replacing damaged infrastructure and preventing future flooding events.
- 2.2 Consider the feedback from the work to date of the Overview & Scrutiny Committee in respect of its review of the events of Storm Dennis and the multiagency response as set out in Appendix C.
- 2.3 Consider and approve the recommendations for improvement set out in Section11 of this report.
- 2.4 Require that progress against the recommendations for improvement are included in the Financial and Performance Management Reports, presented to Cabinet each quarter and to the relevant Scrutiny Committee.



2.5 Request that a further report which sets out the findings of the nineteen Section 19 Investigation Reports of the Flood and Water Management Act 2010 currently being undertaken are presented to a future Cabinet in the New Year.

3 **REASONS FOR THE RECOMMENDATIONS**

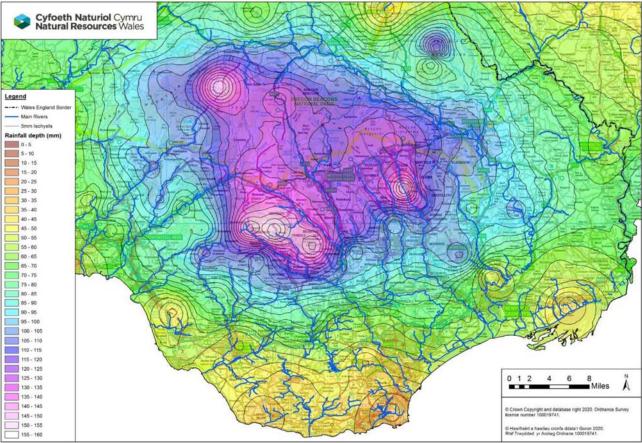
- 3.1 To provide a comprehensive summary for Cabinet of the action taken by the Council in response to the events of Storm Dennis; to consider the lessons to be learnt from the extreme weather event; and to set out a series of recommendations to enhance the Council's short term and long term response to flooding to limit the impact on those communities most at risk
- 3.2 This report does not determine the reasons why specific communities, homes and businesses were flooded. The Council is currently undertaking Section 19 Flood and Water Management Act 2010 Investigation Reports, and these will be available in early 2021.

4. BACKGROUND

- 4.1 During February 2020, Wales was hit by four major storms:
 - Storm Ciara 8 9 February 2020;
 - Storm Dennis 15 17 February 2020;
 - Unnamed Storm 21 24 February 2020;
 - Storm Jorge 28 February 1 March 2020.

Figure 1 - Rainfall Isohyet Map showing rainfall over a 48-hour period during Storm Dennis with the greatest intensity over RCT





- 4.2 These storms badly affected Wales within a period of just four weeks, with record rainfall and river flows causing some of the most significant flooding events seen in Wales since the 1970's. To understand the impact of Storm Dennis on Rhondda Cynon Taf, we need to recognise that this was an extreme weather event that happened after a series of other events:
 - February 2020 was the wettest February on record in Wales and the fifth wettest month ever recorded;
 - Rainfall in the catchment areas of Wales during these events was of such intensity that many rivers reacted extremely quickly, reaching record levels and flows. This was a result of the fact that river catchments were already saturated from the previous months of near continuous rain;
 - Storm Dennis resulted in substantial and intense rainfall with significant impacts on river flows, river levels and flooding in Rhondda Cynon Taf. During Storm Dennis:
 - Nant yr Ysfa gauge, situated between the Cynon and Rhondda Fach river catchments, received 130.4mm of rainfall in 24 hours, the equivalent to 72% of an entire month's rainfall in a single day.



- At the top of the Rhondda Fawr River catchment, Tyn Y Waun gauge received 132.4 mm of rainfall in 24 hours, this equates to 62% of a month's rainfall in a single day;
- o In Pontypridd, the River Taff reached its highest level since records began in 1968. Peak flow passing through Pontypridd was estimated at 805 m3/s, enough to fill an Olympic size swimming pool in just over three seconds. This river level is 78cm higher than the previous record-level set during the 1979 floods.
- 4.3 We also need to take into account the impact of the topography of the County Borough. The rivers in Rhondda Cynon Taf, are relatively steep and flow through narrow valleys that are underlain by impermeable geology. As a consequence, runoff from headwaters rapidly reaches main rivers, and river levels respond quickly following intense rainfall. In a matter of hours, they rose from normal river levels to some of the highest on record. Due to this impermeable geology and the limited amount of groundwater, there is little in the way of base flow, which means when the rainfall ceases, river levels recede quickly as illustrated below.



5 Highest recorded 4 Highest recent River Level (m) 3 1 55m at 2 12:00 pm Lowest recorded Lowest recent 13/02/20 14/02/20 15/02/20 15/02/20 16/02/20 17/02/20 18/02/20 12:00 pm 2:00 am 4:00 pm (GMT) (GMT)

Figure 2 – River level records for River Taff at Pontypridd during Storm Dennis

4.4 The Taff river level was 78cm higher than the previous highest level recorded during the 1979 floods, and went from an estimated flow of 55 tonnes of water per second at 7:00am on 15 February, in relatively normal conditions, increasing in excess of 14 times to a peak flow estimated at 805 tonnes of water per second in just 22 hours during Storm Dennis - an increase of 4.2m in height by 4:45am on 16 February.

Was this level of rainfall predicted and in particular, forecast to fall on Rhondda Cynon Taf?

- 4.5 To plan for extreme weather events, such as those experienced in February, the Council and the emergency services require robust and accurate weather and rainfall forecasts. Over the past few years, we have seen an improvement in the ability of the UK Flood Forecasting Centre to forecast rainfall more accurately and we need to continue to see further improvement into the future. In Wales, Natural Resources Wales (NRW) works with the Flood Forecasting Centre (FFC) (a partnership between the Met Office and Environment Agency) to analyse the latest forecast information. Together, NRW and the FFC assess the weather forecast and flood risk in Wales, summarising the information in the daily Flood Guidance Statement (FGS). The FGS goes to local authorities and emergency responders and is also replicated on the NRW website. It serves as an early warning and allows organisations to prepare for possible impacts.
- 4.6 Figure 3 below is taken from the Flood Guidance Statement issued in the lead up to and during Storm Dennis. The content of the specific FGS highlights the areas forecast to be impacted by the storm and the forecast impact and



likelihood in each case. It shows the build-up to Storm Dennis and that stormy weather was being forecast five days prior (Tuesday 11 February), and that the signals for significant impacts increased on the Thursday (13 February). This did help the Council and other partners prepare. The FGS issued on Saturday 15 February indicated severe impacts but remained at 'Medium' status due to the forecast likelihood. However, the overall flood risk only went to the 'High' risk (indicating a high likelihood of severe impacts) on the Sunday morning, after the Storm had already flooded many communities.

Figure 3 – Five day forecast summary from Flood Guidance Statements leading up to and during Storm Dennis

Warning Level	Event	Date of issue	Time	Likelihood	Impact	Range Rainfall (mm)
Yellow	Wind	11/02/2020	10:34	Medium	Low	N/A
Yellow	Rain	11/02/2020	11:36	Low	Medium	100-120
Yellow	Wind	12/02/2020	10:24	Medium	Low	N/A
Amber	Rain	13/02/2020	10:57	Medium	Medium	100-120
Amber	Rain	15/02/2020	11:07	Low	High	100-120
Red	Rain	16/02/2020	06:10	High	High	100-140

4.7 Figure 4 below shows content from the Flood Guidance Statement from the morning of the 15 February, when Storm Dennis was beginning to impact Wales. The severe impacts forecast for much of South Wales should be noted in 'Risk Area A', although this was also highlighted at a 'Low' likelihood at this stage in the weather event, giving the overall flood risk status as 'Medium'.



Figure 4 - Content from Flood Guidance Statement Issued on Saturday 15 February at 10:30am - Source: Flood Forecasting Centre

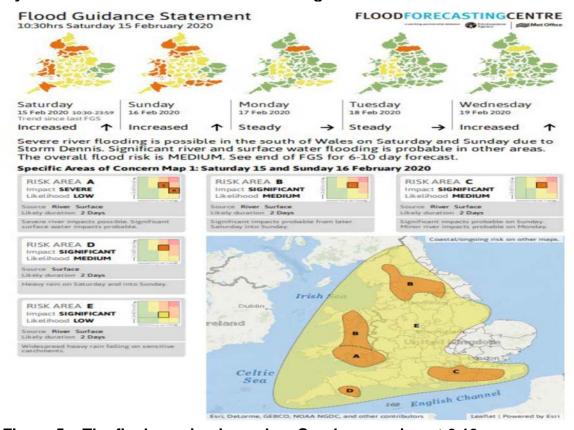
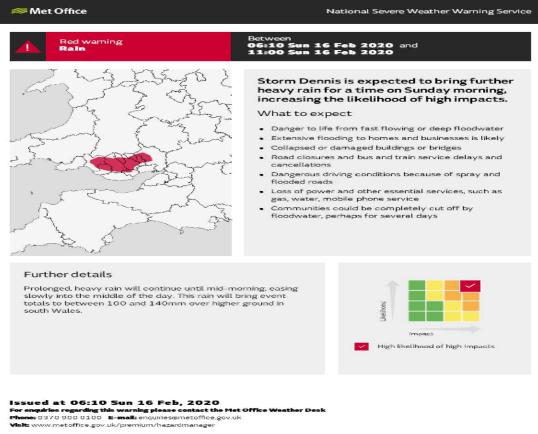


Figure 5 – The final warning issued on Sunday morning at 6.10am





- 4.8 The information provided by the Flood Forecasting Centre, to support councils and other agencies plan for weather events, are forecasts based on the available information and the knowledge and experience of the professionals undertaking this function. It is very difficult to precisely predict exactly where rain will fall and to what extent. However, it is essential that further investment is made by UK and the devolved governments to enhance the flood forecasting and in particular the identification of intense periods of high volumes of rainfall in areas such as the South Wales valleys, where there are few opportunities to capture and store the water.
- 4.9 An improvement in forecasting of such extreme events is essential to avoid the future loss of life. On reflection of the events of Storm Dennis, we were fortunate that the storm occurred at night when the vast majority of people were inside their homes. As a result, there were no direct deaths arising from the storm. If the storm had occurred during a working day with vehicles and pedestrians moving around, the situation could have been very different.

What has been the impact of the Storm on the communities of Rhondda Cynon Taf?



- 4.10 Flooding has a very significant negative and lasting impact on people's mental and physical wellbeing, their homes and their businesses. It also has other adverse impacts on the wider infrastructure that all communities rely on such as roads, bridges, rail networks, public services and public buildings.
- 4.11 The table below sets out the number of properties (domestic and commercial) impacted by the February storms across Wales and it highlights the overwhelming impact on properties in Rhondda Cynon Taf during Storm Dennis.

Number of Properties affected by the three named February 2020 storms

Local Authority Area	Storm Ciara	Storm Dennis	Storm Jorge	February Total
Blaenau Gwent	0	125	0	125
Bridgend	0	16	13	29
Caerphilly	0	203	0	203
Carmarthenshire	2	63	0	65
Cardiff	0	21	5	26
Ceredigion	1	3	0	4
Conwy	172	0	0	172
Denbighshire	23	0	0	23
Flintshire	0	20	0	20
Gwynedd	10	0	0	10
Isle of Anglesey	6	0	0	6
Merthyr Tydfil	0	225	0	225
Monmouthshire	0	215	11	226
Neath Port	0	88	3	91
Talbot				
Newport	0	11	0	11
Pembrokeshire	0	0	0	0
Powys	0	232	0	232
Rhondda	10	1,476	90	1,576
Cynon Taf				
Swansea	0	45	0	45
Torfaen	0	21	0	21
Vale of	0	1	19	20
Glamorgan				
Wrexham	0	0	0	0
Storm Totals	224	2,765	141	3,130

4.12 The 1,476 properties in Rhondda Cynon Taf flooded during Storm Dennis can be analysed as follows:

Residential	Commercial	Total



Total		1,070	406	1,476
Flooding	(Pluvial)			
Surface	Water	690	87	777
(Fluvial)				
River	Flooding	380	319	699

- 4.13 Flood water poses a high risk to life and can devastate homes, businesses and communities; and it will take a long time to recover. It also has a very significant negative and lasting impact on people's mental and physical wellbeing which is immeasurable.
- 4.14 The overall economic damage of Storm Dennis is difficult to calculate given the scale of the impact of the flooding on properties and infrastructure. However, the Association of British Insurers estimate that the average household flood claim is £32,000. Therefore, given an estimated 1,070 households were flooded in Rhondda Cynon Taf during Storm Dennis, the flood damage to household property alone is estimated to be in excess of £34 million. This will not include the substantial economic costs suffered by businesses, other non-residential properties and infrastructure across the County Borough estimated at over £100m of damage to public and private infrastructure.
- 4.15 As a Council, the significant prolonged rainfall during the first few months of the 2019/20 winter has created other potential issues that have had to be resolved such as securing the safety of high-risk former colliery tips. The significant landslide at Tylorstown, when over 60,000 tonnes of former colliery spoil fell into the Rhondda Fach River during Storm Dennis, has resulted in the Council undertaking considerable engineering works to ensure a further 100,000 tonnes does not slide into the river. The Council has already committed £2.5m to address the immediate issues and estimates the final costs to be of the order of £12.5m £15m. The UK Government has confirmed financial support for the first phase of this work.
- 4.16 We have estimated that the storm damage caused to highways infrastructure assets, drainage systems, and Council buildings such as the National Lido for Wales, Ynysangharad Park will be in excess of £76m, a small element of which is covered by the Council's insurance. These costs do not include the costs associated with the landslip and coal tips. To replace all of the bridges damaged or destroyed by the river flooding will take up to three to five years to complete, and the Council is working with Welsh Government to agree a financial programme to complete this work.



Who has the responsibility for Flood Management in Wales?

- 4.17 The responsibility for Flood Management in Wales is set out in Welsh Government's "National Strategy for Flood and Coastal Erosion Risk Management for Wales". This document sets out that Flood and Coastal Erosion Risk Management (FCERM) in Wales involves a number of organisations, including 28 Risk Management Authorities (RMAs), who have a duty to work together and co-operate on FCERM activity, including schemes and reporting. In summary the key organisations and their respective duties are set out below:
 - Natural Resources Wales (NRW) are responsible for managing flood risk from main rivers and the sea. NRW can also undertake certain activities on ordinary watercourses to reduce risk, such as altering water levels and existing works. NRW also have a strategic oversight and general supervision role. This is about having a Wales-wide understanding of all sources of flooding, coastal erosion and helping to communicate the risks associated with them. NRW are responsible for providing advice to the Welsh Government as well as helping inform RMAs and the public through their forecasting, warning and mapping activities.
 - The 22 Local Authorities as Lead Local Flood Authorities (LLFA) are responsible for managing flood risk from surface water, groundwater and from smaller streams called ordinary watercourses. They are also responsible for managing the drainage of local highways under the Highways Act. Their duties include preparing Local Flood Strategies, investigating all significant flooding and maintaining asset registers on defences in their area.
 - Water companies operating in Wales have operational responsibility for drainage via public sewers (foul, surface-water and/or combined).
 - The Welsh Government, as highway authority for trunk roads, has a responsibility for trunk road drainage under the Highways Act.
- 4.18 On 22nd October 2020, NRW published a series of reports in respect of the February 2020 floods. A copy of the reports can be read on the following link: https://naturalresourceswales.gov.uk/february2020floods?lang=en
- 4.19 The Council, as the Lead Local Flood Authority, has identified 28 Flood Investigation Areas of which 19 will require the publication of a Section 19



Investigation Report, due to their significance. A Section 19 Flood and Water Management Act 2010 investigation report is a public statement of the circumstances of a flood event that sets out which parties have a role in managing the risks. When investigating a flood, in accordance with Section 19, the Council will publish a report of the findings, where no other risk management authority is exercising or proposing to exercise its risk management functions and where:

- The flooding causes internal flooding to 20 or more properties or critical infrastructure assets in a localised area;
- The flood mechanism is complex, for instance, where there are 2 or more sources of floodwater involved or the source or mechanism of the flooding is unclear and there is a public interest to explain this mechanism;
- The Council determines that a report of the flooding is merited.
- 4.20 The nineteen Section 19 Investigation Reports are being prepared by Council officers and will be published in the New Year. Therefore, this report does not form an opinion on why specific communities were flooded. It is essential that the Section 19 Investigations understand the movement of the rainfall during the Storm and identify the exact causes of the flooding. For example: in respect of the flooding of Pentre, various opinions have been expressed that this was caused by NRW's approach to forestry management, or Dwr Cymru pumps failing, or the Council's culverts or highway drainage being blocked and not maintained. The Section 19 Report will consider all the facts and determine whether it was one or a combination of events that caused the flood. For example, this will also include the flooding event at Trehafod, where Dwr Cymru has made payments to residents on a goodwill basis but has not accepted responsibility in respect of issues at the local pumping station. The reports will also give an overview of how different types of infrastructure performed against current design standards. For example:
 - Highway drainage Q30 (1 in 30 year event);
 - Ordinary watercourses Q100 (1 in 100 year);
 - Sewers Q30 (1 in 30 year);
 - Main rivers Q100 (1 in 100 year).

Is Rhondda Cynon Taf an area that is likely to be prone to flooding in the future?

4.21 Flooding and coastal erosion are two of the biggest natural hazard risks affecting the safety and sustainability of Welsh communities. Across Wales over 245,000 properties are at risk of flooding from rivers, the sea and surface water.



Managing this risk from flooding is a priority for the Welsh Government and although investment for flood and coastal erosion risk management has been boosted over the last decade, difficult decisions will still have to be made as to where investment is made and the benefits of prioritising investment must be realised.

- 4.22 To support the prioritisation of investment, Welsh Government has prepared the Communities at Risk Register (CaRR) that identifies those most at-risk communities by considering and ranking flood risk from all sources, including Fluvial (Main Rivers), Tidal and Pluvial (Surface Water and Ordinary Watercourses) based on danger to life within individual communities. The CaRR has been analysed to assess flood risk within Rhondda Cynon Taf County Borough Council.
- 4.23 The key findings from the review of the Combined flood risk scores and rankings within the CaRR has identified the following key points:
 - Large parts of the Rhondda remain at high risk of both fluvial and pluvial flooding; and
 - 13 communities fall within the top 5% of communities in Wales at high risk of both fluvial and pluvial flooding.
- 4.24 The following graphs set out the challenge we face compared to the rest of Wales, and the potential household properties that could be flooded by a number of possible flood events.



Figure 6: Number of communities within the top 111 (5%) communities at risk in Wales for flooding from all sources

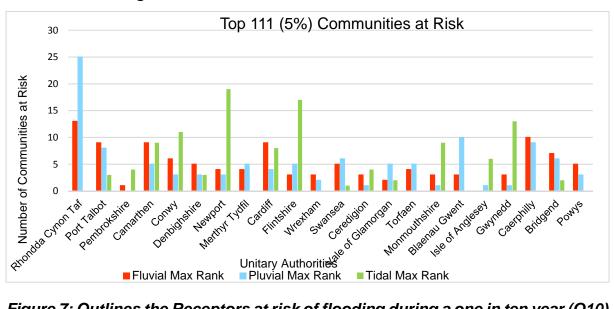


Figure 7: Outlines the Receptors at risk of flooding during a one in ten year (Q10) storm event from all sources and compared against Local Authorities in Wales.

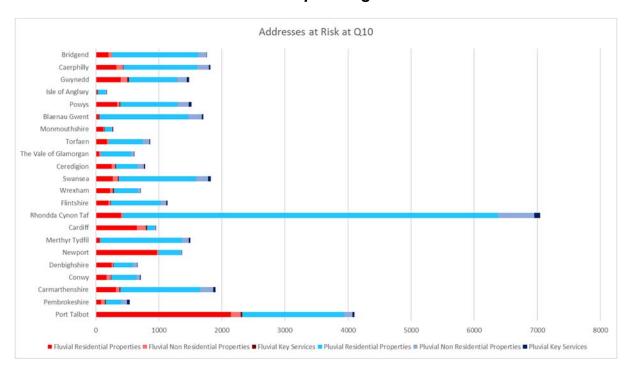
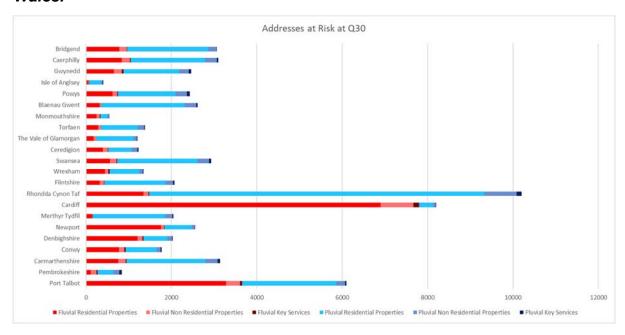




Figure 8: Outlines the Receptors at risk of flooding during a one in a 30 year (Q30) storm event from all sources and compared against Local Authorities in Wales.



- 4.25 The risk analysis highlights that the majority of the Rhondda valley is at significant risk of surface water and ordinary watercourse flooding, along with parts of the Cynon and lower Taf valley. This risk is primarily due to the steep sided valleys which cause rapid runoff of water towards residential development confined to the valley floors. The risk of Fluvial (river) Flooding is primarily owed to the urban extent of the communities within RCT around the flood plain areas.
- 4.26 The data from the CaRR does highlight the need for Welsh Government and NRW to prioritise their investment in flood prevention and alleviation schemes in Rhondda Cynon Taf.

5 HOW DID THE COUNCIL PREPARE FOR STORM DENNIS?

- 5.1 Over the past few years, the Council has implemented its Winter Plan that sets out how the Council prepares for the challenging winter weather, which includes significant rainfall, ice and snow events. Prior to Storm Dennis was no different, other than the preparations were greater than normal due to the forecast levels of rainfall over 100mm.
- 5.2 In the week preceding Storm Dennis additional Highways and Streetcare staff were deployed to inspect and clear all priority culverts within the County Borough. Orders of large quantities of sandbags were placed, purchasing every sandbag locally, these included prefilled sandbags or empty, in



total this amounted to a quantity of 17,381, these were in addition to the 600 plus that were already in stock. All these sandbags were delivered to homes and business throughout the County Borough in the period 15th February to the 29th February.

- 5.3 It is worth noting that before the storm the Council purchased all available sandbags on the market, indeed a neighbouring council contacted this Council to enquire whether they could purchase our sandbags.
- 5.4 We also ensured all available staff were called upon, along with external contractors, to ensure we had adequate resources to cover the upcoming event. These staff were then allocated slots on the rota to supply 48 hours of constant cover for the 15th and 16th February with both Abercynon and Dinas Depots being fully operational in this period. The Highways and Streetcare team working in conjunction with the Flood Risk Management Team in respect of inspection and cleaning of culverts. This additional resource was over and above the normal contract hours work when there would have been 100 plus operational staff dealing with flooding issues within this period. In doing so staff undertook asset inspections on 300 critical infrastructure assets i.e. culvert inlets, manholes and outfalls prior to the storm.
- 5.5 To respond to the risk of flooding, the Council also ordered six **6-inch pumps**, four of which were delivered and in position by Friday the 14th February 2020, with the other two being supplied on the 19th February. Two Drainage Sub Contractors were also employed to create a reactive team to respond to issues with specific heavy-duty equipment to support the Council's response.
- The Contact Centre reviewed its Out of Hours Operations prior to Storm Dennis. The rota was reviewed and updated based on the weather forecasts to try and ensure additional cover was available during the peak periods. During the weather event reactive steps were taken to bring additional unplanned resources as weather and calls necessitated. The table below summarises the staffing resources (planned and unplanned i.e. reactionary) utilised and the calls received during the weekend of Storm Dennis:



From	То	Calls Received	Comments	Resources (staff rota'd)	Resources (additional staff)
Friday 14 th Feb 5pm	Saturday 15 th Feb 9am	4		-	1 x planned additional resource 5pm – 10pm
Saturday 15 th Feb 9am	Saturday 15 th Feb 9pm	137		2 x resource	1 x planned additional resource 2pm – 10pm 1 x unplanned additional resource 6pm – 10pm
Saturday 15 th Feb 9pm	Sunday 16 th Feb 9am	9pm – 12am: 69 12am – 2am: 65 2am – 9am: 429 Total: 563	Met Office: Red warning for rain 6:10AM Sunday – request out to daytime staff to come in	1 x resource 10pm – 6am	1 x planned additional resource 10pm – 6am 3 x unplanned additional resources 2am – 12pm
Sunday 16 th Feb 9am	Sunday 16 th Feb 9pm	754	Additional lines opened in contact centre 9am-5pm with 9 additional staff responding to management request to come in	2 x resource 6am – 2pm 2 x resource 2pm – 10pm	9 x unplanned additional resources 9am – 5pm



From	То	Calls Received	Resources (staff rota'd)	Resources (additional staff)
Sunday 16 th Feb 9pm	Monday 17 th Feb 9am	60		2 x unplanned additional resource 10pm – 6am
TOTAL		1,518		

- 5.7 Over the days running up to the projected storm, the Council issued regular messages and information to residents and businesses in line with the Council's Winter Weather Planning arrangements. In response to the change in the warning categories on Saturday and the early hours of Sunday morning, key information was published to assist the community response.
- 5.8 The communication with Members, residents and staffing teams during the height of the Storm was complicated by the issues experienced with the Council's website and full access to emails. Over the few months prior to Storm Dennis the ICT Service had been steadily transferring ICT functions and equipment from Bronwydd to the Rhondda Fach Data Centre and upgrading the capacity and capability of the ICT infrastructure to enable the Council and schools to become more digitally enabled. These changes had been undertaken in a controlled and measured manner and this approach had been very successful. The ICT team had planned the temporary shutdown of some ICT services over the February half term week, in order that the systems that support schools etc could be transferred. The Plan was for the servers and other infrastructure to be transferred Friday evening, the 14th February and installed and up and running by Saturday lunchtime. Everything went to plan except that there were unforeseen BT fibre issues and BT took time to respond. Once the BT issues had been resolved, Western Power Distribution had a power outage, as a result of the Tylorstown landslide, that compounded the issue and added to the delay in bringing services back on-line.
- 5.9 The plan to move the data servers, also had back up contingencies that could be deployed, so whilst the full functionality of the Council website was not available over the weekend of Storm Dennis, we could post emergency messages on the web page that were visible to all internet users, and we ensured the email systems remained in Bronwydd in order that these could be brought on line first. Based on the Met Office Yellow Warning information we had available on the Thursday 13th February 2020 from the Met Office, and the



fact that the change-over processes were well planned and the previous upgrades had been successful to date, the Chief Executive, in consultation with the Leader, authorised officers to proceed with the changes.

- 5.10 Whilst, the fact that the emails were unavailable until Sunday evening was not ideal, the telephone and text communication between the Council teams responding to the emergency, rehousing people, working with NRW and the emergency services worked effectively.
- 5.11 With hindsight, this was the correct decision, as the changes to the ICT infrastructure have enabled the Council to move all its office-based staff and transactions on-line and facilitate home and agile working, a month later in response to the Covid 19 lockdown. To be clear, the IT system changes made before Storm Dennis had no material impact on the Council's response.

6 WHAT ACTION DID THE COUNCIL UNDERTAKE DURING THE STORM?

- 6.1 During the night of Storm Dennis and through the early hours of Sunday morning, teams from across the Council responded to many requests for help from residents and where road and drainage infrastructure was damaged. The working conditions during the night were appalling, and recognition should be given to the staff who were out in extremely challenging and often dangerous conditions helping and assisting with the public and businesses in dealing immediately with the storm event.
- 6.2 Many roads and bridges to communities were impassable which created inherent difficulties in responding quickly to requests: for example, a 7.5 tonne lorry transporting sandbags was stuck in deep flood water on the A4059 and could not be recovered until almost 24 hours later. The commitment from all the staff that worked and were on-call that weekend was exceptional. The vast majority worked exceptionally long hours through Saturday night and all through Sunday to help all the communities and individuals that required support. It was not just over this weekend, with many key Highways, Streetcare and Drainage staff working exceptionally long hours to respond to the unique events of Storm Dennis. I am sure all Members value the commitment, effort and determination of the staff during this difficult period.
- 6.3 During the early hours of Sunday morning, it quickly became clear that the Council was facing a major incident and in response:



- Set up a command centre in Abercynon Depot to coordinate the Council's response to the Storm, where the majority of SLT officers and the Leader of the Council were based from the early hours. A satellite centre was also established in Dinas to deal with local flooding issues and staff were deployed to Tonypandy Fire & Rescue Station as a direct link with South Wales Fire & Rescue Service;
- Set up four rest centres to support people forced from their homes by the floods;
- The Streetcare staff attended many flooding related issues to respond to requests for help and to assist in dealing with flooding damage to infrastructure, properties, cleaning of drains, repairs, etc but the total number of issues to deal with was exceptional;
- Housing and Environmental Health Officers visited flooded homes and the rest centres to offer temporary accommodation in local hotels or secure temporary accommodation;
- The emergency services, in particular South Wales Fire and Rescue Service responded to many incidents, to support the Council in evacuating homes and properties, such as in Nantgarw, where coaches were provided to take residents to the rest centre established at Llantrisant Leisure Centre;
- Corporate Estates staff also responded to requests for help, with their main focus on securing sites in the interest of public safety, such as retaining walls, damaged buildings etc;
- Engineers and Corporate Estates worked on Sunday 16th February assessing risks that had arisen from Storm Dennis, particularly in relation to Tylorstown Landslip, which was monitored 24/7 in the aftermath of the landslip. The mountain road above the slip was closed as it was impossible to assess whether this had been affected by the slip until a more detailed inspection could be undertaken. Specialist geotechnical engineers were consulted and began an inspection on Monday 17th February.
- 6.4 In the past flooding has usually been limited to a relatively small area, and never to the extent that was experienced during Storm Dennis. Therefore, it took a while after the Storm has passed and even into Monday morning to fully understand the extent of the impact on homes and businesses and the Council's property and wider infrastructure and assets including the network infrastructure. Over the next few days, more families and businesses came forward requesting support and only then did the true extent of the suffering caused by the Storm become apparent.



7 WHAT ACTION DID THE COUNCIL TAKE IMMEDIATELY AFTER THE STORM?

- 7.1 On Monday 17th February 2020, the Council's Senior Officers met with the Leader to assess the situation and put in place a robust Flood Response to support homeowners and businesses to immediately begin the clean-up of their properties, to safely secure any infrastructure assets damaged by the flood, respond to the increasing concerns over Tylorstown Tip landslip, and supporting householders to secure alternative accommodation if required.
- 7.2 On Monday, the following actions were put in place:
 - All the Highways, Streetcare, Parks and Drainage staff were immediately
 utilised on a major clean-up operation, this included revisiting all priority
 culverts to clear blockages, deploying gangs with 20 tonne lorries and JCB's
 to remove large amounts of flood debris from various locations across the
 County Borough. This included providing skips and collection services for
 damaged household items and for town centre businesses;
 - Over and above the Council's dozen road sweepers and gully emptiers, an additional eight gully and street cleaning manned vehicles were provided by Cardiff, the Vale of Glamorgan and Flintshire Councils, for the first week which was a valuable resource in the clean-up. The Vale of Glamorgan also provided two drainage engineers to support the FRM Team;
 - Five Streetcare crews were allocated to drainage repairs on 17th February and are still completing the high number of repairs across the County Borough. A list of all the work undertaken to date is set out in Appendix A;
 - A further 1,400 filled sandbags were made available in the period immediately afterwards to replenish stock levels;
 - We purchased 1,500 flood sacks which inflate when in contact with water and are much quicker to deliver than traditional sandbags due to them being able to be carried in the Inspectors vans. These were offered as an immediate assistance to property owners when required;
 - Additional pumping capacity was procured and leased, both to help the clean up but also for future significant flood events;
 - The Council's engineers worked with the utility companies, and in particular Western Power Distribution, in disconnecting street lighting damaged by the floods;
 - Inspections were immediately carried out on the highway network with bridges and roads being closed, with particular issues in rural lanes that have few or limited drainage systems;



- During the immediate week after Storm Dennis, Redstart geotechnical engineers were called upon to carry out inspections of other significant former colliery tips, where there appeared to have been some movement. Mott MacDonald Engineers were also utilised in particular in relation to a land slip above Clydach offices;
- Inspections of all Category C and D Risk tips were undertaken by geotechnical engineers and this has continued throughout the period especially on D tips after a period of heavy rainfall;
- There were several slips along the Maerdy Mountain Road. A contractor was immediately appointed and undertook extra drainage works on the Mountain;
- A review of all the structure inspections was undertaken whilst maintaining the existing programme of work. Repairs continued to be prioritised and procured both directly and through Redstart engineers. One hundred and forty structures required repair or further review with investigations still ongoing. It is anticipated that the programme of repairs to structures damaged during Storm Dennis will take until 2022/23 to be completed;
- The Council's Corporate Estate's maintenance team had contractors assisting business to safely reinstate power and gas supplies, and providing dehumidifiers;
- Highway and surface water culverts across the County Borough were being surveyed for damage and those that were blocked by debris were being immediately cleared;
- Council buildings that were damaged by the flood such as Ty Glantaf Depot, Ynysangharad Park including the Lido and other buildings, Pentre Home for the Elderly, Riverside Day Centre, and Treforest Learning Curve Day Centre were inspected and action taken to make the locations safe;
- Monitored river walls at risk of collapse, and watched 24/7 Tylorstown Tip, and other key sites in the interests of public safety;
- 7.3 All the available Environmental Health and Housing Officers visited flooded communities and individual homes each day during the first week, with many residents receiving repeat visits. The officers provided advice and offers to households to be rehoused if they wished, health advice on safely cleaning the home, and the officers recorded all the respective resident's details which were essential for the Flood Hardship Grant payments.
- 7.4 During the first week, we provided temporary accommodation to 37 households (90 people, including children), the majority of which quickly left the temporary accommodation having been supported to move on to 6-month tenancies in alternative homes. The majority of the households were funded by their



insurance companies and the Council supported the remainder through Housing Benefits or other financial support.

- 7.5 It also become apparent that for some residents, which were flooded, their mental health needs were significant and contact was made on their behalf with the Community Psychiatric Nurses and or family and friends to offer additional support. As new intelligence was received throughout the day, during Monday and Tuesday, on properties affected by the floods, officers were directed to these areas to offer advice and assistance. This included meeting with the local Member in Trehafod to visit residents of Fountain Terrace who had advised of water penetration to their homes and to explore the need for possible temporary accommodation.
- 7.6 In respect of the response to Pontypridd Town Centre and Treforest Industrial Estate businesses, on the Monday morning, approximately forty staff from the Prosperity and Development Service were redirected from normal duties to visit either the Town Centre or Industrial Estate with a focus on business support. Staff were deployed with the objective of engaging with as many affected businesses as possible and having a visible presence within the town and estate. Officers engaged with businesses owners, sometimes in distressing circumstances, listened to their concerns and were then able to coordinate the required support. In Pontypridd 12 skips were placed around the town for businesses to remove damaged goods and furniture, abandoned cars were removed, electrical contractors made safe and reconnected electric supplies, staff coordinated the safe access of contractors into the town and street cleaners started to remove the flood debris.
- 7.7 This was followed up with visits to businesses in Pentre, Cwmbach and Mountain Ash on Tuesday, providing similar levels of support. Immediate feedback from the retail/town centre community towards the Council was positive, with a number of comments on social media that evening including, "The Council have been fantastic and so supportive". A later survey of businesses by 'The Means' consultants found that 'the council's reputation has largely been enhanced as a result of the actions it has taken ...in response to Storm Denis ... Comments included "exceptional work" and "the council had a strong vision of what needed to be done and delivered on their promises".
- 7.8 On Tuesday afternoon, 18th February 2020, the first Flood Recovery Board met, chaired by the Leader of the Council, which included the Deputy Leader, Cllr Crimmings and Cllr Norris, which was to become the Major Incident Recovery Board, meeting twice weekly. The Recovery Board included representation



from NRW, the Police, representatives of Pontypridd BID, Pontypridd Town Council, business representatives from Treforest Industrial Estate, Citizen's Advice and a range of Council officers.

- 7.9 Immediately, the Board considered and agreed to proposals to provide a Financial Support package for Residents and Businesses. At the time it was estimated that over 530 homes and at least 300 businesses had been affected by the flood waters and in response the Council Leader established a Community Flood Recovery Grant Hardship Payment, which made £500 available to each home and £1,000 to small and medium sized enterprises affected to help deal with the initial impact of internal flooding.
- 7.10 An online form to apply for the Hardship Payment was developed and made available to the public on the 19th February 2020 and face to face drop-in sessions were organised in the respective communities to provide the financial grant. Environmental Health officers attended the drop-in sessions as well and provided public health information to assist householders cleaning and decontaminating their homes and belongings. To access the grant, all the homes were also visited during the short space of time by the Housing Team from the Council's Public Health and Protection Service. Senior officers, Transactional Services Teams along with the Communities for Work Team attended the following community centres with cheques already available to residents who had been impacted (which could be alternatively replaced with a BACS transfer, which most residents opted for).

Monday	Tuesday	Thursday	Friday
24 th Feb	25 th Feb	27 th Feb	28 th Feb
Canolfan	Trallwng	Canolfan	Coleg y
Pentre	Community	Pennar	Cymoedd
Pentre	Centre 9.30am – 5pm	Mountain Ash	Nantgarw
9.30am – 5pm	·	9.30am – 5pm	9.30am – 4pm
Trehafod	Trehafod	Taffs Well Hub	
Village Hall	Village Hall		
1pm – 5pm	9.30am – 5pm	9.30am – 5pm	



- 7.11 The face to face sessions with residents were much appreciated, with many wanting to share their experiences and staff provided practical support such as obtaining bank details to provide a faster and more secure payment process than postal cheques, especially as many residents had temporarily moved out of their homes. The first Residential Flood Hardship Grants were paid directly into residents' bank accounts on 25th February 2020. We also provided Uniform Grant support for those school age children who were flooded and who required support.
- 7.12 Over the course of the initial recovery period, **803 residential households** received the £500 Council flood support, amounting to **£401,500**. A further **326 uniform grants**, amounting to **£32,600** were paid. In addition, the Council also administered and paid Flood Hardship Grants to residents on behalf of Welsh Government amounting to £565,000. Accountancy Teams contacted residents to establish whether they had household insurance, as the basis of WG support was £1,000 for uninsured homes and £500 for insured homes. Further payments were also made by the Council's Transactional Services Team to residents, on behalf of MPs/AMs/Cllrs from local flood relief donations. This was a considerable logistical challenge which the teams across the Council worked well together to deliver.
- 7.13 A similar approach was adopted for small and medium sized businesses that were also flooded. An online claim form was made available and the Prosperity & Development Team visited local businesses to obtain necessary bank details and validate potential claims, also providing advice and guidance. Meetings were held with businesses to discuss queries around criteria, particularly those businesses that work from home. A total of **226 businesses** received the £1,000 business flood relief support payments, amounting to £226,000.
- 7.14 The Council's website and Contact Centre was also providing support during the period. The table below sets out the types and numbers of requests for help and support.

Support Requested	Number of requests
Hardship Support Grant	1,402
Special Collection	700
Replacement wheelie/food bin	415
Housing Assistance	283



Support Requested	Number of requests
Assistance with Repairs	119
Assistance with Insurance Claims	72
TOTAL	2,991

- 7.15 During the first week following the Storm, the Council's focus was on the practical issues that the Council does best that were driven by services. For example, homeless households were rehoused, support was provided to clear up homes and businesses, the flood debris was removed, culverts and other water courses were cleared, etc <u>but we were less focused on the other issues that arise from having your home flooded, such as access to food, cleaning materials, infection control and hygiene, and other practical issues.</u>
- 7.16 As a Council, we were therefore very grateful for the speed in which local communities responded, often led by the local elected Member, usually via the local community centre or other community venue. We would like to pay a particular thank you to the following community centres and the volunteers that provided invaluable support to many individuals and families:
 - Canolfan Pentre;
 - Taff's Well Rugby Club;
 - Taff's Well Village Hall;
 - Trallwn Community Centre;
 - Treforest Community Centre;
 - Trehafod Hall;
 - Salvation Army, Pentre;
 - St. Catherine's Church, Pontypridd.
- 7.17 We recognise that we need to revise and strengthen arrangements for community support in our emergency planning procedures. However, the following section of the report sets out how we recognised this weakness and how we have addressed it. This is reflected in the way in which we supported hundreds of people that were shielding or vulnerable during the first Covid19 lockdown over Easter and early summer.
- 7.18 The focus of services through the Storm, and Sunday and Monday was to respond to the emergency. During this period, we were still uncertain as to the extent of the damage caused and we had a very mixed picture in respect of the



size of the issues and the problems faced. Therefore, it was very difficult to provide an accurate picture of the position and report this via media and social media channels to the public and to elected members. Understandably, some members felt that they did not have sufficient information to understand the impact on their ward and were uncertain of the range of action being undertaken by the Council.

- 7.19 We recognise and appreciate that elected members wanted a better grasp of the situation, but senior officers were for the first two days also struggling to get a clear position of all the issues due to the sheer scale of the event and the number of individual areas flooded. They also had to focus on further challenges such as the landslip at Tylorstown.
- 7.20 One of the biggest lessons for the Council's officers in responding to the major emergency is the need for a suitably staffed and resourced Control Room with accurate, and up to date information being available as telephone calls are logged, ansd as other various information sources provide details on homes and businesses. This will require the provision of better digital equipment to allow staff on the ground to input information there and then to inform management data dashboards.
- 7.21 Having access to this comprehensive information, enables faster decision making but also the opportunity to provide more timely information and updates to elected Members, specific communities affected and the wider public. We are also developing a system to provide instant messaging to elected Members such as Text Messages or put in place an elected Members Emergency/Essential Information WhatsApp, that quickly updates Members and directs them to further data sources for their information and use. We would also seek to bring together, physically or virtually the Council's Communications Team into the Control Room, so that necessary information can be quickly communicated to elected Members and the general public as appropriate.
- 7.22 Progress has already been made in establishing the Control Centre, based in Ty Elai, which has its own power backup generator, a backup network provision (including WiFi), and access to CCTV pictures from across the County Borough. The drainage, river and key highway network will also become connected to this Control Centre over the coming months, to monitor potential emergency events, to have better access to data and other information to help inform decision making and to also better inform others, including elected Members.



8 WHAT ACTION DID THE COUNCIL TAKE IN THE DAYS AND WEEKS FOLLOWING THE STORM?

- 8.1 The public response to the flooding across the County Borough, was overwhelming with offers of help and support from businesses, supplies of food and other goods from UK supermarket chains, and the many individual volunteers and community groups that offered their time to the Council to help in the clear up and to support those families affected by the floods.
- 8.2 Coordinating and managing all these offers of help and support and identifying the best way to use the volunteers in a safe manner was a very new experience to the Council and our staff. The Council's Public Health, Protection & Community Services teams took on this responsibility and quickly established:
 - A food and goods collection and distribution network;
 - Food parcels and non-food donations;
 - The coordination of volunteers.
- 8.3 Collection and Distribution network A plan was implemented to coordinate the collection of food donations, and to ensure the preparation and redistribution of food parcels for individuals and families affected by Storm Dennis. The following buildings were identified as collection points for donations by the public:
 - · Council offices at Ty Elai and Ty Trevithick;
 - Canolfan Pennar;
 - Libraries:
 - Leisure Centres.
- 8.4 Local and national businesses, including supermarkets, made large scale donations of food and other items. Non-perishable/long-life food items were delivered to the Food Distribution Unit at Tonypandy, perishable food items offered by Council suppliers being diverted to local community centres that were supporting residents, and non-food items were stored at a unit in Clydach Vale and re-distributed from there to the following community centres that played an invaluable role in supporting the delivery of food and supplies;
 - Canolfan Pentre;
 - Taff's Well Rugby Club;
 - Taff's Well Village Hall;
 - Trallwn Community Centre;
 - Treforest Community Centre;



- Trehafod Hall;
- Salvation Army, Pentre;
- St. Catherine's Church, Pontypridd.
- 8.5 We also sought to support these community centres in a variety of ways for example, food and other personal and household items were provided to meet any needs identified, PPE was purchased for volunteers involved in the clearing-up, and community development officers were allocated to support centres on-site in response to requests by some centres.
- 8.6 It was recognised that allocating a named contact to each Community Centre at the outset of the major incident would have been beneficial. Community development officers were allocated to Canolfan Pentre, Trehafod Hall, Trallwn Community Centre and Taff's Well Village Hall. This will be taken into account in the planning for future emergencies.
- 8.7 **Food Parcels and Non-Food Donations** Food parcels were tailored to meet the needs of families both in respect of the number of people to be provided for and also to reflect the needs of families who were in temporary accommodation with limited access to cooking facilities. Where required kettles, toasters and microwaves donated by supermarkets and the public were provided to those who needed them. Six vans and twelve staff from the Highways Enforcement teams, plus resource from Libraries and Leisure Services were made available to ensure that families in need received their food parcels. In total 910 families received a food parcel. (52 affected households indicated they did not require one). The deliveries took place over a fortnight concluding on 20th March 2020.
- 8.8 The collection and distribution of food parcels during Storm Dennis was achieved due to the collaboration between a range of Council services and staff, in partnership with community organisations, volunteers and businesses. This partnership approach has been harnessed more recently in the County's response to Covid 19.
- 8.9 Significant donations of non-food items including clothes, cleaning items and small electrical appliances were received. For example, one supermarket donated over 75 new microwaves, 200 kettles and toasters. These were stored at Clydach and delivered to those identified by Council services as being in need. Cleaning items and personal hygiene items were placed in libraries for use by affected residents and/or provided to community centres that identified they were running short of supplies to support residents.



- 8.10 The Council worked with Too Good To Waste to facilitate the processing of large items of furniture and white goods (and ensuring these met required Health and Safety standards) for those who had lost possessions during the floods. It should be noted that any non-food items remaining after the flood were given to local RCT charities or used to provide home starter packs for people moving into new accommodation and any residual food items were used to support shielding and vulnerable people during the Covid19 pandemic.
- 8.11 The Coordination of Volunteers The Community Development Team coordinated the effort to deploy individual volunteers to where they were of most value. Eighty-seven calls came via the RCTCBC helpline immediately from individual community members. However, the safeguarding issues were too high to utilise these volunteers to assist households. Each of the individuals were contacted later and thirty-five were used to support activities at Trallwn Community Centre, Tonypandy Food Distribution Unit, Clydach Donation Centre and Tesco, Aberdare. Coordination of volunteers was a new development for the Council and lessons were learned from this experience that has served the Council well during Covid 19 lockdown. During this period we coordinated a range of volunteering support to individuals, ensured DBS checks were in place and made use of a specifically designed App to communicate, engage and coordinate the volunteers.
- 8.12 Other key organisations worked with the Council to provide specific support, and we are very grateful for their invaluable help and assistance, in particular:
 - Citizen's Advice and a range of Council services visited affected communities using our Mobile libraries so that any residents could receive support locally, for example Citizens Advice provided advice on insurance claims, uninsured losses and access to financial support;
 - A number of private businesses donated staff time, vehicles and equipment to help with the clean-up. Large teams were deployed from Persimmon Homes, Llanmoor Homes, CMB Pipe Fitters, GEs and Transport for Wales. These worked alongside the Waste and Streetcare teams for days, in many communities, supporting the clean-up operations. Their deployment was coordinated by Public Health and Protection staff;
 - Job Centre Plus delivered benefit advice to people in communities confirming that any Hardship Payments would not affect benefits.
 Information was disseminated to Neighbourhood networks;
 - Interlink released a small fund for Community Groups who wished to support the flood response to apply (up to £250.00 for extra costs per group). This



information was widely distributed by the Community Development team to Neighbourhood Networks.

- 8.13 In the immediate aftermath of the flooding, the Housing Grants and Strategy team working with Housing Advice colleagues reviewed and re-organised budgets to allow for financial support to ensure they could return quickly to their homes be offered to vulnerable residents that had been affected by the floods. An opportunity to merge underspend in other grants was identified to create a new **Emergency Flood Recovery Grant (EFR)** targeted at our most vulnerable residents.
- In terms of process, the Grant was accessed the same way in which a Disabled Facility Grant (DFG) is accessed, through a very simple referral process. Referrals were completed by the Housing Advice team, who were delivering face to face support to those vulnerable residents whose homes had been affected by the floods and who had already received the hardship grant of £500. As these grant recipients were some our most vulnerable residents, we worked in partnership with Care and Repair, who agreed that they would offer a handholding service where possible. Twenty-four referrals were received, twenty one were approved and the work completed at a cost of £47,201. The Housing Strategy team also signposted residents (regardless of grant eligibility) to the Council's Community Support team to access donated items which were available to anybody affected by the floods, such as microwaves, kettles and toasters.
- 8.15 The process has worked very well due to the robust processes that already exist within the Housing Grants team as well as the collaborative working between the Housing Grants, Housing Strategy and Housing Advice teams. Residents who have accessed the grant have been able to get back into their homes and out of temporary accommodation, which has been essential especially with the Covid-19 outbreak and the need for people to self-isolate.
- 8.16 After the Council's initial clean up response to the storm, significant work continued in order to inspect and assess the damage caused to the County Borough's infrastructure. In the aftermath of Storm Dennis and Storm Jorge that followed it, the Highways Inspection Policy was suspended for the resources to be utilised assisting reactive works and drainage inspections. A comprehensive review of the network was subsequently undertaken and significant works delivered to repair storm damaged areas in mainly rural locations.



- 8.17 Full inspections of bridges, major culverts and major river retaining walls were undertaken in the two to three weeks after Storm Dennis, staffed by two teams of Council Engineers and two teams of Redstart engineers. Over 350 bridges, walls and culverts were inspected. Several bridges were closed including Berw Road Bridge (White Bridge) in Pontypridd, Castle Inn Footbridge, Treforest and Ynysangharad Park Footbridge, Pontypridd. Several walls had collapsed requiring traffic signal control including Hopkinstown Wall, Berw Road, Sion Street, Cardiff Road (adjacent to Castle Inn), Blaen y Cwm Road, Blaencwm, Brook Street, Pontypridd and a number of others. Significant work has also been completed to clear culverts blocked with debris including Nant Gelliwion Bridge and Campbell Terrace, Mountain Ash.
- 8.18 Within a month of Storm Dennis, the UK was locked down as part of the UK Government's response to the Coronavirus Pandemic. This significantly hampered the opportunity to undertake significant repair work to the highways infrastructure in residential areas, due to the exceptionally high number of parked cars and other vehicles on the highway. Whilst the drainage gangs in the depots, and their contractors, undertook significant cleansing and repair of road gullies and gulley connections where access was available, a comprehensive street by street exercise involving letter drops, door knocking, removal of parked vehicles, etc was not undertaken until after the first UK wide Coronavirus lockdown was relaxed in June 2020.
- 8.19 This had a similar impact on our highways; carriageways and footways, recovery programme was targeted at more rural areas through the first lockdown. The value of such works to the Council's rural highway network, undertaken to date, is in excess of £550k with over 5 miles of highway repaired, these repairs have mainly consisted of traditional carriageway replacement due to significant surface water erosion, with localised ditching and drainage works incorporated.
- 8.20 There are further areas of the Council's rural network compromised by storm damage and it is the intention to target these in the coming months. The programmed works for the next four months, to Spring 2021, are estimated to be £350k, with a further £300k of work to be completed in the summer. These works will improve the condition and safeguard the future of a further 4.5 miles of the highway network.
- 8.21 One of the areas that has been strengthened is the degree of coordination and mutual support between the flood risk management authorities. In response to flood warnings during and after Storm Dennis, the Council, NRW and DCWW



have worked together, shared knowledge and resources and agreed lead roles and responsibilities. For example;

- The Council, NRW and DCWW have coordinated deployment of pumps to meet specific needs, particularly around Pentre, during Storm Dennis and also in preparation for other storm warnings;
- The Council has led on delivery of the new headwall and inlet arrangements for the NRW owned culvert inlet at Pentre which failed, funded by WG secured by the Council and part funded by NRW;
- The Council has quickly rebuilt numerous flood assets along rivers;
- DCWW has facilitated an overflow arrangement from the highway drainage system in Lewis Street, Pentre to the DCWW sewers to improve the resilience of the highway system in Lewis Street, funded by WG grants secured by the Council;
- DCWW has reconfigured manholes at Treorchy to enable highway flows to be dealt with more efficiently. This will make the highway system more resilient and will alleviate the build-up of silt and reduce a maintenance liability;
- NRW, DCWW and the Council have established a project board to oversee strategic flood prevention measures in some of our highest risk communities;
- The Council and DCWW are working together to map integrated infrastructure to identify where systems can be modified to reduce flood risk, particularly with respect to highway drainage, combined systems and pump stations.
- 8.22 There is more that can be done at a strategic level with our partners and every avenue of improvement will need to be explored to ensure the best outcomes for our communities and businesses in future storm events.
- 8.23 The range and extent of the remedial works being undertaken by the Council's engineers over the period since the Storm is significant, which has been in addition to the planned maintenance and capital programme:
 - Approximately 47km of ordinary watercourses (culverted and open) and surface water drainage infrastructure has been surveyed to date;
 - Approximately 1,300 tonnes of debris has been removed from within culverted and open channel ordinary watercourses;
 - Emergency repairs have been identified at 26 locations with 19 locations completed to date which range from culvert repairs (replacing collapses),



- repairing scoured channels, rebuilding manholes and removing accumulated debris;
- The Flood Risk Management team is currently coordinating the delivery of 28 investigation reports into the mechanism of flooding within key areas affected by Storm Dennis, Jorge and the extreme thunderstorms in June. They will also be developing a further 19 Section 19 flood investigation reports which require publication under Section 19 of the FWMA 2010;
- Up to the end of September over 6,000 hours of officer time has been spent on Storm Dennis recovery; that is the equivalent of 6 engineers working full time. The planned programme of works has also been ongoing with major schemes also taking place. Some footbridge schemes have been delayed as resources were allocated to Storm Dennis;
- Highway Term Maintenance Contract Hammonds Civil Engineering Contractors have been used for many of the wall repairs. This has proved an effective and efficient means of procurement;
- Specialist Contractors coordinated and appointed the nature of the Storm Dennis defects has required contractors that specialise in underwater/confined space repairs;
- Tips (A-D risk classification) Four contractors have been appointed to improve the stability of the high-risk tips. A number of the tips have had their remedial works completed;
- Specialist Demolition Feeder Pipe Bridge required removing prior to the winter season due to risk to the bridge been further destabilised. A demolition company experienced in difficult demolitions were employed and safely removed the bridge;
- Ynysangharad Park Footbridge repair has been designed and is currently being repaired and due to be open in Feb 2021;
- Maerdy Mountain Landslip external consultants procured to identify additional remedial works.
- 8.24 A major issue the Council has had to address was the significant landslide in Tylorstown where 60,000 tonnes of former colliery spoil slide into the Rhondda Fach River. The overwhelming concern was that the rest of the remaining spoil was unstable and could potentially result in a major incident resulting in flooding and a potential loss of life. In response, a team of Council engineers maintained a 24/7 presence on site for a number of weeks. Subsequently, the procured contractor to stabilise the site was appointed and they were able to drain the high-water levels on the site that reduced the risk of further spoil movement. An Emergency Plan was developed with all the emergency services and other agencies to ensure a comprehensive and coordinated response in the event that a further landslide occurred.



- 8.25 Further work has progressed on remediating the landslide, all being carried out during the Covid lockdown period. The Phase 1 that installed emergency surface water drainage on the hillside in Tylorstown commenced within days of the Storm and was completed within weeks (April 2020). Over the following weeks, the Council's engineers working with consultants and contractors experienced in the field of tip reclamation, developed a remediation strategy and safe methods of working that would enable works to commence to safely remove the 60,000 tonnes of slip material from the valley floor and reduce the significant risk of blockage of the river. The agreed engineering solution has 3 phases, Phase 1 having already been completed. Phases 2 and 3 are on-going and remove the spoil from the river and continue as emergency work.
- 8.26 A further phase; Phase 4, involves removing the residual tip material which still sits on the hillside above the river. This work is progressing through the rigorous statutory approvals process and, subject to such approvals, will commence late summer 2021. There is an ongoing risk that this material will slip and potentially block the watercourse but the Phase 1 drainage scheme, the Phase 2 & 3 removal of the existing slip material from the valley floor and ongoing monitoring will significantly reduce and mitigate this risk. An emergency plan is in place to respond to and manage a potential incident.
- 8.27 In terms of the support provided to local businesses, in the first few weeks, the Council provided:
 - Thirty-five skips throughout Pontypridd Town Centre;
 - Six domestic style heaters and two dehumidifiers to be loaned to businesses in order to assist with the drying out of properties affected by the flooding;
 - Provided advice and support in respect of available office space to flooded businesses and the team directed affected businesses to the owners of temporary accommodation where required/appropriate;
 - More than 80 retail businesses were visited and 38 local independent businesses received emergency flood assistance grants.
- 8.28 In respect of Treforest Industrial Estate and Nantgarw, 110 businesses had contacted the Council seeking advice and support. In response we set up a multi-agency drop-in session for local businesses with Business Wales, Development Bank of Wales and Welsh Government's Regional Economic Team all available to provide advice and support. The first session was held in Coleg-Y-Cymoedd on Monday 24 February where support was available for businesses to complete the emergency funding application, advice on insurance and opportunities to access loan funding through the Development Bank of Wales. Over 40 businesses attended. Council officers were also



deployed out on site to meet with businesses directly to ensure that all affected were made aware of the support available. A further drop-in session for businesses was held at Coleg-Y-Cymoedd, the following day. As a result 85 businesses in the area have received grant support. The team also coordinated the delivery of a further 14 skips to some smaller businesses affected in the Treforest / Nantgarw area.

- 8.29 In September, Cabinet approved a report from the Director of Prosperity & Development which recommended a restructure of the current Regeneration Grants Programme and allowed for the creation of a Flood Resilience Grant to provide targeted support for businesses in Town Centres who were severely impacted by the significant flooding caused as a result of Storm Dennis. The grant will support the implementation of anti-flood measures which will improve business resilience to deal with any such potential weather events in the future. The grant has recently opened for applicants and businesses have already started to apply.
- 8.30 In recent weeks, the Prosperity & Development Service has been exploring the impact the flooding on Treforest Industrial Estate has had on businesses' insurance premiums. To understand the extent of the issue, we undertook a survey of all affected businesses on the estate and received 35 questionnaire responses and the results are summarised below. The main purpose of the questionnaire was to find out about any difficulties business were now experiencing obtaining insurance, particularly for flood insurance provision. The results of the main question asked:

How has your business insurance been affected by the flooding? is summarised below:

	No of
Response	businesses
No Change	5
Some increase	5
Major Increase	13
Unsustainable Increase	6
Not able to get insurance	
at all	6

8.31 As a result, meetings are taking place between senior managers in the Council, key business owners on the estate and world leading insurance experts to explore solutions to obtaining suitable and affordable insurance cover going forward. Officers from the Service are also assisting some businesses with



finding space to relocate key stock if a major flood warning was issued in the future.

9 WHAT IS THE COUNCIL'S LONGER-TERM RESPONSE TO REPAIRING, REPLACING DAMAGED INFRASTRUCTURE AND PREVENTING FUTURE FLOODING EVENTS?

- 9.1 The total cost of repairing or replacing all the damaged infrastructure, caused by Storm Dennis is estimated to cost in excess of £91m including the cost to make safe the former tip in Tylorstown. The Council is currently using its capital programme funding to undertake the necessary repairs of highways and drainage infrastructure, supported by Welsh Government grants and other funding applications.
- 9.2 This section of the report evidences that:
 - A number of the bridge and retaining walls repairs have already been actioned;
 - Consultants have been procured and are progressing with a number of designs for repairs to bridges, retaining walls, landslips and other infrastructure assets:
 - The full costs on repairs to structures have not been finalised as the results
 of the inspections are still being evaluated and it is expected that the costs
 will dramatically increase;
 - Our total estimate for repairing flood damage to our civils infrastructure remains at £70m (excluding tips). The Council has made a commitment to date to fund Highway Structures and landslips of circa £2.4million, and it is estimated that the overall spend on the Highway Structures and landslips will be in excess of £91 million
- 9.3 In respect of the tips, the scenes at Tylorstown that were so vividly captured on social media have reverberated across the communities of South Wales. The Council is heavily involved in work that is being undertaken by Welsh Government in conjunction with the UK Government and the Coal Authority. This work is moving at pace to: understand the scale of the problem; develop a definitive data base of all tips and their ownership; understand the level of risk and to establish a common assessment framework; review whether legislation is fit for purpose; and ultimately to establish a strategy for the future that provides the public and the various tiers of government that ongoing risks are acceptable and restoring public confidence. The legal framework is being reviewed by the Law Commission and this is important as many of our tips are in private ownership.



- 9.4 In the interim, the Council continues to monitor all our tips and our inspection regime has been enhanced by further support from the Coal Authority. Our risk framework is being adopted as the common framework across all coal tips and we are delivering of the order of £600k of works to Council owned tips to ensure ditches, headwalls, culverts, etc operate as designed.
- 9.5 In terms of the Council's own buildings that were damaged by the flood, the Council has already made good progress in repairing these facilities, including key sites such as Pontypridd Lido and other sporting facilities in Ynysangharad Park. The plan is to open these facilities in 2021, subject to any Coronavirus restrictions
- 9.6 Following Storm Dennis, the Flood Risk Management (FRM) team have reviewed the County Borough, identified those areas most liable to flooding and have considered how we can manage the risk of surface water, ordinary watercourses and groundwater flooding going forward through the identification of 'Strategic Flood Risk Areas' (SFRA) of which there are 12 within RCT. These boundaries are intended to sub divide the County Borough into strategic boundaries for better analysis of the wider flood risk and prioritisation based on local and national flood risk.
- 9.7 To develop the SFRA, the Council has commissioned a Pilot Program Business Case for the Upper Rhondda boundary which will be used to review the actual flooding against the perceived modelled flooding forecasts and provide an estimate of the damage associated to the area and the high level options for managing the pluvial (non-river) flood risk. The FRM team has also commissioned a further pilot study focused around the practicalities of utilising Property Flood Resilience (PFR) Measures and how they could be deployed within those communities at a high risk of flooding. This project will take into account the limitations and risk of PFR measures and also the opportunities.
- 9.8 The Council's Local Flood Risk Management Strategy is due for review and update following the publication on 20th October 2020 of the Welsh Government's National Strategy for Flooding and Coastal Erosion Risk Management (FCERM). This review will have to be undertaken with neighbouring local authorities, NRW and other bodies such as Dwr Cymru. Nevertheless, a number of capital schemes being developed in partnership with NRW and Dwr Cymru are being accelerated for delivery. The plan is to deliver 58 projects over the next 2-3 years, with 7 having been completed to date.



- 9.9 To assist in the development of robust flooding infrastructure, surveys are ongoing to ascertain the structural and serviceable condition of below ground infrastructure to identify the need for remedial works in some areas and opportunities to increase and improve the structures in other areas. This exercise will bring forward a proposed infrastructure work programme for prioritisation as part of the Council's capital programme and to form part of funding bids to Welsh Government.
- 9.10 The FRM team is also engaged in the ongoing development of the Sustainable Drainage Systems through the SuDs approval body (SAB) to ensure the standards are being adhered to by developers on new developments and surface water flood risk is alleviated.
- 9.11 Over the period since Storm Dennis, the FRM team has been working on a number of immediate responses to address infrastructure repairs and also develop and design major schemes. The first table below sets out the shortterm schemes.

Category	Number of Projects	Completed
Emergency Repairs.	26	19
Flood Risk Management - Major Schemes	11	0
Flood Risk Management - Small Schemes (2020/21)	23	5
Flood Risk Management - Small Schemes advanced preparation (2021/22)	8	0
Resilient Road 2020/21	16	2
Total Projects	84	26



9.12 The following table sets out some of the major flood alleviation schemes being developed, with timetables for completion of the works in 2023 at the latest.

Project	Brief Description	Benefits	Estimated Value
Nant Gwawr (Phase 2)	Flood Alleviation Scheme	Increased standard of protection to Approx. 62 properties.	
,			Not Known
Oaklands Terrace, Clifynydd	Flood Alleviation Scheme	Increased standard of protection to Approx. 78 properties	Not Known
Park Lane Aberdare	Lusing overland flow and natural Lto Approx 31 properties		£530,000
Cwmbach, Canal Rd	Flood Alleviation Scheme using overland flow and flood routing to increase capacity in existing system.	Increased standard of protection to Approx. 69 properties	£450,000
Treorchy FAS - (Phase 1) Cemetery Road	Flood Alleviation Scheme. Phase 1 - diversion/upgrade of culverted watercourse	Increased standard of protection to Approx. 236 properties	£750,000+
Treorchy FAS - (Phase 2) - Column Street	Flood Alleviation Scheme	Increased standard of protection to Approx. 236 properties	£1,000,000+
Cwmaman Phase 2	Flood Alleviation Scheme Phase 2 - Reduction in peak flows through upper catchment management and traditional methods	Increased standard of protection to Approx. 60+ properties	£550,000
Glenboi Road – Mt Ash	Options to manage the highway drainage and exceedance flows from the ordinary watercourse.	Increased standard of protection to Approx. 24 properties	£800,000
Pentre Flood Alleviation Scheme	Flood Alleviation Scheme	Increased standard of protection to Approx. 400 properties	£3,000,000+
Nant Frwd Culvert – Flood Routing	Flood Alleviation Scheme	Increased standard of protection to Approx. 18 properties	£300,000
Abercwmboi – Upper Bronallt Terrace Catchment	Instillation of an enlarged debris control structure and channel armouring. Within the Upper Culverted ordinary watercourse Inlet area including flood water storage areas.	Increased standard of protection to Approx. 30+ properties	£250,000



- 9.13 Further detail on all the schemes is set out in Appendix A.
- 9.14 An analysis of the £13m invested in recent years in flood prevention schemes is set out in Appendix B.

10 OVERVIEW & SCRUTINY COMMITTEE FEEDBACK

- 10.1 The Overview & Scrutiny Committee is currently in the process of scrutinising the events of Storm Dennis and the Council's response to this extreme weather event. The Scrutiny Committee will formalise its report in the coming months as all the available evidence and information becomes available. To support Cabinet's review of the Council's response to Storm Dennis, the Scrutiny Committee has provided the information they have collated to date and their initial common themes emerging from their review. At the Scrutiny Committee meeting on 9th December 2020, the Committee agreed to submit the information set out in Appendix C to this report.
- 10.2 A summary of the information in Appendix C is as follows:
 - Overall, there was much praise for the response to the February flooding from the emergency services, community volunteers, neighbours and Council staff:
 - Members recognise the huge effort of staff and the mobilisation of resources to respond to these unprecedented weather events. Many contributions recognise the swift response of the Council on the ground to support communities in the aftermath of the storm;
 - The swift recovery response of the Council members recognised the
 recovery arrangements and support made available to residents and
 businesses and the swift way in which they were made deployed in
 challenging circumstances. The continued support made available to
 support residents and local members over the last nine months has also
 been acknowledged.
 - Members highlighted a number of areas where further work is needed and improvements could be made including communication with Elected Members and facilitating a better understanding of the Council emergency response procedures;
 - NRW has already identified the need to develop more precise forecasting and early warning procedures to give communities time to respond. This was identified as a key ask by the Committee. (with the added caveat that there is a need to be as realistic as possible to identify major events);



- Members acknowledged that Storm Dennis was significant and its impact felt county wide. It was declared a major weather incident by South Wales Police and under these circumstances it was recognised that flooding cannot always be prevented. However, Members did feel that the risk can be managed and actions can be taken to minimise the harm caused by flooding as far as possible;
- The Scrutiny process has already identified the importance of training for Elected Members, particularly newly Elected Members, to identify roles and responsibilities in the case of flooding emergencies in addition to being able to signpost residents.
- The capacity and capability of the current flood water infrastructure to cope with extreme weather events – Members noted that much of the infrastructure was built to deal with 1:100 year flood events, however, these measurements have significantly changed in recent years. Communities need confidence that the Council, NRW and Dwr Cymru will invest to ensure that new and existing infrastructure will be future proofed to deal with more frequent extreme events;
- The management of forestry, the mountainsides and private land a number of the flood events appear to have been caused by the way in which NRW has managed its commercial forestry business, clearing hillsides of trees and leaving natural debris on the hillside, which has found itself in blocked culverts on the valley floor;
- The first few days in the aftermath of Storm Dennis communication with local elected members - a number of members have referred to the immediate aftermath of the storm and being able to access information on the action of the Council to respond in their respective community;
- The human impact of the Storm in terms of individual's mental health and well-being – inevitably the experience of having your home flooded, destroying your personal effects and possessions and the impact that has on your confidence of feeling safe and secure at home is considerable. We need to understand the long-term effects of this and ensure support is available:
- What is Wales' long-term response to Climate Change? Are public bodies doing enough and at a sufficient pace to tackle this issue to protect future generations? – National targets have been set and progress has been made to reduce our reliance on carbon fuels but not at the pace required to prevent future extreme weather events becoming even more prevalent and damaging.
- 10.3 The Scrutiny Committee also acknowledged the pressure placed upon emergency services and other public agencies in responding to such a



significant event. Members appreciate their response, recognising that all agencies were initially overwhelmed by the severity of the weather and the geographical spread of the impact.

10.4 The Scrutiny Committee has yet to complete its review into the events of Storm Dennis, and this Cabinet report could form part of the evidence basis of the Scrutiny review, along with the S19 Flood Investigation Reports due to be completed in the new year. The observations, findings and recommendations from the Scrutiny Committee review will be presented and considered by Cabinet in due course.

11 LESSONS LEARNT & RECOMMENDATIONS FOR IMPROVEMENT

- 11.1 This report outlines a comprehensive response by the Council to the events of Storm Dennis, when many local elected Members, Cabinet Members, managers and staff worked above and beyond their duties to support individuals, families and communities impacted by the extreme weather event. Whatever planning and preparation had been undertaken by the Council and other agencies prior to Storm Dennis, no action could have prevented the unprecedented levels of rainfall and such high river levels.
- 11.2 It is also very unlikely to be the only extreme weather event we experience in the near future, as the UK climate becomes significantly wetter, warmer and unpredictable as a result of climate change.
- 11.3 We were very fortunate that the worst of Storm Dennis occurred in the early hours of the morning and not at rush hour on a busy working day otherwise there would probably have been casualties due to the force of the water in locations such as Treforest, Nantgarw and Pontypridd.
- 11.4 We cannot wait until an extreme weather event causes significant casualties before we all seriously focus on the environmental issues we face. Addressing the causes of Climate Change is essential and as a Council we are actively tackling our carbon footprint. We have made good progress when compared to the majority of the public and private sectors in Wales. However, we and the rest of society need to take greater action and at a faster pace if we are to slow down the rise in temperature of Earth. To achieve this requires international and national leadership and a global political commitment that we have yet to see.
- 11.5 As a Council, we will have little influence to change international politics but we can commit to an Environmental Strategy that not only considers how we



eliminate our carbon footprint but also tackles other issues such as air quality, managing the environment and alleviate wherever possible the impact of extreme weather.

- 11.6 To do so successfully, we have to recognise that as a Council we need to understand our role and that we are not responsible for everything that needs to be undertaken. This includes preventing significant weather events, clearing up the events and providing solutions to meet the needs of all those affected. In our Community Leadership role, we do need to work with other agencies and partners to ensure we all are aware of each other's respective roles and responsibilities in preventing and responding to significant weather events, and we hold each other to account for competently delivering on our respective duties.
- 11.7 There are other public sector agencies that should respond to specific issues, for example, in respect of River Flood Prevention, Flood Mitigation and Flood Warnings National Resources Wales is responsible for managing the river courses, preventing river flooding, providing accurate and timely flood warnings and is also responsible for 30% of the landmass of Rhondda Cynon Taf, and so has significant landownership responsibilities to the communities of the County Borough.
- 11.8 One of the biggest issues we experienced before and during Storm Dennis was receiving accurate weather forecasts and sufficiently early flood warnings from NRW. If we are to adequately plan to respond to extreme events in the future the early warning information we receive needs to be more accurate and reliable.
- 11.9 The recently released NRW Flood Reports highlight a number of issues that still need to be addressed and the Council's Chief Executive is in discussion with NRW Operation Director to resolve the following:
 - "The Current Flood Warning System Telematics— Significant damage
 was caused to river measuring sensors and other telematics, and we need
 confirmation that the system has not only been repaired but steps taken to
 enhance the data systems to better inform the flood warning system;
 - Improving rainfall forecasts the NRW February Floods report provides some excellent ideas as to how to better predict future storm and rainfall patterns across Wales, using new technology. However, the red warning was issued on 15th February after communities had been flooded. When will we see the benefits of these improvements and can they pilot the new forecasting methodology in South Wales?



- Flood Warning System the NRW report highlights the limitations to the current flood warning system, and we were surprised at the high level of human intervention into the process. During Storm Dennis the report evidences that the staff were totally overwhelmed by the limitations of the system and the expectations placed upon them. Is the Flood Warning System being upgraded and properly resourced in terms of the decision making on when to issue the emergency commands? Again, when is this being introduced and what improvements are being made that will have a positive impact on our data analyses in RCT?
- Achieving 1:100 year flood protection of river flooding relies on significant third party assets that are not necessarily intended for flood protection purposes. As the risk management authority, how can you provide reassurance that these assets are fit for purpose and adequately maintained?
- Local responsibilities As the body responsible for managing 30% of the land in RCT, what steps are you taking to maximise the flood mitigation opportunities to which this land could contribute."
- 11.10 In respect of the fourth and fifth bullet point, we will need to resolve these in partnership with NRW, by prioritising high risk flood areas and finding solutions together.
- 11.11 Another pressing issue as a result of Storm Dennis is **Mental Health.** A number of elected members have rightly raised the issue of the mental health and well-being needs of those personally affected by the Storm. For example, for some people the trauma of being rescued from their home has been emotionally very difficult. This is an issue for the University Health Board and the local GPs, and they should be seen to respond to this community need.
- 11.12 RECOMMENDATION 1 To strengthen plans to respond to extreme weather events, it is recommended that we establish a multi-agency working group, which includes NRW and Dwr Cymru, that plans and prioritises County wide investment in flood alleviation and prevention schemes, makes strategic flood prevention funding applications to Welsh Government, develops a comprehensive emergency response to extreme weather events, and provides the immediate comprehensive response to meet the communities' needs.
- 11.13 RECOMMENDATION 2 We will undertake a further comprehensive review of the County Borough to identify the high risk residential and industrial areas likely to be at most risk of flooding in the future as climate change takes effect and identify the possible longer term alleviation and mitigation measures that could be put in place. However, this may require



us to consider the future viability of existing homes and properties in areas that are a high risk of flooding, as a result of climate change. The public and businesses will need to recognise that the Council, NRW and other agencies will not be able to protect all properties, and the public sector may have to acquire and demolish such properties to create flood defences or alleviation schemes to protect others. The Strategic Flood Risk Areas analysis has started this process, and we now need to prioritise smaller high risk areas and develop long term flood alleviation schemes that substantially reduce the risk of flooding. This may require the Council to set aside land, such as sports and recreation fields, to create water holding areas to mitigate the risk of river flooding evidenced during Storm Dennis or building underground tanks.

- 11.14 RECOMMENDATION 3 The Council will create a Flood Support Team alongside the Housing Grants Service, that supports landowners, residents and businesses in high risk flood areas to procure local flood prevention measures, provides advice and guidance and supports home owners to apply for the Insurance Re Scheme to improve people's understanding of what insurance they need and ensure they are financially protected against future flooding. We would also seek to support businesses in flood risk areas to access affordable business and flood insurance, in the event of a future flood.
- 11.15 RECOMMENDATION 4 Individual landowners and property owners, particularly in high flood risk areas, will be requested to consider and evidence how best they can protect their land, homes, and businesses through local measures. Such measures could include flood gates, bunds around commercial properties and ensuring that the property has flood "resilience" features, in terms of stone floors, power supplies above the flood line, and high value machine equipment raised off the floor. This will help limit the potential damage and cost if the property was to flood again. Where the landowner has significant surface water or drainage issues on their land we will expect that the infrastructure is sufficiently robust to alleviate the risk of flooding to other properties. It is proposed that we will appoint a small team of Flood Enforcement Officers including legal support to ensure landowners take their flood responsibilities seriously and are fully compliant with the relevant legislation.
- 11.16 RECOMMENDATION 5 To further update the Emergency Plan to ensure that in the event of a major incident we provide local community responses centres within the communities most affected. We cannot plan for every emergency, but we have to rely on an effective multi-agency



emergency operations framework (the Emergency Plan) and the support from well trained staff that have the equipment and the facilities to be able to think on their feet and respond appropriately to the respective emergency. In doing so, we also need to continue to be able to call upon the local knowledge of elected ward members, the voluntary and third sector and willing volunteers to provide very localised support, such as that provided by Trallwn Community Centre in the period immediately after Storm Dennis. We will also seek to provide a named officer to work with the local elected member(s) to coordinate and facilitate a community response as required from the local community centre.

- 11.17 RECOMMENDATION 6 To respond to the risk of flooding, in the short term we have to ensure that we maximise the benefits of our current infrastructure by undertaking comprehensive maintenance and introducing some enhancement so this infrastructure operates at the optimum level in its response to extreme weather events. For example, we need to consider our approach with NRW to:
 - **Scour risk assessments** need to be undertaken on bridges. All river bridges that require maintenance, we should ensure that a scour risk assessment should be undertaken to determine if protection from scour needs to be included within the repair strategy. This will increase costs but in the longer term would reduce risk of significant flood damage;
 - River-walls there needs to be a programme for specialist inspections of key river-walls developed and a longer-term strategy for vegetation management. Storm Dennis highlighted that certain walls are very susceptible to the force of water catching trees and pulling the walls down. There are also walls which are perceived to be flood walls but they are not designated or built as such. We need to determine whether these walls need to be replaced and/or strengthened in the future;
 - Culverts stone masonry culverts throughout the county borough were constructed when the towns and villages were built. They are over 100 years old and have had little regular maintenance so are at high risk of damage due to scour. It is planned to procure a term maintenance contract so repairs can be procured quickly and easily. An exercise to review all the watercourses that pass under the highway that started before Storm Dennis has highlighted that the culvert records for culverts 900mm diameter and over were not complete. This exercise needs to continue so that all the culverts are inspected. Many of these culverts have access chambers that have been covered and will need to be re-established in order to maintain safe access for repairs and inspections. Most of these actions were being



- planned before Storm Dennis but the storm certainly emphasised the importance of this work;
- Undercut/Scour damage historically for some inspections river entry has
 not been possible. Going forward inspections will be targeted when river
 levels are low so river entry is possible. If the river levels are still too deep
 then specialist inspections should be made. Scour defects will be given a
 higher priority for repair, possibly included in the term contract above as the
 skills required are similar;
- River Management river bed levels are lowering in certain watercourses
 as can be seen where previous scour repairs are seen to be undercut. This
 will continue unless there is a longer-term strategy to manage river bed
 levels. This should be considered alongside the scour risk assessments.
 We need to agree a comprehensive programme to ensure the river bed
 levels provide greater capacity wherever possible in partnership with NRW.
- 11.18 RECOMMENDATION 7 The Council will digitalise and remotely monitor its key flood defences, which will include key culverts, outlets and other drainage systems via a central control room. These key flood defences will be equipped with alarms, remote telemetry systems, digital cameras and will enable the operators to ensure the drainage systems are operating effectively. We will also seek to employ cameras on key points of the river network that have previously flooded in order to be able to regularly monitor levels and be better equipped to warn residents if there are potential river breaches. We will also use the contacts received by the Contact Centre to identify potential cluster of issues and be able to provide a comprehensive and informed response, rather than respond to individual requests in a haphazard manner. We would also seek to bring together, physically or virtually the Council's Communications Team into the Control Room, so that necessary information can be quickly communicated to elected Members and the general public as appropriate. The central control room will be based in Ty Elai, along with the Council's Contact Centre and CCTV centre. We will also improve the digital access of Housing and other Public Health & Protection Staff working with flood victims in the aftermath of future storm events which will provide instant and updated information in the control room, and will facilitate additional support to the flood victims, such as automatic flood payments, or the provision of a skip, or access to a home repairs grant etc.
- 11.19 RECOMMENDATION 8 Creating the capacity to be able to provide timely Elected Member and Public Information during Major Emergencies Implementing Recommendation 8, creates the opportunity for Senior Officers and the Communications Team to have direct access to a comprehensive suite



of information that not only facilitates faster decision making but also the opportunity to provide more timely information and updates to elected Members, specific communities affected and the wider public. We will commit to reviewing how we can better use instant messaging such as Text Messages or WhatsApp, that quickly updates Members and directs them to further data sources for their information and use.

- 11.20 RECOMMENDATION 9 The Council will create two dedicated Pluvial Drainage Teams, an East and a West team. The teams will increase the staffing compliment in the Drainage teams from 20 to 31 staff, comprising a service manager, two senior drainage engineers and 8 additional operational staff. The two new Drainage Teams will focus entirely on the refurbishment and maintenance of the Council's highways, surface water and other water course drainage systems throughout the year. One team will be based in Abercynon and the other in Dinas, serving the County Borough. In addition, the Council will engage with a Specialist Vactor Contractor providing 365 day access to heavy drainage clearance machinery, and two operatives, that can clean the largest, deepest and most inaccessible of heavily silted drains, quickly including pipes, culverts and sewers.
- 11.21 RECOMMENDATION 10 The Council will produce on-line information and booklets for flooded households that set out the support available from the Council, and its partners in responding to a households needs, from securing alternative accommodation, financial support and advice, applications for home repairs assistance, health and wellbeing support, environmental health advice on how to safely clean your home after a flood, and other offers of support from the third sector.
- 11.22 The Section 19 Flood Investigation Reports will be completed in 2021, and these reports will also identify issues, some of them consistent issues, which we will need to resolve. In addition, the Scrutiny Committee will also consider weaknesses that need to be addressed in how the Council responds to future extreme weather events. Therefore, the list of recommendations above is likely to increase over the coming months, as the other pieces of work are completed.
- 11.23 RECOMMENDATION 11 The Council will publish a comprehensive Environmental Strategy by 31 March 2021 that sets out the action the Council will take to ensure it is a Net Zero organisation by 2030 and how it will engage with local communities and businesses to change behaviours to significantly reduce the carbon footprint of the County Borough.





12 **EQUALITY AND DIVERSITY IMPLICATIONS**

12.1 An Equality and Diversity Assessment has not been carried out in connection with the recommendations set out in this report as the contents and actions do not require a policy or service change, resulting in no reasonably foreseeable differential impacts.

13 **CONSULTATION**

13.1 There is no requirement to consult on this report, it is primarily for information.

14 **FINANCIAL IMPLICATION(S)**

14.1 The financial implications of the Council responding to Storm Dennis are significant. The Council triggered an application to Welsh Government's Emergency Financial Assistance Scheme (EFAS) on 25th February 2020 to provide some financial support for the immediate recovery costs. The total cost claimed was £3.762m of which the EFAS, in accordance with the terms and conditions, repaid £1.697m.

Storm Dennis	2019/20	2020/21	Total
	£	£	£
Total Cost to Council	2,782,950	979,218	3,762,168
Less EFAS Grant	(717,695)	(979,218)	(1,696,913)
Net Cost to Council	2,065,255	-	2,065,255
General Fund Allocation	(1,500,000)	-	(1,500,000)
Balance funded in 2019/20 Outturn	565,255	-	565,255

14.2 It is estimated that the total recovery costs, taking into account the need to replace highways infrastructure and drainage systems, will be in excess of £70m and we have had WG confirmation of funding of approximately 10% of this total cost amounting to £6.827M, which was reported in Q2 performance report in November 2020.



- 14.3 During the course of the response the following financial delegated decisions were made to provide the support required by residents and businesses, and to fund the action taken by the Council.
 - <u>17th February Allocation of Resources from General Fund Balances</u> £1M to support immediate recovery;
 - <u>18th February Financial Support for Residents and Businesses</u> Community Flood Recovery Grants £500 per residential property, £1,000 per business property (SME);
 - 21st February Further Allocation of Resources from General Funding Balances – £0.500M to continue to maximise clean-up, recovery and community support work;
 - 25th February Grant Funding Support for Property Renovation and Free School Meals – £800K fund (£500K for residential properties, £300K for businesses) funded by £150K general reserves already released, £150K donations, £500K reprioritisation of capital. FSM for 4 weeks (cost £11K);
 - 5th March Support to Businesses Non Domestic Rates Relief 3 month local relief
 - 10th June Tylorstown Tip Remedial Works £2.5M of emergency works to be undertaken at financial risk to the Council in the absence of any WG funding confirmation.
- 14.4 If the recommendations in this report are approved, there will be financial consequences, such as in respect of Recommendations 4,8 & 10. Any revenue and capital costs arising from this report will be considered as part of the budget setting process for 2021/22.

15 <u>LEGAL IMPLICATIONS OR LEGISLATION CONSIDERED</u>

15.1 There are no legal implications arising from the recommendations in this report.

16 <u>LINKS TO THE CORPORATE AND NATIONAL PRIORITIES AND THE</u> WELL-BEING OF FUTURE GENERATIONS ACT

16.1 This report is primarily an information report on progress in responding to the consequences of a major emergency caused by Storm Dennis. No significant policy change decisions are being taken in this report. The focus is to strengthen and improve our existing infrastructure, and operating procedures.

17 **CONCLUSIONS**



- 17.1 Planning for an unknown weather event is never easy, and when that event is an extreme event that happens in the middle of the night, on a weekend, and covers a wide area, it is inevitably difficult and logistically complex to respond to, particularly when the majority of the workforce is also at home. As a Council, we are not an emergency service, and we do not have the capacity to respond to extreme weather events during the event. Our work is undertaken before and after the event, and this is done in partnership with other public bodies that all have different responsibilities which ideally dovetail together.
- 17.2 The Council's pre-storm planning and its approach after the storm was exceptional. Very few local authorities in Wales could have responded in the same way, taking into account the severity of the storm and the damaged caused to homes, businesses and other infrastructure across so many communities. The commitment from Members, managers and staff across the organisation to support those affected was exemplary and it is clear from letters and emails we have received from residents and businesses that this was appreciated.
- 17.3 Many community and third sector organisations provided an excellent response and took responsibility for aspects of the flood recovery. I would particularly make reference to Citizen's Advice who supported many households in negotiating the right support from insurers and holding the insurers to account.
- 17.4 We also recognise that the Council's response to Storm Dennis could be improved. The list of recommendations in Section 11 set out these opportunities.
- 17.5 It is particularly worth drawing attention to the fact that we were unprepared for the overwhelming offer of food and other goods from individuals and businesses for those people affected, including enormous quantities of food from UK national supermarkets. We are very grateful for this support and for the many financial and other donations received.
- 17.6 We also did not initially appreciate some of the basic needs of those flooded and the systems we would have to put in place to help meet those needs. We are grateful for the way in which local community groups stepped in to fill that void. However, we did learn quickly, and responded accordingly, which put us in a strong position when the Covid 19 lockdown occurred a month later.
- 17.7 Storm Dennis caused many types of flooding, all of which are the responsibility of different public and private bodies. To ensure the river, surface water and



sewerage infrastructure is fit for purpose for future extreme weather events and effective flood alleviation schemes are in place, the Council, in its community leadership role, has to bring these organisations together to plan and deliver long term flood alleviation schemes. This will be the most challenging action to deliver, but we will start this process in earnest early in the New Year.

- 17.8 This multi-agency forum will also provide the opportunity to share and consider the S19 Flood Investigation Reports and how collectively we respond to the specific lessons learnt in the communities most affected.
- 17.9 The effects of Climate Change will be with us for decades and Storm Dennis will not be a one-off event. If the equivalent of Storm Dennis occurs again in 2021 after other significant rainfall events, flooding will be inevitable. A coordinated and comprehensive response to severe weather events will take many years to deliver by increasing, where possible, flood alleviation and prevention schemes.
- 17.10 Nevertheless, this Council will do whatever it can to ensure that the impact of future floods is minimised through a comprehensive programme of investment.



APPENDIX A

OVERVIEW OF FLOOD RISK MANAGEMENT PROJECTS BEING DELIVERED BY THE STRATEGIC PROJECTS SERVICE - NOVEMBER 2020

Summary

Category	Number of Projects	Completed
Emergency Repairs.	26	19
Flood Risk Management - Major Schemes	11	0
Flood Risk Management - Small Schemes (2020/21)	23	5
Flood Risk Management - Small Schemes advanced preparation (2021/22)	8	0
Resilient Road 2020/21	16	2



Total Projects	84	26



Flood Risk Management - Major Schemes

Project	Brief Description	Benefits	Estimated Value	Current Status	Est Completion
Nant Gwawr (Phase 2)	Flood Alleviation Scheme	Increased standard of protection to Approx. 62 properties.	Not Known	Application for OBC/BJC only for 2021/22	2022/23
Oaklands Terrace, Clifynydd	Flood Alleviation Scheme	Increased standard of protection to Approx. 78 properties	Not Known	Application for OBC/BJC only for 2021/22	2023/24
Park Lane Aberdare	Flood Alleviation Scheme using overland flow and natural attenuation areas.	Increased standard of protection to Approx. 31 properties	£530,000	Under Construction Scheduled for completion by Dec. Weather dependent.	Winter 2020/21
Cwmbach, Canal Rd	Flood Alleviation Scheme using overland flow and flood routing to increase capacity in existing system.	Increased standard of protection to Approx. 69 properties	£450,000	Detailed Design ongoing. Expected construction start Advanced work Sept 2020. Main scheme Nov 2020.	Spring 2021
Treorchy FAS - (Phase 1) Cemetery Road	Flood Alleviation Scheme. Phase 1 - diversion/upgrade of culverted watercourse	Increased standard of protection to Approx. 236 properties	£750,000+	BJC being developed. Preliminary Design ongoing	2021/22
Treorchy FAS - (Phase 2) - Column Street	Flood Alleviation Scheme	Increased standard of protection to Approx. 236 properties	£1,000,000+	BJC being developed. Preliminary Design ongoing	2022/23



Project	Brief Description	Benefits	Estimated Value	Current Status	Est Completion
Cwmaman Phase 2	Flood Alleviation Scheme Phase 2 - Reduction in peak flows through upper catchment management and traditional methods	Increased standard of protection to Approx. 60+ properties	£550,000	OBC/BJC development (Mott Mcdonald). Flood Wall option being developed	2021/22
Glenboi Road – Mt Ash	Options to manage the highway drainage and exceedance flows from the ordinary watercourse.	Increased standard of protection to Approx. 24 properties	£800,000	Design and Development (Redstart) ongoing Grant bid for D&D submitted	2021/22
Pentre FAS	Flood Alleviation Scheme	Increased standard of protection to Approx. 400 properties	£3,000,000+	OBC development (RPS) Being integrated with DCWW and NRW assists. Ongoing. Interconnectivity survey ongoing	2022/23
Nant Frwd Culvert – Flood Routing	Flood Alleviation Scheme	Increased standard of protection to Approx. 18 properties	£300,000	Application for Grant for BJC development ongoing	2021/22
Abercwmboi – Upper Bronallt Terr Catchment	Instillation of an enlarged debris control structure and channel armouring. Within the Upper Culverted ordinary watercourse Inlet area including flood water storage areas.	Increased standard of protection to Approx. 30+ properties	£250,000	Preliminary Design and Land enquiries ongoing.	2021/22





Flood Risk Management - Small Schemes (2020/21)

Project	Brief Description	Benefits	Estimated Value	Current Status	Est Completion
Bryn Ifor Inlet Upgrade	Upgrade of a Culvert Ordinary watercourse Inlet - inlet enlargement and instillation of a larger Debris screen and overflow route within the headwall structure The work will also facilitate a new access track for future maintenance	Increased standard of protection to Approx. 60 properties	£80,000	Construction Completed (Streetcare)	Completed
Plantation Road	Replacement of existing culvert.	Increased standard of protection to Approx. 20 properties and highway	£100,000	Completed	Completed
Cardiff Road, Aberaman	This scheme is proposed to upsize the capacity of the existing culverted ordinary watercourse overflow system and identify opportunities to	Increased standard of protection to Approx. 7 properties	£150,000	Detailed design ongoing in 2020/21. Upgrade requires use of private land	2021/22



Project	Brief Description	Benefits	Estimated Value	Current Status	Est Completion
	daylight the redirected culvert.				
Campbell Terrace - Mt Ash	Replacement of culvert Inlet	Increased standard of protection to Approx. 10 properties	£125,000	Grill advanced works (Streetcare) start WC 16/11/20 Detailed Design ongoing for flood Routing element.	2020/21
Granville St - Allen sT mt ash	Replacement and upgrade of Concrete Debris Catcher.	Increased standard of protection to Approx. 13 properties	£150,000	Detailed design Completed. Tender WC 23/11/2020	2020/21
Fernhill Abercwmboi	Upgrade of Inlet structure and facilitation of overland conveyance and interception route to reconnect conveyance flows back into the culverted ordinary watercourse.	Increased standard of protection to Approx. 22 properties	£35,000	Completed	Completed



Project	Brief Description	Benefits	Estimated Value	Current Status	Est Completion
Troed y Rhiw/Forest Road - Inlet Upgrades	3 Inlet upgrades feeding into the main Culverted Watercourse.		£75,0000	Detailed Design ongoing	2020/21
Victor Street, Kingscraft St Mt Ash - inlet	Replacement and upgrade of inlet with overflow arrangement (if Possible)	Increased standard of protection to Approx. 24 properties	£100,000	Preliminary Design ongoing. Advanced works to "channel" designed and out to price.	2020/21
Painters Row, Treherbert - Inlet	Replacement and upgrade of inlet with overflow arrangement (if Possible)	Increased standard of protection to Approx. 4 properties	£45,000	Under Construction DT Contracting on site. Progress good	End of Nov 2020
Pentre (Volunteer St) FAS (Advanced Works - Nant Y Pentre Inlet)	Upgrade of the existing culvert inlet structure with the emplacement of an upper debris screen/platform and overflow route.	Increased standard of protection to Approx. 237 properties	£300,000	Under Construction Streetcare (Hammonds) on site.	December 2020
Pentre (Volunteer st) FAS	Instillation of an exceedance flow path and interception drainage (Linear Drainage) to	Increased standard of protection to Approx. 167 properties	£125,000	Preliminary/Concept Design ongoing	2020/21



Project	Brief Description	Benefits	Estimated Value	Current Status	Est Completion
(Advanced Works - Pleasant Street)	reconnect overland flows back into the culverted ordinary watercourse.				
Oxford Street	Highway Drain Replacement due to collapse	Highway Flooding	£60,000	Completed	Completed
Mount Street	Highway Drain Replacement and upgrade	Highway Flooding	£25,000	Completed	Completed
"Pretty Ponty"	Pilot Scheme for Urban SuDs	Green Infrastructure. Takes water out of the drainage systems.	£35,000	Detailed design ongoing	March 2021
PFR – Property Flood Resistance (9 Projects)	Distribution and "loan" of expandable flood barriers to doors as interim measure in Flooded/high risk areas.	Increased of protection to Approx. 350+ properties.	£357,000	Project plan and procurement ongoing	2020/21



Flood Risk Management - Small Schemes advanced preparation (2021/22)

Project	Brief Description	Benefits	Estimated Value	Current Status	Est Completion
Mt Ash A4059 Upper catchment scour	Repair and armouring of the scoured sections of the Ordinary Watercourse Channel	Increased standard of protection to Approx. 22 properties	£150,000	D&D Grant Awarded. Preliminary/Concept Design ongoing.	2021/22
Heath Terrace	Repair and armouring of the scoured sections of the Ordinary Watercourse Channel and replacement of two number ordinary watercourse inlet headwalls and debris screens.	Increased standard of protection to Approx. 10 properties	£95,000	D&D Grant Awarded. Preliminary/Concept Design ongoing.	2021/22
Abergorki Tip - Treorchy Cemetery	Upgrade of the existing culvert inlet structure with the emplacement of an overflow route. Repair and armouring of the scoured sections of the Ordinary Watercourse Channel	Tip Safety	£125,000	D&D Grant Awarded. Preliminary/Concept Design ongoing.	2021/22



Project	Brief Description	Benefits	Estimated Value	Current Status	Est Completion
Turberville Rd - Porth	Upgrade of the existing culvert Ordinary Watercourse identified as Hydraulically under- capacity and structurally failing.	Increased standard of protection to Approx. 20 – 30 properties	£150,000	D&D Grant Awarded. Preliminary/Concept Design ongoing.	2021/22
Tyn-Y-Wern	Lining of a structurally weakened ordinary watercourse culvert and rebuild of several Manhole structures.	Increased standard of protection to properties	£125,000	D&D Grant Awarded. Preliminary/Concept Design ongoing.	2021/22
Standard View	Lining of a structurally weakened ordinary watercourse culvert and rebuild of several Manhole structures.	Increased standard of protection to Approx. 5 properties	£125,000	D&D Grant Awarded. Preliminary/Concept Design ongoing.	2021/22
Nant Cae Dudwg	Repair and armouring of scoured sections of the ordinary watercourse channel and replacement of damaged debris screen and channel base	Increased standard of protection to Approx. 12 properties	£50,000	D&D Grant Awarded. Preliminary/Concept Design ongoing.	2021/22



Project	Brief Description	Benefits	Estimated Value	Current Status	Est Completion
Mostyn Street	Rebuild of Culvert Inlet with inclusion of a debris platform/catchpit The works will also re- channel the ordinary watercourse channel upstream of inlet.	Increased standard of protection to Approx. 3 properties	£30,000	D&D Grant Awarded	2021/22



Resilient Road 2020/21

Project	Brief Description	Benefits	Value	Current Status	Est Completion
Rhigos Road - Nant Cnapiau & 2 x Culverts (CV6)	Upgrade an Existing Culverted Ordinary watercourse conveying within the Highway to prevent further structural failure of the culvert plus 2 upgrades or overflows. 3 x Culverts		£350,000	Detailed Design ongoing.	2020/21
Aberdare - Asda Roundabout (CV3)	Raising of the road by 200-400 mm to avoid flooding onto the highway (1km)		£480,000	Detailed Design ongoing. Est Start Feb 2021	2020/21
Bronallt Terrace - Phase 3 (CV5)	Replacement of defective masonry culverted ordinary watercourse conveying through Bronallt Terrace highway		£200,000	Design Completed. Tender WC 16/11/20	2020/21
Aberdare Bypass (CV1)	Replacement of existing highway Filter drain with gully connections		£300,000	Design Completed Cost Estimate Awaited.	2020/21



Project	Brief Description	Benefits	Value	Current Status	Est Completion
A4059 - Abercynon - Mt Ash (CV7)	Various Improvements of overland conveyance i.e. instillation of low point within the verge area to manage the low spot flooding.		£65,000	Various Works. Overflow – completed Build out – completed Drainage Mt Ash Town Hall Completed Additional Drainage at Layby (NEW) – Streetcare Design/Constructio n	2020/21
Abercynon Road to A4059 New Road	Install wholly new Carrier line with additional gullies to manage the surface water flooding associated to the low spot within the highway approximately 100m		£80,000	Scope may be less than expected.	2020/21



Project	Brief Description	Benefits	Value	Current Status	Est Completion
Cynon Valley Monitoring Stations	Telemetry monitoring stations to be installed at various locations across the Cynon valley		£30,000	Locations completed and a schedule produced for consultation	2020/21
Ynyshir Cycle Path (RV6)	Surface water drainage networks are ineffective and flooding the footpath approximately 280m - history of minor landslips in 2016 that caused the closure for 6months of the path, further uncontrolled surface water conveyance could shut the critical route more frequently		£95,000	Preparing info for pass onto Depot	2020/21
Mynydd-yr-Eos Penygraig (RV8)	Renew kerb, channel, renew 150mm diameter perforated pipe and stone, provide 9 new gulley pots covers and frames, 2m edge of carriageway reinstatement, all over a length of approximately 300m.		£65,000	Complete	Completed
A4223 - Porth Relief Road (RV1)	Highway drainage has deformed up to 70% in places and will need replacement (around 100m)		£165,000	Complete	Completed
Tonypandy Bypass A4058 Asda- Tonypandy R/About (RV5)	Existing Highway Carrier Line (filter system) is showing significant root mass within the main system approximately 500m which is reducing		£115,000	Detailed Design Complete.	2020/21



Project	Brief Description	Benefits	Value	Current Status	Est Completion
	the capacity of the carrier line to function resulting in frequent Highway Flooding				
Tonypandy Bypass A4058 Tonypandy R/A- Trealaw R/A (RV4)	Existing Highway Carrier Line (filter system) is showing significant root mass within the main system approximately 550m which is reducing the capacity of the carrier line to function resulting in frequent Highway Flooding		£110,000	Preliminary Design	2020/21



APPENDIX B

RECENT CAPITAL EXPENDITURE ON FLOOD DRAINAGE SCHEMES

Word	Oak and			Expen	Spend To 30/11/2020	Remaining Budget	Total			
Ward	Scheme	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2020/21	
	!	£M	£M	£M	£M	£M	£M	£M	£M	£M
	Culvert Inlet Programme					0.047				0.047
	Cynon Valley Highway Drainage							0.044	1.331	1.375
	Drainage Improvements Unallocated							0.000	0.061	0.061
	Flood Alleviation Investment			0.517	0.042	0.005				0.564
	Highways Drainage Improvements	0.167	0.164	0.002						0.333
	Ortho Clinical Diagnostics Projects			0.054						0.054
Various	RCT Inlet Upgrade Programme					0.036				0.036
	Rhondda Valley Highway Drainage							0.025	1.055	1.080
	Scheme Development of FRMP					0.007				0.007
	Small Works Drainage				0.062	0.042	0.027	0.067	0.016	0.214
	Storm Dennis						0.550	0.910	0.190	1.650
	Strategic Outline Cases						0.041	0.000	0.015	0.056
	Upper Rhondda Strategic Flood Risk Area							0.011	0.029	0.040
	Water Level Monitoring Devices		0.024							0.024
Treherbert	Painters Row, Treherbert							0.004	0.021	0.025
Treorchy	Cemetery Road, Treorchy				0.025	0.001	0.019	0.017	0.000	0.062



Mond	Sahama	Expenditure						Spend To 30/11/2020	Remaining Budget	Total
Ward	Scheme	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2020/21	
		£M	£M	£M	£M	£M	£M	£M	£M	£M
	Park Road Cwmparc					0.091				0.091
	Mynydd Yr Eglwys	0.008	0.007		0.012	0.003	0.015	0.000	0.010	0.055
Pentre	Nant Y Pentre Inlet, Pentre							0.027	0.123	0.150
	Pleasant St Flood Routing, Pentre							0.003	0.148	0.151
	Tudor Rd, Ton Pentre						0.114	0.024	0.054	0.192
	Volunteer St, Pentre				0.031	0.025	0.004			0.060
Llwynypia	Rosedale, Llwynypia				0.006					0.006
Cymmer	A4058 Cymmer Rd, Cymmer						0.003			0.003
	A4233 Porth Relief Road, Porth						0.008	0.124	0.053	0.185
Porth	Aberrhondda Rd, Porth				0.009	0.071	0.059	0.002	0.008	0.149
	Graig Ddu, Dinas				0.001	0.008				0.009
	Nythbran Terrace, Porth					0.065				0.065
Ynyshir	Ynyshir Cycle Path, Ynyshir						0.001			0.001
TTIYSTIII	Ynyshir Wall Project	0.017								0.017
Rhigos	Cysgod Y Mynydd Rhigos		0.001							0.001
Hirwaun	Brecon Rd, Hirwaun						0.015	0.000	0.015	0.030
Tillwauli	Rhigos Road, Hirwaun						0.067	0.000	0.008	0.075
Aberdare West	Bwlfa Road, Cwmdare	0.220	0.008							0.228
Abeldate West	Park Lane Trecynon					0.009	0.054	0.238	0.187	0.488
Aberdare East	Maes y Ffynnon Road, Aberdare						0.122	0.002	0.149	0.273
Aboromon North	Bronallt Terrace, Abercwmboi					0.052	0.059			0.111
Aberaman North	Cardiff Road, Aberaman	0.251	0.008							0.259
	Nant Gwawr Aberaman	0.666	0.017							0.683



Ward	Scheme	Expenditure					Spend To 30/11/2020	Remaining Budget	Total	
vvara		2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2020/21	
		£M	£M	£M	£M	£M	£M	£M	£M	£M
A1 0 11	Cwmaman (Nant Aman Fach)				0.029	0.030	0.015			0.074
Aberaman South	Cwmaman Flood Alleviation			0.023	0.334	0.193				0.550
	Glanaman Rd Cwmaman			0.092	0.149					0.241
Cwmbach	Cwmbach Industrial Estate						0.022	0.135	0.569	0.726
Cwmbacn	Cwmbach PROW		0.007		0.018		0.062	30/11/2020 /20 2020/21 1 £M 015 022 0.135 062 0.022 0.017 0.007 0.078 0.005 0.013 0.015	0.128	0.237
	Campbell Tce, Mt Ash							0.012	0.113	0.125
Mountain Ash East	Granville Tce, Mt Ash							0.017	0.132	0.149
Wouldan Ash East	Troed Y Rhiw/ Fforest Rd, Mt Ash							0.017 0.007 0.078	0.068	0.075
	A4059 Layby Drainage				0.048					0.048
	Brynifor FAS, Mountain Ash							0.078	0.002	0.080
	Fernhill Inlet, Mt Ash West							0.005	0.030	0.035
Mountain Ash West	Glenboi Pumping Station, Mountain Ash							0.013	0.145	0.158
	Victor St & Kingscraft St, Mt Ash							0.015	0.085	0.100
Abercynon	Nant Y Fedw Drainage Improvements	0.607	0.020							0.627
	Wood Rd, Abercynon Flood Alleviation	0.005	0.049							0.054
Glyncoch	Ynysybwl Rd, Glyncoch						0.001	0.004	0.000	0.005
Cilfynydd	Nant Cae Dudwg, Cilfynydd	0.211	0.007		0.018					0.236
Pontypridd Town	Hafod Lane, Trehafod	0.003				0.022				0.025
Rhydyfelin Central	Caenant Flats flood alleviation scheme	0.001								0.001
	Rhydyfelin Flood Alleviation	0.031								0.031



Ward	Scheme	Expenditure					Spend To 30/11/2020	Remaining Budget Tot	Total	
		2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2020/21	
		£M	£M	£M	£M	£M	£M	£M	£M	£M
	Sycamore Development, Rhydyfelin					0.003	0.094			0.097
	Taff Trail Rhydyfelin	0.058								0.058
Treforest	Gene Metals, Treforest						0.016			0.016
rreiorest	Treforest PROW		0.002	0.011	0.032					0.045
	Llanwonno Road, Mt Ash						0.065			0.065
Taffs Well	Moy Road, Taffs Well						0.004			0.004
rans wen	Nantgarw Rail Training - Waiting Restriction		0.003							0.003
Llantwit Fardre	Plantation Road, Abercynon						0.001	0.099	0.001	0.101
	Waun Hir Phase 1	0.001								0.001
Pontyclun	Miskin Quarry Flare	0.003								0.003
Grand Total		2.249	0.317	0.699	0.816	0.710	1.438	1.905	4.746	12.880



To: Cllr Andrew Morgan – Leader of the Council Mr Chris Bradshaw – Chief Executive

Date: 10th December 2020

Dear Cllr Morgan & Chris

RE: SCRUTINY OF FLOODING IN RCT DURING 2020

I have been requested by the Overview & Scrutiny Committee to present the comments and emerging themes arising from the committee's considerations of the Council's response to flooding in Rhondda Cynon Taf in early 2020. In doing so, I have also been requested to present the evidence and information considered from local members, through a scrutiny inquiry session and the written submissions received, inform the findings of the Interval review in advance of Cabinet considerations later this month.

The Chair has asked me to convey his thanks for providing this opportunity to local members and scrutiny to contribute to this review and for the time provided by Officers of the Council to this scrutiny process.

A majority of scrutiny members have acknowledged a number of common themes to have emerged from the inquiry session and the discussions of committee, as follows:

- Overall there was much praise for the response to the February flooding from emergency services, community volunteers, neighbours and Council staff;
- ➤ The views of members highlighted a number of areas where further work is needed and improvements could be made including communication with Elected Members and facilitating a better understanding of the Council emergency response procedures.
- ➤ The process has already identified the development of more precise forecasting by NRW which would enable early warning procedures to be delivered and to give communities time to respond. This was identified as a key ask by the Committee. (with the added caveat that there is a need to be as realistic as possible to identify major events);

- Members acknowledged that Storm Dennis was significant and its impact felt county wide. It was declared a major weather incident by South Wales Police and under these circumstances it was recognised that flooding cannot always be prevented. However, Members did feel that the risk can be managed and actions can be taken to minimise the harm caused by flooding as far as possible.
- ➤ The process has already identified the importance of training for Elected Members, particularly newly Elected Members, to identify roles and responsibilities in the case of flooding emergencies in addition to being able to signpost residents.

A majority of committee members have acknowledged the following key areas arising from the submissions from local Elected Members:

- Members recognise the huge effort of staff and the mobilisation of resources to respond to these unprecedented weather events. Many contributions recognise the swift response of the Council on the ground to support communities in the aftermath of the storm.
- ➤ The contributions made acknowledge the huge scale of this weather event. Contributions from members recognised the unprecedented nature of the flooding which spread resources and the support efforts of the Council across a range of communities. They acknowledge that despite this logistical challenge, a positive effort was made by staff to respond with the required resources to support communities.
- ➤ The capacity and capability of the current flood water infrastructure to cope with extreme weather events Much of the infrastructure was built to deal with 1:100 year flood events, however, these measurements have significantly changed in recent years. Communities need confidence that the Council, NRW and Dwr Cymru will invest to ensure that new and existing infrastructure will be future proofed to deal with more frequent extreme events;
- ➤ The management of forestry, the mountainsides and private land a number of the flood events appears to have been caused by the way in which NRW has managed its commercial forestry business, clearing hillsides of trees and leaving natural debris on the hillside, which has found itself in blocked culverts on the valley floor;
- ➤ The first few days in the aftermath of Storm Dennis communication with local Elected Members a number of members have referred to the immediate aftermath of the storm and being able to access information on the action of the Council to respond in their respective community;

- ➤ The human impact of the Storm in terms of individual's mental health and well-being inevitably the experience of having your home flooded, destroying your personal effects and possessions and the impact that this has on your confidence of feeling safe and secure at home is considerable. We need to understand the long-term effects of this and ensure support is available;
- What is the Wales' long-term response to Climate Change? Are public bodies doing enough and at a sufficient pace to tackle this issue to protect future generations? – National targets have been set and progress has been made to reduce our reliance on carbon fuels but not at the pace required to prevent future extreme weather events becoming even more prevalent and damaging;
- The swift recovery response of the Council members recognise the recovery arrangements and support made available to residents and businesses and the swift way in which they were made deployed in challenging circumstances. The continued support made available to support residents and local members over the last nine months has also been acknowledged;
- > The majority of responses speak positively about the Council's response in challenging circumstances. A number of responses deem the response of the Council response to be effective and efficient.

Through the scrutiny process, evidence from partners has acknowledged the pressure placed upon the response of public agencies and emergency services as result of the scale of the severe weather. Natural Resources Wales and Dwr Cymru Welsh Water contributions also acknowledge that services and the response efforts were initially overwhelmed by the severity of the weather and the geographical spread of the impact.

Members of the committee have also asked for me to formally convey their wish to scrutinise and comment upon the Section 19 statutory report and upon the ongoing work that the Council is undertaking into the February Floods as the Lead Local Flood Authority (LLFA) under the Flood and Water Management Act 2010.

When determining to submit this information some members requested the opportunity to clarify their comments as recorded in the attached. The amendments received to date have been reflected in the attached evidence.

Christian Hanagan

Service Director – Democratic Services & Communication – On behalf of the Overview & Scrutiny Committee

CC: Cllr Mark Adams – Chair of the Overview & Scrutiny Committee
Cllr Wendy Lewis – Vice Chair of the Overview & Scrutiny Committee

WRTITTEN SUBMISSIONS RECEIVED FROM:-

- 1. ABERAMAN SOUTH (Cllr T Williams)
- 2. ABERDARE EAST (Cllrs S Bradwick & M. Forey)
- 3. ABERCYNON (Cllrs R. Lewis & E George)
- 4. CYMMER (Cllr G. Caple)
- 5. GRAIG (Cllr J Brencher)
- 6. LABOUR GROUP
- 7. MOUNTAIN ASH WEST (Cllrs A Morgan & W. Treeby)
- 8. PLAID CYMRU GROUP
- 9. RHONDDA (Cllr E. Griffiths)
- 10. RHYDYFELIN CENTRAL/ILAN WARD (Cllr M Webber)
- 11. TAFFS WELL (Cllr J Bonetto)
- 12. TREFOREST (Cllr S Powderhill)

The following two written submissions were received following the Overview & Scrutiny Committee (09.12.20)

- 13. YNYSHIR (Cllr J Edwards)
- 14. YNYSYBWL (Cllr S Pickering)

ABERAMAN SOUTH

On 15th February, 2020 an amber weather warning was in place that was later upgraded to a red warning by the UK Met Office, meaning "danger to life". The local authority of Rhondda Cynon Taf saw unprecedented levels of rainfall due to Storm Dennis, with over 1,000 properties being internally flooded. It was nothing short of a natural disaster, which I hope never occurs again in my lifetime.

In the days preceding Storm Dennis, I undertook pre-storm visits in Aberaman South to check flood risk assets were clear from blockage. Such as, the river adjacent to 'Glynhafod Club' which caused flooding approximately 30 years ago. However, it has received significant funding since I was elected as the local member – Nevertheless, it gives me peace of mind knowing they have been inspected by council staff prior to the onset of the severe weather. When I checked these locations there were no issues to report before 10pm.

Unfortunately, I was alerted to the possibility of flooding by local residents within Aberaman South a few hours later. So, I immediately informed the call centre to request sand bags once again to protect their properties. But, I found it difficult to get them despite only waiting around 4 minutes for someone to answer my phone call initially – it became increasingly more difficult afterwards due to the number of calls being made to the call centre. At 3am, I received another phone call with the heart-breaking news that many properties in Bronallt Terrace, Abercwmboi had been internally flooded. Also, their garages (located at the rear) had an ingress of water because of a substantial blockage to the culvert line on phurnacite land. Soon after this fire engines arrived to provide assistance, the council also attended but at this point it was little they could do.

A few days later, I was contacted by Sian Evans from the local authority's Community Development team to provide assistance following Storm Dennis. On 20th February, 2020 she hosted an advice day alongside myself in Cap Coch Community Centre, Abercwmboi for flood victims within the electoral ward. It was evident from the advice day, support was required to help remove household items damaged during Storm Dennis such as carpets, flooring etc. Therefore, I coordinated a "clean-up" with the secretary of Abercwmboi FC, Steve Goodfellow with containers being provided by RCT Council. In addition, I organised a Citizen's Advice van to help the local residents fill out flood funding applications.

Sian Evans, and myself worked closely together for weeks afterwards to ensure everyone got as much support as possible. But, I must say, the community spirit after such a traumatic experience was fantastic to witness.

The highways depot carried out remedial works in Mostyn Street, Abercwmboi with a new manhole being constructed to improve accessibility. Furthermore, over 100 tonnes of material was removed from the river bed near 'Glynhafod Club' – it included a large tree, which was stuck underneath the bridge due to Storm Dennis.

Lessons Learnt

I firmly believe, the local authority have taken a proactive approach since Storm Dennis occurred. For example, a few weeks ago sand bags were distributed in Bronallt Terrace, Abercymboi following a yellow weather warning being issued. Moreover, I was pleased to hear RCT Council had four bids pending/approved to

upgrade flood defences in Aberaman South. The Welsh Government funded scheme will hopefully be delivered shortly.

Since Storm Dennis, I have managed to accelerate the remedial works required by the Coal Authority in collaboration with RCT Council, MP Beth Winter and MS Vikki Howells. The removal of silt has been ongoing for a few weeks, and it will cost approximately £130,000 in total. Also, they have provided industrial pumps within phurnacite land for inclement weather conditions whilst remedial works are being undertaken.

In conclusion, it appears the internal flooding to properties which occurred was unavoidable due to the amount of rain that fell in such a short amount of time. The sheer volume of water overpowered our highway drainage systems in Bronallt Terrace, Abercwmboi – even though it was upgraded twice, prior to Storm Dennis. However, I want to reassure the constituents of Aberaman South they have my full backing as local councillor to see further improvement works carried out to stop debris off the mountain wasting down and blocking the culvert. Moreover, I will continue to fight their corner whenever possible to prevent future flooding events from happening.

Lastly, I just want to thank the Council Leader, Cllr Andrew Morgan for his continued support, during storm Dennis and since, also my thanks to all members of staff. From highway operatives to call centre workers.

Councillor T Williams

Aberaman South Ward Councillor

ABERDARE EAST

This is our response to the flooding that accrued in Aberdare East ward in the Cynon Valley

We will start with Gloucester St, a number of houses were flooded here, mostly the bottom end.

It was caused by the stream that runs at the back of the houses, Cllr Forey and myself along with residents would like to know how this stream flooded, yes, some parts of the stream run between residents' gardens, but it is mainly looked after by the council

This stream runs into the main river near the railway station

Cllr Bradwick was made aware of the flooding by residents while he was out seeing what was happening in the ward not council, he then made contact with the council and council staff did attended with sand bags

Our other concern is the stream that starts on the Mardey Mountain then flows into the ward of Aberaman North, in Maesyffynon Lane, this culvert is on both sides of each ward, we have both over many years have had concerns on this, many calls and emails have been sent regarding this

At the time of the flooding a few houses at the bottom of Wind St as you drive up Maesyffynon Lane were flooded, along with many houses in Cardiff Road, this is not the first time these houses have been flooded, we have lost count.

The problem what we have been told by residents is this stream goes under ground and into the river, but the outlet of this stream is well below the river level, so when the river floods the water backs up as it cannot get to the river

We have been told the flooded, culvert under the road was blocked, so what is going to be put in place to stop this happing again

Again Cllr Bradwick was informed by residents of their flooding, and he made calls and emails to the council, plus sandbags were supplied

We will leave it at this but are more than happy to attended any meetings over the flooding in Aberdare East Ward, and are willing to talk to officers

We both understand, that these floods were like once in a lifetime, but for residents it was total heart breaking

We would like to know what has been done and what will be done to resolve the problems

Just to say, Cllr Bradwick had just come out of hospital after major surgery on his shoulder, yet was hands on with residents

Aberdare East Ward Councillors

Councillors Steve Bradwick and Cllr Mike Forey

ABERCYNON

We write with reference to the flooding that occurred in our ward during Storm Dennis earlier this year.

We fully appreciate that Storm Dennis was an extreme weather event that caused damage across the whole of the County Borough of Rhondda Cynon Taf. That being said, we would like to raise the plight of the residents in Abercynon Ward who had their properties flooded and had to move out for a long period of time. Many of them lost household belongings and personal items of great value.

Three principle areas in Abercynon Ward were affected by flooding as a result of high river levels and culverts that overflowed. These areas have experienced flooding on a number of occasions over the past ten to fifteen years. As one would expect, residents would like the Council to explore measures to prevent flooding in the future.

I will take each area of flooding in turn.

Wood Road

- Flooding occurred when a culvert burst at the top end of the street. This has occurred a number of times in the past ten to fifteen years following heavy rainfall.
- Flood water overwhelmed flood prevention measures that were installed within the past five years.
- The flood water reached a very high level due to the street laying in a 'basin' and the high railway embankment prevents water from flowing or draining away.
- A large water tank to the rear of the properties designed to take floodwater was empty during the storm.
- We ask that officers assess the condition of the culvert with a view to increasing its capacity to take more water. We also ask that Council officers explore the effectiveness of the flood prevention measures that were installed in the past five years.

The top of Nant y Fedw

- Flooding occurred due to an overflowing a culvert that takes the stream from above the road under Nant y Fedw housing estate.
- House No. 263 Abercynon Road was flooded due to the overflowing of a culvert and high water levels in the steam on and adjacent to the property's land.
 Residents have reported that a device designed to sound when flooding was imminent, did not function.
- Water flowed at a high speed and volume down footpaths at a lower level.
- The force of the water was such that residents had to smash down a wall in order to allow water to flow away.
- The floodwater overwhelmed flood prevention measures installed in the past five years.

- Properties at this location have been flooded on a number of occasions in recent years during heavy rainfall.
- We ask that officers investigate the condition of the the culvert with a view to increasing its capacity and also the effectiveness of the flood prevention measures that have been installed in recent years.

River Row

- Flooding occurred due to high river levels overtopping the river bank.
- This was compounded by the overflowing of the stream adjacent to the Park Road Path.
- Water pools in a number of locations in the street due to the poor road surface that is not aligned with drains. We ask that this is resolved by the resurfacing of the street.
- We ask that officers look at what improvements can be made to river bank flood defences working with Natural Resources Wales and also, working with Transport for Wales officers, seek to increase water capacity on the stream water course.

We know that Council Officers have been extremely stretched during 2020 due to Storm Dennis and the global Covid-19 Pandemic. We kindly ask that officers look at the matters raised in this letter to assess whether additional capital monies from the Welsh Government could be used to improve flood defences.

We would be very grateful if you and Council officers could look at the contents of the letter setting out the concerns of residents in our ward at what is an extremely uncertain and unprecedented time.

Abercynon Ward Councillors
Cllr Rhys Lewis
Cllr Elaine George

CYMMER (Written submission & Photographs)

- 1. WW admit that alarms in Trehafod and Britannia pumping stations sounded around 2 a.m. on the morning of 16th February, which alerted WW that there were operational problems at both pumping stations as the flood water increased.
- 2. Both Pumping Stations were visited, by an employee of WW, at around 7 7:30 a.m. on the morning of Sunday, 16th February. During the visits, the flood waters, in Trehafod and Britannia, drained away very quickly as the pumps were brought into action. Unfortunately, during the Intervening period between 2 a.m. and 7:30 a.m., over 40 homes were flooded in Trehafod and around 30 homes in Britannia.
- 3. In a Trehafod Flood Action Group liaison meeting held on Friday, 13th March, at the Heritage Park Hotel, WW suggested that, in Trehafod, RCT maintained highways drains were blocked, thus preventing floodwater flowing into the appropriate drainage network in order to be pumped away. They confirmed that these highways drains were unblocked between Storm Dennis and Storm Jorge. Furthermore, in a telephone meeting between Chris Bryant M.P. and WW, held on Friday, 24th April, WW suggested that a culvert overflowed and contributed towards the flooding in Britannia, together with the collapse of the river wall. (I am informed by residents that the homes were flooded before the river wall collapsed. It was the force of the floodwater re-entering the river that caused the weakened river wall to collapse.) Furthermore, WW seems to suggest that RCT Council may not have maintained the culvert, which overflowed, thus contributing to the flooding. WW also suggest that the river wall at Britannia should be reconstructed as a flood defence, even though the pumping station at Britannia is only around 10 years old and was built on the site of the old Lodge Public House (Britannia Hotel) in order to prevent a history of flooding at this location. As far as I am aware, there were no plans to install flood defences along the river banks. As in the case of Trehafod, I am informed that floodwaters came through the
- drainage system and toilets and passed sewage into the properties.
- 4. WW has admitted that the capacity and power of the pumps in Trehafod may have to be increased, presumably due to the age of the pumping station equipment. The other pumper station in Trehafod, based at Hafod Primary School, seemed to work effectively and prevented flooding in nearby streets, such as, Lewis St., Wayne St., etc., despite the unprecedented volume of water, at this location, which did not hydraulically overload the network and did not overwhelm the pumping station. (I know that Chris Bryant M.P. would be familiar with the pumping station at Hafod Primary, as he was involved in resolving potential flooding by enhancing and improving capacity, around 18 years ago, together with Yvonne Caple, who was a RCT Councillor at the time).

However, Britannia pumping station is a relatively modern construction, being around 10 years old. I believe that there has been no flooding at this location during this time.

5. A financial hardship payment, as a "gesture of goodwill", was given to residents of Trehafod, by WW, as an emergency payment of £1,000 ".....to enable you (the residents) to deal with the immediate aftermath of the flooding incident". Also, a GSS (Guaranteed Standard of Service) payment of approximately £200 was made by

cheque, equivalent to the annual sewerage bill. Furthermore, for those without home insurance, WW offered claims for property/internal damage using WW's insurers Willis.

Therefore, by implication a similar "goodwill gesture" should be made available to the residents of Britannia, as the circumstances are the same. After the Trehafod Flood Action Group meeting with WW, held on 13th March, I asked Steve Wilson if he would give due consideration to a similar compensation scheme for those residents of Britannia, whose homes were similarly devastated by flooding, as a result of Storm Dennis, and he kindly agreed to do so.

6. Also, In his correspondence to residents of Trehafod, Steve Wilson, Director of Wastewater Services, in his opening paragraphs, commented as follows, viz., "We are aware that parts of Trehafod suffered extensive and devastating flooding last weekend as a result of Storm Dennis.

We appreciate the heartbreak caused by this flooding, and while our investigations and monitoring system show the flooding was not caused by the local pumping station and that the station continued to operate as designed, the pumping station was simply overwhelmed by the unprecedented volume of water caused by the storm.

At no point was the pumping station switched off. Some customers noticed a Welsh Water technician visiting the station on 16th February. This visit was triggered by the pumping station alarm indicating that storm water levels were increasing......

Our investigations show that the flooding was caused by the extreme weather hydraulically overloading the network which was simply unable to cope. It was not caused by the failure of the pumping station. While we do not accept liability and responsibility for the incident, we know the financial hardship caused by such incidents and this is why we are taking the steps......to make things easier for you.... We will work with you and the local authority over the next few weeks and months to help restore your homes....."

Surely, these well-meaning sentiments, agreeing to a compensation package for Trehafod, apply equally to residents of Britannia, and yet no compensation scheme or assistance has been forthcoming, in order to alleviate the financial hardship of residents in Britannia affected by flooding.

I believe that both WW and NRW are abrogating their responsibilities and abandoning the residents of Britannia, leaving RCT Council to consider repairing, enhancing and modernising the river walls and flood defences.

During Storm Dennis the river walls, including some of the gardens, between 5 & 8 Eirw Rd., were washed away, completely or partially (see attached photographs).

No. 8 Eirw Rd was eligible for a Flood Recovery Grant of £500, as flood water entered the house.

However, in the case of No. 7, for example, the resident was not eligible for £500 as no flood water entered the house, even though the river wall and garden has been washed away. Is there any discretion, under the regulations, to pay the Flood

Recovery Grant in such circumstances, due to the significant damage incurred to the property?

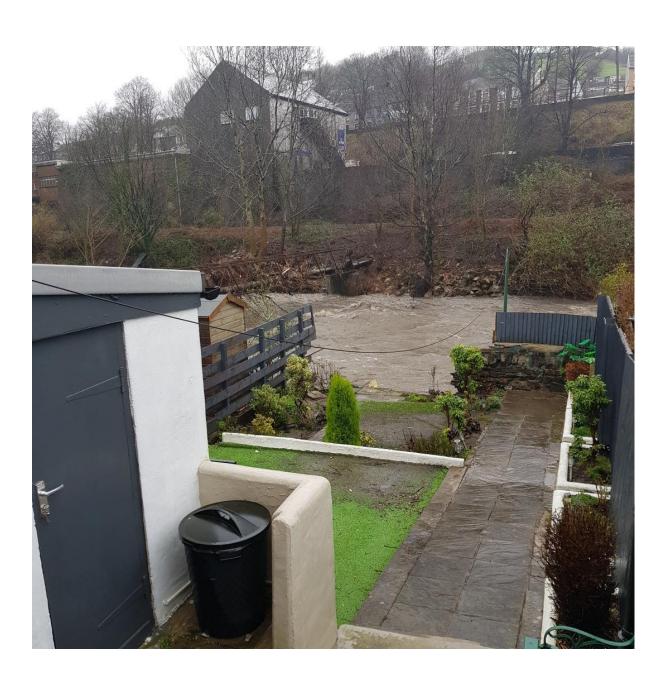
Furthermore NRW has stated that the walls were not flood defences but river/training walls, therefore the responsibility of the riparian land owner. The insurance companies have also stated that they will not bear the costs of repair to the river wall as they are regarded as flood defences.

A "catch 22" situation indeed.

I shall be obliged if, in due course, you will consider these circumstances and, perhaps, provide advice in relation to eligibility for an Emergency Assistance Payment Grant from Welsh Government, a Community Recovery Grant or Council Tax exemptions.

Councillor G Caple

Cymmer Ward Councillor













Jayne Brencher The Graig Ward

Whilst residential properties in my ward were mainly unaffected by the extreme rainfall and flooding that occurred in Pontypridd in February, there has undoubtedly been a negative economic and social impact on the town, including businesses in the High Street area. Overnight the town became inaccessible and severe flooding in Taff St and Mill St impacted on all the town's businesses. During the night, we monitored the situation closely but I visited the next morning with Alex Davies-Jones MP after flood water lowered in Taff St. Speaking to various businesses across the town, it was clear that the destruction was overwhelming and a deep despondency of the town's future was expressed.

The loss of the pedestrian access into the Park via the Marks and Spencer bridge was also deeply felt. However, within hours a clean-up operation began by business owners and volunteers, supported by RCT staff and a strong community response became evident.

The role of GTFM as a means of communicating information and organisations such as the Town Council - itself severely impacted - became evident, but most importantly the enormous response of local residents and businesses which was to become an important factor over the coming days. RCT staff were able to focus on responding to extreme immediate emergency call outs and supported local efforts. This role strengthened as the days passed and RCT worked closely with local groups to establish a more co-ordinated support network.

Of prime concern, however, was the situation in households directly affected in the town area such as Sion St and Berw Rd immediately bordering the town.

All local members in the wider Pontypridd area co-ordinated efforts and the Treforest and Trallwn Community Centres established themselves quickly as centres for flooded residents and over the following days they provided a critical support network.

Local churches and volunteers must also be commended for their huge efforts over the following weeks. Hot meals were provided by Coedpenmaen Baptist Church and other local churches in addition to support from the Mormon church which was celebrated later.

Donations came from across the UK and clothing became such an issue that through social media we were able to establish the need for cleaning items (humidifiers etc.) to focus donations .The health and safety aspects of cleaning properties were quickly highlighted and RCT officers were able to offer advice.

The presence of a lady from Save the Children fund helped in the disaster relief operation and local volunteers should be commended for their professional approach supporting our officers and staff.

Once personal well-being and alternative accommodation for those effected was established and all residents checked by local members and RCT staff, issues emerged relating to insurance and volunteer solicitor William Watkins attended the Trallwn Centre on behalf of Capital Law to give free advice on insurance issues. RCT mobile library also visited to offer advice to residents and at Trallwn we set up Citizens Advice - and they, with RCT officers, were able to navigate those affected through the grant processes and other post flooding challenges.

It is notable that all local members worked closely together and regular meetings with RCT officers were established at the centre until officers were able to move the remaining donations and allowed the centres to continue their normal functions. The outcomes were that, as a result of this extraordinary response, affected families were not only receiving practical support but were really moved and warmed by the responses from within the town and beyond.

This community spirit was again evident with the Covid 19 volunteer groups that sprang up across the area and there is growing confidence in the community that the town is resilient enough to cope with anything!

Lessons learned

- The vital need for quick response coordination which would include the Pontypridd Town Council and community centres and local volunteer groups-a contact network and emergency response strategy constantly updated with key partners.
- Communications with volunteers etc through local media and social media coordination to avoid misinformation and data security –names and addresses of those needing support were sometimes shared openly.



Date: 12th November 2020

RE: RCT Labour Group's Response to Storm Dennis

We are writing to you to provide an overview of some of the RCT Labour Group Member's experiences and feedback on the truly devastating weather events in mid-February, which not only saw residents and businesses affected by flooding on an unprecedented scale, but also saw a significant amount of the Council's own infrastructure sustaining damage, including highways, river walls, culverts and bridges. This was, of course, exacerbated by the landslip at Llanwonno/Tylorstown, which saw 60,000 tonnes of material fall away from the mountainside, thankfully at no loss of life.

With almost 1,500 of our residents and businesses affected, Storm Dennis brought the worst flooding episode that Rhondda Cynon Taf has ever witnessed, and this was also the case in a number of communities spread across England and Wales. The weather event has since been classified as a 1-in-290 year event that brought a month's worth of rain in just 48 hours, with 160mm of rain falling in Maerdy between midday on the Friday and Sunday, 16th February – this was the highest level recorded in Wales and was closely followed by recordings in Hirwaun. The scale of the event prompted the Met Office to issue the highest level (Red) weather warning which poses a severe risk to life and prompted a major incident to be declared in RCT by the emergency services. This was clearly an extraordinary weather event.

It is evident from the initial investigations that the causes of the flooding were complex and multifaceted, with pluvial flooding prevalent in a number of communities in the northern areas of the County, and river flooding the primary cause in more southern areas. The two are, however, inexorably linked, with the significant rainfall further up the valleys driving the three rivers situated in the County to record their highest levels for a generation – including the River Taff, which broke a 40 year record by 80cm in reaching a level of over 5m.

With regards to the Council's response on the night, crews did largely attend the vast majority of calls, with some responses (particularly during the early parts of the night) particularly swift and others many hours later, although we fully recognise that this was due to the sheer volume of calls being received from across the entire County. Several main artery roads were rendered impassable due to deep flood water, which also hampered crews in getting to some locations. Furthermore, in some instances, the severity of the flooding was so great that Council staff could do very little even when they did attend. Some Members have relayed that even with Council

staff and emergency services attending the scene and pumping water, the volume of rainfall was so great that the actions had little to no effect.

The consensus amongst Members of this Group is that whilst the Council did take the necessary steps to prepare for the weather event by sourcing additional Highways and Call Centre staff, as well as additional plant and machinery via external contractors, the intensity of the weather event and their widespread nature created challenging circumstances for the Council and emergency services.

It is our view that, given the severity and the scale of the damage and destruction caused by Storm Dennis, that the Council's response in the aftermath of the event was timely, effective and concentrated the help and support it provided in the right areas. Through the establishment of the Major Incident Recovery Board, the £1.5m released from the general reserves and the further £500,000 were able to be allocated to supporting priority individuals and households via initiatives such as the Community Flood Recovery Grant – Hardship Payment and four weeks of free school meals; small and medium-sized businesses through the £1,000 payments and the provision of skips to those internally flooded; and emergency infrastructure assessments and works. We would also like to recognise the hard work of Council staff and Officers in assisting those who had been affected both on the night and over the course of the following weeks and months.

It is widely accepted that the increasing impact of climate change is likely to mean that we experience more severe weather events more often. It is important that the Council now focuses on potential courses of action that can be taken forward to mitigate the risks of such devastating flooding occurring again in the future – both in preparedness for such events through the further development of a comprehensive programme of flood defence works (which we note to already be ongoing), and also in terms of responding to major instances of flooding.

To conclude, while the Council took the necessary steps to prepare in advance for the impact of Storm Dennis, this was clearly an event that none of us have ever experienced previously and it is vital that – in light of the factors outlined above – the necessary lessons are learned to inform the future planning and response. We would welcome the Council bringing forward a detailed plan of investment over the next 3-5 years in addressing these key flooding areas within the Council's responsibility; but also progressing discussions with both NRW and the Welsh Government about wider river flood protection assets. The Council needs to use this as an opportunity to review all of it's functions and responses to such a major event.

Submitted on behalf of the Rhondda Cynon Taf Labour Group

RE: Local Submission from the Councillors for Mountain Ash West

We are writing jointly to share our local experience during the unprecedented flooding events caused by Storm Dennis on the weekend of Saturday, 15th and Sunday, 16th February.

We were first made aware of flooding issues in the Glenboi area at around 10:15pm – due to the horrendous weather and torrential rain. At this point, we experienced no issue in getting through to the Council's call centre and reporting the incident, which was promptly attended by the Council's Highways crews. We also made a 999 call to the South Wales Fire and Rescue service responded to to assist in pumping water.

Despite Highways Officers checking the pumping station at the location, which was working at maximum capacity, and the Fire Engines in attendance pumping the water with 2 appliances, the water levels continued to quickly rise due to the sheer volume of the rainfall. At around midnight, Emergency Planning Officers were contacted as we became aware of further issues of flooding arising in other locations across Mountain Ash and evacuations were needed.

By the early hours of the morning, the situation had sadly deteriorated further, with significant flooding of some key routes in and around Mountain Ash, including the town centre and Miskin Road, as well as a section of the major A4059 route, meaning it was almost impossible to get in or out of Mountain Ash by the early morning.

In all of the local cases of flooding that we reported, the Council's crews did attend, albeit in some cases it was many hours later due to the sheer volume of calls that were being received on a County-wide basis. Furthermore, the flooding was so severe in some instances that there was little that staff could do even when they did attend.

In the days following the flooding, we had a number of site visits with Council Officers and Natural Resources Wales, and we are pleased to see that progress is being made in carrying out some of the repairs and improvement works. Whilst work is only being carried out at a few sites so far, we are aware that investigations and design works at many other sites across RCT are ongoing and will need to be prioritised as part of the Council-wide programme.

In both of our experiences, it was certainly the worst flooding episode in Mountain Ash that either of us can recall. We both share the view that we were able to contact the Council until around midnight to report issues and Officers responded as well as they possibly could, especially before the situation drastically turned for the worse across the County at around 12am-1am as the storm intensified.

In terms of the recovery, the use of the library bus supported by CAB was something that was well received by residents as a point for information. Residents clearly remain anxious whenever there is bad weather so the Council needs to lay out a programme of flood alleviation works for the next 2 to 3 years.

Yours sincerely,

Councillor Andrew Morgan Councillor Wendy Treeby

Mountain Ash West

Plaid Cymru Group Submission to the Overview and Scrutiny Committee relating to the Floods

Unprecedented. Devastating. Traumatising.

Those are the three most often used words in relation to the floods that hit so many communities across RCT this year. And we weren't the only communities affected, with similar scenes being seen across the country.

All Councils affected have been overwhelmed, and it has been estimated that at least £500m more is needed in the next decade if Wales is to avoid significant flooding.

Unfortunately, though for those communities affected, many of the questions they have remain unanswered nine months on, with some suffering further floods as recently as August. Every time there is now heavy rainfall, people are naturally anxious. Nothing done to date has alleviated their fears.

A number of reports have either been published or are pending, but it is clear that they are limited in scope and are conducted by the organisations themselves rather than by an external agency. We believe, as do thousands of residents, that there must be an independent inquiry to bring together all those reports, scrutinise them and bring together the evidence and experiences of residents and businesses. It is the only way that we can secure the answers and justice for the residents and businesses affected.

At the recent meeting of the Overview and Scrutiny Committee on 9 November 2020, we were limited to a maximum of 5 minutes to present our views. It should be noted this was the only time we have been asked for our evidence, though we have asked for the opportunity to do so a number of times since February. This is not sufficient if the Council is serious about learning lessons from its response to the floods, to help inform future investment as well as response in an emergency situation.

Why should there be an inquiry?

Limitations of Section 19 reports

The reports referenced in section 19 of the Flood and Water Management Act do not differentiate between a major incident of flooding and more localised flooding. We believe this to be inadequate in light of the severity of the flooding that occurred in RCT this year.

In effect, the act also asks Councils to investigate themselves as part of the process, something which is surprising given the important role Local Authorities also play in flood prevention.

Businesses and residents affected do not have any opportunity to input their own experiences as part of this process and submit evidence. Again, given the scale of what occurred, this means that all reports published or are pending are limited in what they will reveal. Video footage and photographs would greatly help

investigators to better understand what happened in each of the locations affected, as the reasons differ widely and include potential lack of maintenance of drains and flood defences, failed pumps, trees been cut from mountainsides and debris left in rivers and much much more. The only way we can plan to prevent flooding in the future is by understanding what happened. Only an independent inquiry will be able to achieve this, by taking a holistic overview of what took place and why, and also, if anything could have been done differently that would have prevented homes and businesses from being affected to the extent they were. It would also help us understand the Council's preparedness for floods, as well as response to the floods this year and help us learn lessons for the future.

Climate Emergency

In 2019, the Welsh Government declared a climate emergency. The Future Trends report, published in 2018, predicted that by 2030 the predicted potential impacts on Wales include flooding, coastal changes, drought, shortages of water, risks to health and wellbeing from high temperatures, and risks to nature.

An independent inquiry would help us understand the role the changes to the climate played in the flooding and determine what actions we need to take now – rather than in years to come – in response to climate change. It would also help determine how we should best invest to prevent flooding. RCT Council are taking some steps to try and prevent some further flooding but these are sticky plaster solutions rather than permanent ones. We need a plan that takes into account both the whole of RCT, and arguably the whole of Wales if we are serious in responding to the Climate Emergency.

Wellbeing of Future Generations Act 2015

We are fortunate to have in place in Wales the Wellbeing of Future Generations Act, meaning that all public bodies – including Local Authorities and Natural Resources Wales – must embed the act in all that they do. Obviously, the 2010 act does not take this into account, and therefore is focused on finding out what happened in a local area at a point in time rather than also being focused on future outcomes. An independent inquiry would need to apply the principles of the act to their work, making it a much more worthwhile and insightful process than simply a Section 19 report.

Impact on physical and mental health

An independent inquiry needs to include looking at the impact the floods have had on the health and wellbeing of residents affected, both children and adults. The Section 19 report looks at the material elements, eg, if pumps drained properly but it does not in any way look at the human side of the impact. As local Councillors representing areas affected, we have seen with our own eyes the toll the floods have had on the physical and mental health of children and adults. There is a long-term impact that needs to be considered, and none of this is being looked into at present.

Impact to the local economy

Many of those affected had been costed out of insurance or did not have cover for flood damage. This has had a huge financial impact on them, and also means they are either not able to secure insurance for the future or are facing extremely high premiums. We must look at how we can support businesses and residents in these areas, so that if the worse happens again in the future, they are protected.

Many businesses that were flooded are also lacking confidence in the way the reasons for the floods are being addressed, and are now considering re-locating to an area where there is a lower risk of floods. Given the importance of businesses as employers, especially in an area such as the Treforest Industrial Estate, it would be a huge blow to an area that already has high unemployment and high dependency on food banks. This would further increase child poverty in the area.

Conclusion

Whilst it is intended that our five minute presentations will feed into the Section 19 report, given the limitations of what we could present in such a short time and that no in-depth evidence has been sought from us nor the residents and businesses affected, it is clear that the report will not be able to take into account the many issues that the local communities have raised. It will mainly relate to technical matters and will be limited in being able to help us understand how the Council responded, and the lessons that we need to learn. Hence the need for an independent inquiry.

The precedence for commissioning an Independent Investigation was made in the first National Assembly for Wales in 2000.

The Environment, Planning and Transport Committee under the Chairmanship of Richard Edwards AM commissioned an Independent report to LEARN any relevant lessons and INFORM future policy on waste disposal in Wales. This is known as the Purchon Report on the Nant Y Gwyddon Landfill Site dated 12th December 2001.

Like flooding there was a regulatory framework covering waste disposal but it did not stop that committee with the full support of Sue Essex AM - the then Government Minister who had portfolio responsibility - from supporting an independent Investigation to learn the lessons and drive forward policy in Wales

The terms of reference were set by the Committee in consultation with the Minister and used as headings to format the final published report. The infamous Tip was operating throughout the investigation but closed following the publication of a very damning report. Many agencies regulating the hazardous waste at a national and local level were held to account in the final report, as was RCT and its predecessor Council. The Environment Agency, Audit Commission, Wales Office and National Assembly also had questions to answer.

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There is a striking comment highlighted in the report in relation to information being withheld by public bodies who relied on "commercial confidentiality "to defend their position.

"When seeking to investigate matters of great public interest, where virtually all the business concerns public money and where the risks, financial, health and environmental, fall on the public, and its purse, lack of transparency is unsatisfactory".

The report also says,

"The procedure was entirely new and required a degree of innovation, tolerance, flexibility, patience and good will from all those involved " and also " The search for facts, relevant data and opinion is never easy and in the UK we are not used to non-adversarial governance or inquiry procedures. The National Assembly for Wales has sought to conduct an entirely open investigation and I feel honoured to be part of that approach in the early days of the Assembly's history. "

We hope that this brief reminder of the innovative way that the first Assembly, in its infancy some two decades ago, dealt with a very high profile environmental disaster in the Rhondda will persuade the Overview and Scrutiny Committee and the Cabinet to use all its influence to support an independent inquiry.

We have nothing to lose, but everything to gain if we allow for proper scrutiny of the floods and our preparedness and response. Those affected must be given the opportunity to have their say, and receive the answers they deserve about why the flooding occurred. This will help us better understand how to prevent flooding in the future, as far as is possible, and inform where investment is needed. It will also help inform how best to support the children, adults and businesses affected in a cohesive and joined up way as well.

Importantly and crucially, it would help us as a Council to understand if we could have done anything differently, before, during and after the floods. None of the reports currently underway or published will provide that honest and frank assessment which is essential if we are serious about learning lessons for the future.

Appendix A:

Evidence sent to Cllr Heledd Fychan from affected residents and businesses, and why they believe an independent inquiry is essential, as part of the campaign for an Independent Inquiry.

"I've been left with bronchitis since the floods. I'm still on antibiotics and steroids I'm not well at all they wanted me to go into hospital yesterday but I said I can't because my son is gonna uni on Monday and I've got two other children. Now we are in lock down I'm not good with my mental health either"

"I honestly feel like this experience has pushed me to the brink. It's been one of the worst things I've ever experienced and still affects me every day in some way. Even filling in this survey and thinking back to it all I've cried. I had 6 weeks off work with stress, I can't sleep or relax when it's raining badly. I don't know if I'll ever be the same again, I've spoken to many neighbours who all agree it's like we have PTSD. The mental and emotional stress of the whole situation has absolutely shocked me, I've always regarded myself as a very strong person but this almost broke me. Waking up at 5am to the sound of running water and going downstairs to dirty water pouring in your house and looking out the window to see a literal river raging past your house and taking cars with it, with absolutely no warning at all, it makes me sick to my stomach thinking about it even now. How are we ever supposed to relax in our homes again when there's bad weather? We can't trust NRW or RCT for that matter. My sense of safety in my home has been robbed from me and my family. We've been moved into an unfurnished flat in a strange area and then we went into lockdown as well, we literally have a bed and a tv because we lost everything else and then with lockdown getting furniture was practically impossible. Then on top of all that stress we have the stress of trying to rebuild our houses and lives, deal with insurance companies who are basically soulless monsters in some cases, source 2 new cars. If I ever had to go through this again... well, I don't think I could. I'd be in a psychiatric hospital. They need to protect us before they take more of us and more from us than they already have, we can't survive another instance like this."

"I'm disabled the help we received we zero we had to do all the work ourselves."

"I feel extremely let down by authorities, we have been forgotten about and no one wants to own up to their part in what has happened. The council think that by giving some money it will go away and welsh water/natural resources won't take won't accept liability, and I as the innocent party am now paying the price, I have had no help off anyone because I've had insurance which is unfair as I've done the correct thing. I have lived in Treforest for nearly 12 years and loved it up until that night, I no longer wish to live in the area if no one can help prevent this from happening again but will not be able to sell now and am stuck there."

"Our eldest daughter (20) has been diagnosed with PTSD as a result of the flood. She is on medication, receiving counselling and although she tried, she has been unable to return to work and as a result has had to leave her post with BT. Her wellbeing is very much our focus. We cannot believe that we have never had that much rain before, there must be a more rational explanation. Someone is

responsible, we are desperately worried that this may happen again. We need reassurance that steps will be taken to prevent another disaster. Anxiety levels are high every time it rains."

"In some respects The lack of support from the local authorities as far as they are concerned we have insurance so that's our problem bear in mind many insurance companies have got out paying out or underpaying. The lack of any report, any sign of prevention, even just answering our questions or having a meeting. I have to reassure my wife and young children it won't happen again and I honestly cannot tell them that it won't. Also I would really want to know why major funding campaigns were set up separately rather jointly as we are all RCT and we were all affected."

"We needed advice on what to do to the house (in absence of insurance company guidance). This advice was very difficult to get despite contacting RCT many times. They responded once our local councillor expedited our request. We are now very anxious each time it rains. We need answers to whether this was a natural event or whether there is blame. If there is blame, then we will hopefully rest easier during future rain storms as we would live in hope that lessons would have been learnt."

"We had a lot of presence from council, dwr cymru and NRW etc in Treforest immediately following the flood. Almost 6 months on much of the discussion seems to focus further up the valley and Treforest residents and effect in Treforest (not Pontypridd Town or Pentre) is largely forgotten. We would like to safeguard our house by moving entrance ways to the property to higher ground, is funding or can funding be made available to strengthen personal flood defenses."

"It was very traumatic when it happened - it has caused my mental health to worsen and I live in fear that when I am able to move back that it will happen again. Where I am living now I feel isolated and alone -trying to cope one day at a time to stop myself from feeling suicidal And depending on people to chat with on phone Especially past few months due to COVID not able to visit my elderly parents or friends and family."

"I would like to know what happened that night. It wasn't just the rain it was something much more significant that morning on the 16th February. We are devastated and will always live that nightmare. Also Financially it's devasted me bringing up two children of GCSE ages on my own."

"The stress and financial effects of having my business closed due to flooding has affected me greatly I have never had time of work before but haven't worked now for four and a half months and I'm one of the lucky ones that had the builders in straight away regardless of covid."

"Yeah since being in the floods I haven't long come off medication because I had newmonia and chest infection several hospital visits and tests and they said it was because I was up to my waist in water now I've been left with bronchitis for rest of my life" "I also lost my car in the flood. It's been a Very stressful time. I am a single person. I am now living with my parents In a small 1 1/2 bedroom house. I am still going to work. The whole experience has been horrific and very upsetting."

"Because of covid Prehaps the council could have helped with priority supplies of plaster etc that would have helped immensely. I am extremely worried about the increase and availability of insurance for next year."

"it has been an horrific time for myself and family. We have had to move out while repairs are taking place as the house was unlivable. It will be 6 months in total before we will be able to return"

"It has tipped our life's upside down, our 3 children's houses were effected too, to see that much water and devastation in our house has been horrendous and it's hasn't helped with Covid 19"

"We are concerned about the impact on resale of our home (We has planned to sell this year) as well as insurance premiums and of course the impact of future floods on our home and our lives"

"It's destroyed our lives, the difficulty with the insurance is unbelievable, 5 months on and nothing done at property, they are looking to knock down 7&8 Rhyd-Yr-Helyg and rebuild"

"Just that I think it could have been prevented and someone has messed up somewhere and we need answers, my dads last months should have been in his own home not in a Temp house"

"There was no help we was left to fight the floods ourselves with our neighbors .if wasn't for my neighbours helping me I would have been in more mess"

"The level of response for Trefforest was less than anywhere else, they had council employees cleaning the park before helping with peoples houses!!!"

"How it's turned out lives upside down. Petrified when we have bad weather. Kids asking are we going to flood again. Living in fear."

"Haven't cleaned up the roads and pavement after the flood and haven't collected the sand bags from Trehafod all over the pavement"

"We lost our pet. Our dog was downstairs. Our children are traumatised knowing she suffered and drowned. We want answers"

"It was one of the worst experiences ever which is still going on.. mentally, physically and emotionally draining."

"We took the brunt of the water because we were directly in its path we have left our home structurally unsafe"

"Just the devastation it caused to the community and the community spirit shown by everyone was superb"

"my car was written off. I am £600 out of pocket from car hire charges because it was a natural event"

"We are still in temporary accomadation that one night has kept us from our home and neighbours"

"I just hope nobody else goes through it,my wife was in tears,all of our family photos are gone."

"I never want to experience this again abd I am scared to return to my home when it's finished"

"The lack of sympathy that was shown by the council left us for 3 days with nothing"

"I have lots to say, including being insured is irrelevant. We are not in our home."

"It's been the worst experience ever and would never want to go through it again."

"I live on my own and I was petrified as it was on the fourth step of my stairs. No warnings. Middle of the night. Rescued by boat the officers were brilliant!"

"Felt like we were on our own watching all our treasures going down the drain"

"It's just heart breaking and mentally put strain on our family."

"Was not alerted quickly and not enough time to move possessions"

"Council did nothing till it was too late."

"Not enough support no am or mp in sight"

"It's really bad and stops your life"

"I have mental health issues since the floods. Please help me."

"If I may share my experience briefly - my business is located within Rizla House (the former Rizla factory building) in one of the units to the rear, north facing side. We look out to the substation which separates us from what is known as Power Station Hill i.e. Tonteg Road. We were therefore in the 'firing line' when the flood water came and had around 14 inches of water inside our unit which resulted in a great deal of the equipment stored there being affected and around three months of work to save the vast majority of it! I remember watching the aerial images of the river rising and seeing the path that the flood water took. I noted that the river breached its bank at the rear of the small industrial estate at the other side of Power Station Hill, known as Taf Business Centre. This breach was adjacent to the old transport cafe at the rear of the site. In the days following, I did a little recce of the area and observed that contractors had been at work in that exact area on the river bank installing perimeter fencing. Now, I cannot prove that they did anything to compromise the bank there, but it did seem at the time that there were less trees there and that the bank was perhaps a little lower compared to images found on Google Street View from a couple of years prior. Regardless, of any issues of liability, it is clear to me that this section of the river bank needs building up in the same way as has been done further along Tonteg Road - opposite the Hutchings

Vauxhall and other car dealerships. At no point did the flood water breach the builtup embankment there. Thank you once again and here's hoping that answers are found and something can be done to protect residents and businesses from such catastrophic events in future"

"While our area of Hawthorn was not actually flooded, it was a 'close' call. Mentally it caused myself (even while with family in NZ) and neighbours, many hours of worry watching the water 'lap' at the very top of the flood bank, near us!!

It still does worry me personally, as of course this could/will re-occur??! would support an Independent enquiry because -

- a. Worst flooding in my living memory and I am 70 years old
- b. Overall COST financially of the floods to the tax payer AND the negative impact this has on our RCT area. Seeing photos of the town centre under several feet of water.
- c. The impact mentally, physically and financially to residents and businesses on the area. Again, on a negative note many businesses may be considering relocating? These businesses need to know things will not be 'brushed under the carpet'. We want them to be convinced and confident to remain in RCT.
- d. No political bias. A party majority, would likely result in actual or perceived bias!
- e. Independence infers fairness, truth, facts AND no 'bulls..t
- f. 'Scotch' rumours replace them with facts
- g. Result in recommendations which can be audited and properly action planned/supervised.
- h. If needed, not only genuinely learn from any errors but also, bring people/organisations to account."

"We are at Lewis St Pentre and we were flooded in February and high water levels in June......

The trees were removed from the mountain in Pentre and when we had rain the brash washed into the culvert blocking it so the water overflowed into the lower streets of Pentre

We had been renovating for a year and we were moving in in 3 weeks time, then got flooded so we're unable to move in until the end of May.

We were not insured as the house was classed as empty so not able to insure an empty property

WE ARE LIVING IN FEAR OF MORE FLOODING EVERY TIME IT RAINS!!!"

RHONDDA

Additionally I would like to re-iterate the point I raised verbally during the meeting regarding the situation in Trehafod specifically. I attempt to capture them here:

- 1. As a councillor I was unprepared for the events and unfamiliar with the expectation on local councillors during an emergency situation in my ward. Based on this I would like to see a thorough training programme implemented.
- 2 Local councillors were the only people available on day 1, 2 and 3 in Trehafod to be a liaison between the population and council services. We were seen as representatives of the council by local volunteer groups and by members of the public. We were expected to know what was going on, what help was available, what the council could or could not provide. Access to this information was slow and difficult to come by, leading to frustration for myself as a councillor and frustration for local people.
- 3 Dealing with the anger and upset that was expressed by local people was difficult and potentially explosive. This should be considered in any future training provision
- 4 I feel strongly that local volunteer networks and councillors should be a key part of recovery work post emergency. This doesn't not seem to be planned for by the local resilience forum nor by RCT emergency plan with the content in these plans being far more strategic. Work is needed on a Community level to ensure there is a network of people ready to kick in with relevant training and designated tasks in such events. These volunteers could also potentially be active in monitoring local issues that are relevant to emergency situations.
- 5 Having one central point of contact was not sufficient for the needs of councillor and volunteers trying to help families in desperate conditions. Direct contact details of key individuals that were available to support, were known about through ad-hoc means and due to coincidence.

There is far more to share in terms of wider impact of the floods, that is relevant to all named agencies as well as agencies not currently part of a section 19 investigation, such as the local health board. This is why I support an independent enquiry.

My comments are offered in the spirit of learning and developing strong robust provision for the future. This is essential considering the climate change context. I am aware how hard everyone worked during this period and how many are still working now to deal with the aftermath of Storm Denis. It is important now that we identify what worked and what improvements can be made. I also recognising that people -officers, councillor and community volunteers worked as hard as they could during these hard times and am grateful for this.

Eleri Griffiths Cynghorydd Ward y Rhondda Ward Councillor

Response to Storm Dennis in Rhydyfelin Central/llan Ward

As has been said a number of times, the flooding events of February this year through three named weather events brought unprecedented levels of destruction and damage to communities across Rhondda Cynon Taf, with Storm Dennis seeing the worst flooding episode in a generation.

Communities in the constituent parts of the County were impacted – including many across the length and breadth of RCT that had no previous experience of flooding, and this extended across the Rhondda, the Cynon Valley and Taff Ely. Unfortunately, areas in the Rhydyfelin Central/llan ward, which I represent, were also affected by Storm Dennis.

It is important that in reflecting on the flooding events that we recognise the scale and magnitude of the event that impacted our communities earlier this year – Storm Dennis has been classified as a 1 in 290 year weather event. Many areas in the south of the County were impacted by river flooding – and the monitoring gauge for the River Taff at Hawthorn showed that the water levels were at their highest in over forty years and a full 80cm higher than the records for the 1979 floods.

This was a truly exceptional weather event that placed a significant pressure on many communities across Rhondda Cynon Taf through widespread devastation, with almost 1,500 homes and businesses affected. I would like to record my thanks to all of the Council staff who provided support and assistance to those residents and businesses affected by flooding, both on the night and over the days, weeks and months that followed. This has, of course, been made all the more difficult by the global COVID-19 pandemic which followed shortly after.

It is my view that the response from the Council in the Rhydyfelin Central/llan ward on the night was prompt and effective in assisting and offering advice to the residents affected. Furthermore, my own experience and that of my residents, has been that information from the Council in the aftermath of the event was relayed in a clear and swift way, particularly concerning the financial support available to those who had suffered internal flood damage via the Community Flood Recovery Grant – Hardship Payment and also in terms of the updates of the Major Incident Recovery Board.

Councillor Maureen Webber Rhydyfelin Central/llan

TAFFS WELL WARD

February's Storm Dennis reaped considerable damage to both Taff's Well and Nantgarw. All basement flats and rooms were under at least 4foot of water in Cardiff Road, Taff's Well. The local Park was under feet of water which destroyed the changing rooms, kitchen and Playgroup cloakroom, consequently emergency accommodation had to be found for the Playgroup to continue.

Nantgarw was badly hit and only 10 houses were not under water, all downstairs in these homes were destroyed. Residents were vacated from their homes via dinghies as there was no other way to access these homes.

Reports from residents were that by the time they received the warning of flooding they were already under about 4-5 feet of water with no time to remove any of their possessions to higher ground. Many of the residents were not insured and this as caused considerable stress and anxiety in trying to get their homes back to being fit to live in. Some houses are only just having work started on them and many still living in rented accommodation away from their Community.

These homes are situated on a flood plain, flooding was not caused by culverts or drainage but by the shear amount of water from the river, residents are constantly living on their nerves and when heavy rain fall's they are terrified that they will back in the same situation as the beginning of the year.

My question is what can be put in place to help alleviate any future flooding of the flood plain as NRW have stated that to build higher river banking will only push the problem down further towards Cardiff

Residents need some reassurance that something will be put in place to help mitigate any future flooding that may take place and feel secure that they can go to bed at night without worrying of further flooding.

Councillor Jill Bonetto
Taffs Well Ward Councillor

Treforest Ward (Submission & Photographs)

Dear Chair, thank you for the invitation to write to the Overview and Scrutiny Committee, I have as you are aware had the opportunity to speak to the committee and at to Cabinet at their meeting.

I would like to put on record my thanks to officers for the assistance I had on the Saturday Afternoon and subsequent early hours on the Sunday and throughout the period following the devastating flood and also for answering my queries about what actually happened in my ward.

Saturday afternoon 15th February

Having had warnings about the heavy rainfall we had been receiving and were due to receive even more I inspected my ward and paid particular attention to areas which are prone to flooding.

One of these was Cemetery Road Glyntaff which was already showing signs of flooding. I walked through the flood and went up behind the Crematorium to a culvert which is prone to block.

It had blocked and try as I did alone I failed to clear it and had to call out Streetcare for emergency assistance. Up to our waists in water we managed to clear the culvert and stop the water which was flooding Cemetery Road. I will attach photographs.

We cleared the debris from the numerous street drains which had quickly blocked with pine needles and blocked university traffic which was still driving through the flood causing waves to potentially flood the homes.

On this occasion Streetcare had saved the street from flooding but as it is a regular occurrence it will need to be addressed, I believe it already has agreed proposals for the work to be done.

I returned home to change and shower.

That evening the warnings got more severe, I had already posted Emergency Telephone numbers on Social Media so my community had the information to hand.

I had spoken to a residents of Cardiff Rd stating my concerns and that time the answer was in forty years we haven't flooded but my concerns still stood.

I went to bed hoping that this storm would pass by but as we all know it didn't. I was contacted in the early hours by residents who were devastated the river had burst its banks flooding Egypt St, Nile St, Niagra St and Cardiff Rd. I contacted my neighbouring ward elected member who I work closely with and we discussed the implications.

As I had been contacted by Egypt St Residents I went to Cardiff Rd first to make sure they were awake and prepared but it was too late the Castle Inn Bridge had blocked with debris and trees and caused the river to flood the street, which was also subject to a problem with a culvert officers informed me at a later date. Cardiff Road was completely blocked to traffic.

I then went to Egypt St I had to walk from Broadway because of the flooding. This was absolutely devastating cars completely submerged and houses flooded completely. Emergency services were in assistance. We made sure everyone was out of the properties, some of these house were student houses and bedrooms were downstairs a very worrying fact. I contacted the Community Centre and they opened up to setup an emergency centre. Everyone who needed emergency accommodation was transported there where officers had already set up and started ringing around. Again the professionalism of officers helped us enormously.

Throughout the day and followings weeks we continued to work as a community through the emergency centre to take and distribute donations of food, clothing, cleaning products and household goods.

This was without doubt the most devastating incident of my elected member tenure but not the first time I have seen the floods because as a professional newspaper photographer I had covered them before but it was the very first time I have had to deal with them as a community leader and representative and I can assure you that it is a very heavy burden to carry and hopefully it will be the last time I have to.

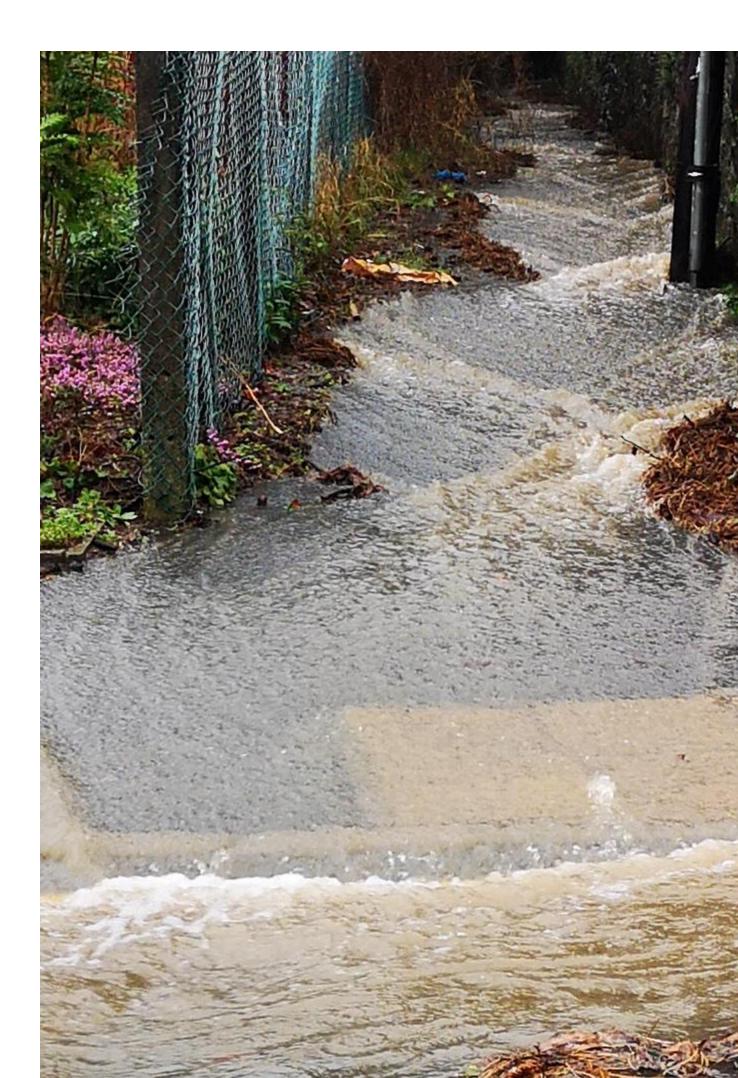
I do not need an enquiry to tell me how and why my ward suffered these floods I already know.

I need answers from NRW, Rhondda Cynon Taff CBC, Dwr Cymru and Welsh Government to ensure that should anything like this "190 year occurrence" ever happen again we have done our best to protect the homes, businesses and lives.

I want the section 19 reports to enable me to be able communicate with my ward and give them them the assurance we will within our powers do everything we can to stop this happening again.

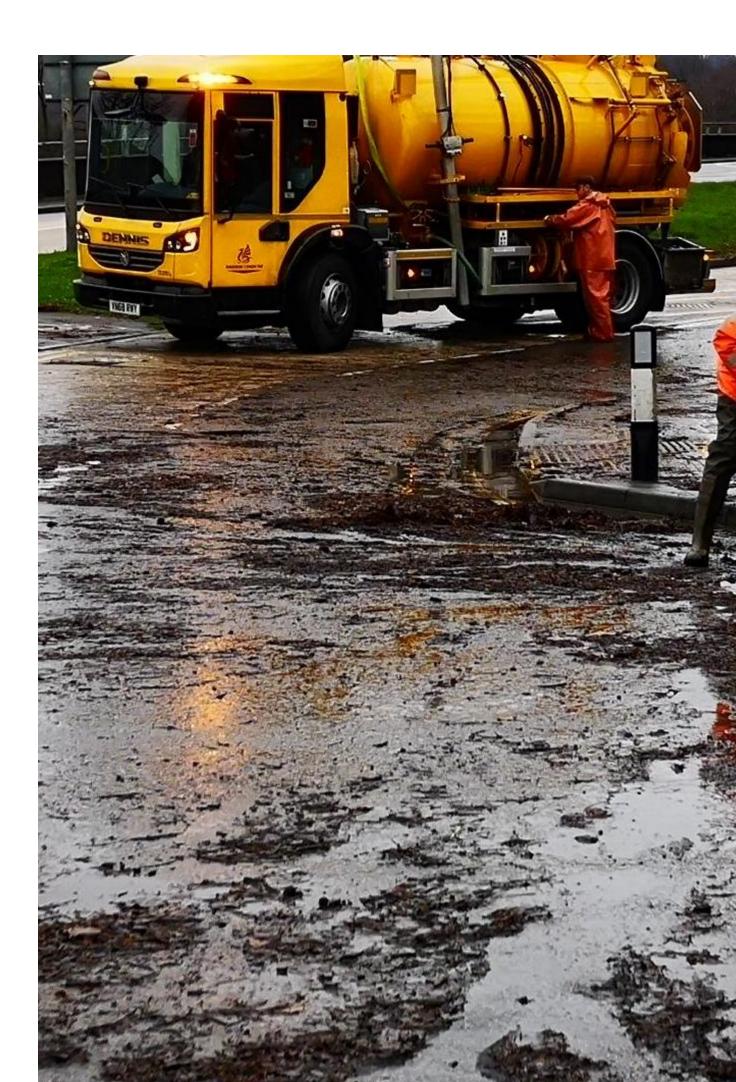
Thank You

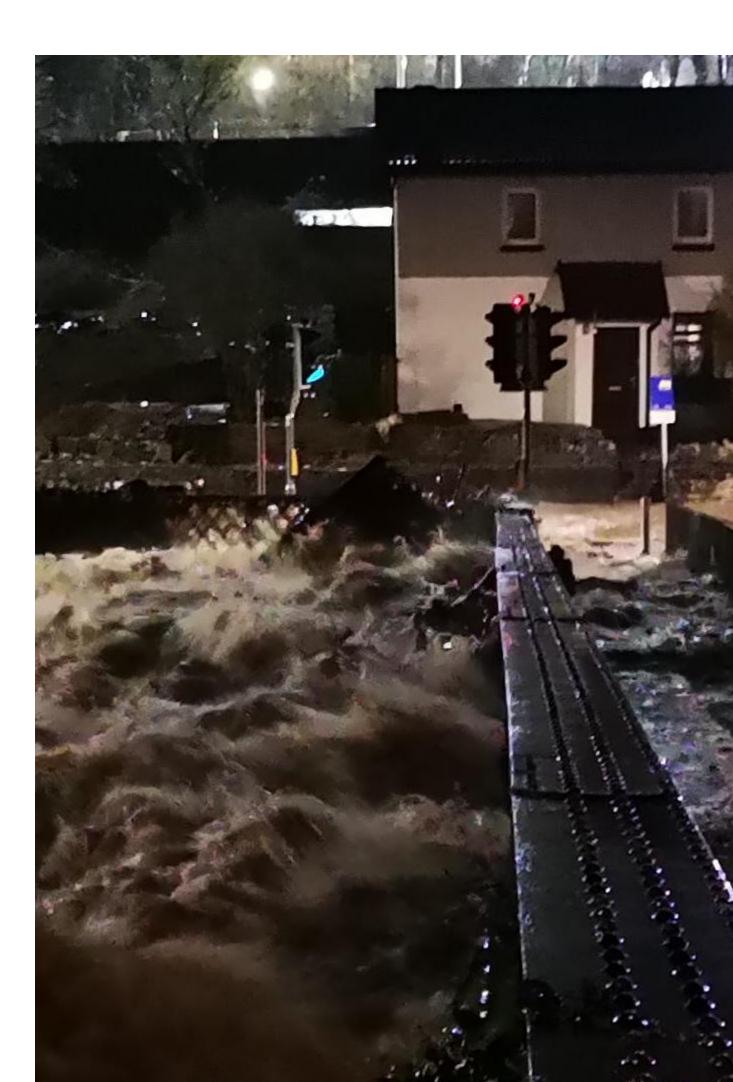
Cllr Steve Powderhill Treforest



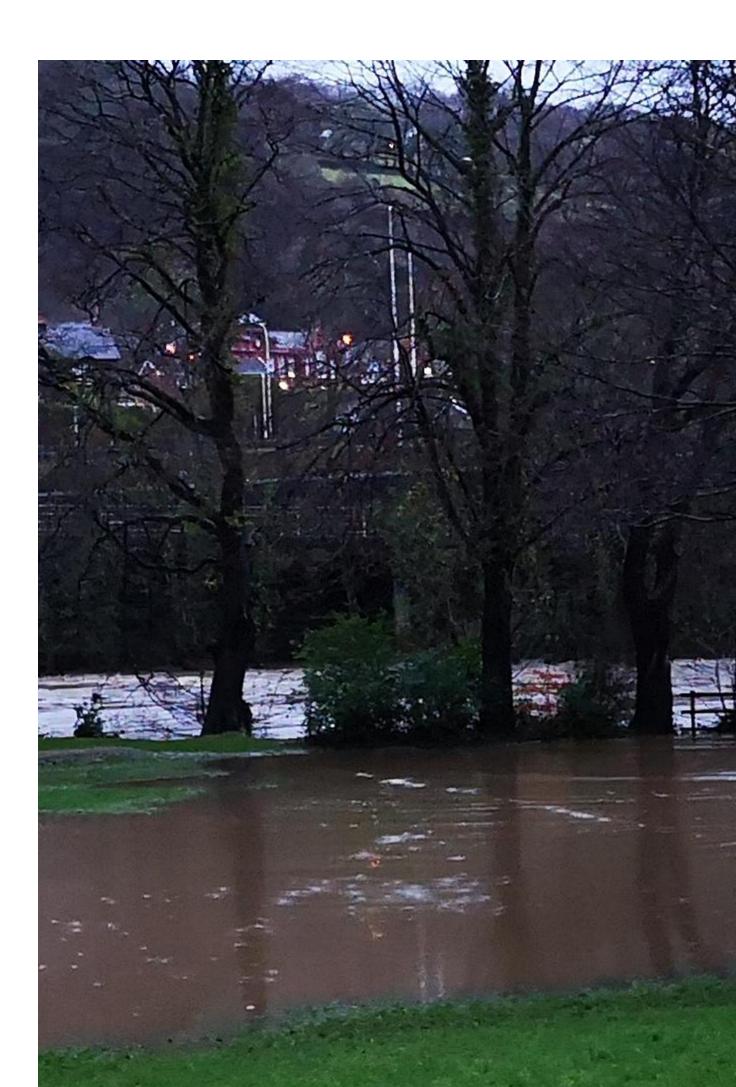


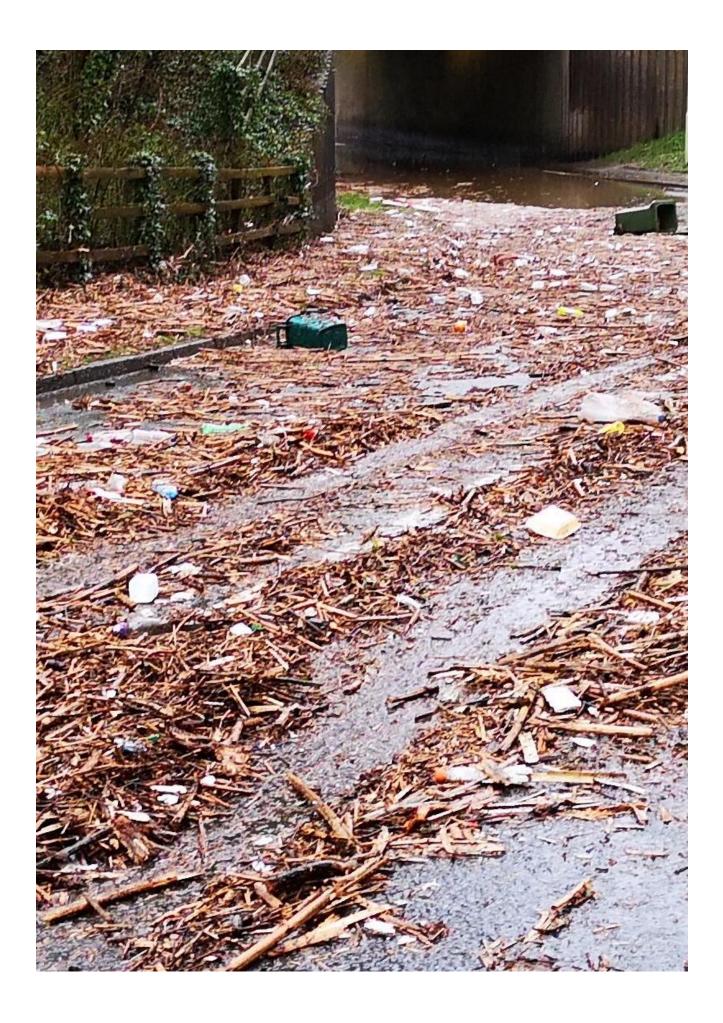












YNYSHIR

On the Sunday morning, when the call came in, I couldn't believe my eyes as I seen people's lives devastated. In over 100 years Ynyshir has never been a victim of such ruin. Ynyshir was flooded in several areas, caused by a catalogue of issues within the community.

The river in Ynyshir dammed, clogged by debris and overgrowth that remains to this day, all the way down from Maerdy. In addition, the drains were blocked and couldn't cope with the additional water either. The two contributory factors caused flooding on both sides of the bridge with one family experiencing danger to life.

On the street high above the valley floor, culverts blocked and water created watercourses through people's homes, never seen before. Other culverts failing caused water to come off the mountainside and into homes on the valley floor.

NRW who manage the river have since said that the blockage underneath the bridge is because of the height of the bridge and will be a contributory factor moving forward. I challenged the officer as residents and I believe that if the overgrowth was better managed then less debris would be present to cause any blocking!

I'm pleased to see that the culvert behind Heath Terrace is due to be fixed however, residents have already invested thousands of pounds in creating their own flood defences for the future. Other culverts still need exploring.

In such devastation though, we must acknowledge the resolve of others. Communities pulled together to distribute cleaning products and food items to those who'd been impacted. People did what they could to help others showing that the spirit in the Valleys remains.

Councillor J Edwards Ynyshir

Ynysybwl

As you know, Clydach Terrace in Ynysybwl was severely flooded in February during Storm Dennis. The Nant Clydach River burst its banks in the early hours of February 16 2020, and overflowed over the wall opposite the houses and rushed, I am told, like a Tsunami up the street.

The water reached up to seven feet high in the houses in Clydach Terrace and residents had to be rescued from upstairs by the Fire Service, who brought them out on a raft.

One resident was knocked off his feet and ended up under the water, in what he describes as a 'washing machine' and another disabled resident, who sleeps downstairs, only just made it to the stairs with the water up to her neck. Truly frightening experiences as you will agree, I am sure.

All the residents lost everything and saw possessions and vehicles floating down the street. Some have not yet moved back into their homes. Some were not insured as they couldn't afford the high cost of living so close to a river. It has been devastating and changed lives of many residents.

NRW have done significant work on the river, removing huge amounts of shoal and debris, and I have had assurance that this stretch of the river will be monitored and worked on at regular intervals. Unfortunately it hadn't been done for several years and the river bed had risen and fallen trees and debris littered the river, which residents feel contributed to the flooding.

The authority provided numerous skips and removed many household items free of charge in the aftermath of the flood, and continue to monitor the drains along Clydach Road and Terrace, clearing when necessary and provide a sweeper for the leaves when required. The authority has also built a wall in a small area adjacent to the lowest part of the river. There is a bigger, longer part of wall which residents would like to see made higher as well.

Residents are naturally extremely anxious that this will happen again and live in fear every time it rains.

I hope I have explained as much as possible the events of that night and the devastation of residents.

Councillor S Pickering Ynysybwl

DETAILED VERBAL REPRESENTATIONS FROM THE SCRUTINY INQUIRY SESSION:-

Councillor T Williams (Aberaman South)

"The two villages Abercymboi and Cymaman, the whole place was flooded and patches were coming off the mountain. We had sandbag issues. Money has been spent since and we are waiting for more work to be done"

Councillor R Lewis (Abercynon)

"There were 3 principal areas of Abercynon were affected by the flooding, Wood Road, the top of Nant Y Fedw were overflowing and there was some river flooding in River Row. The culvert worked because the local authority has spent money on flood prevention measures. When residents refer to 1975, there is a perception that there has been little action taken since 1975, that we have known about this for the last two decades and Storm Dennis has been a wakeup call, but should we have been more investment in the culverts and rivers. Ten years of austerity has been difficult.

We set up an Emergency Centre, helped by residents and supported by local businesses. Residents put calls to us but we were overwhelmed by the event. Myself and Councillor E George have written to Council Officers regarding the Abercynon flooding and have had a speedy response. The issue of dredging has been raised"

Councillor E George (Abercynon)

"Opposite River Row there is a natural flood plain, would the banking levels of the river opposite reduce the natural flood plain?"

Councillor G Caple (Cymmer)

"Pumping Stations – The Rhondda ward flooded, one did work in Trehafod, one didn't in Britannia. Welsh Water indicated that some highways maintained drains were blocked and the culvert was over flowing. The collapse of the river wall caused flooding. There are a whole range of questions.

On the 16th February 2020 there was constant communication with NRW and WW – At 2am the alarms went off in Trehafod and Britannia pumping stations. Are there lessons to be learned from the performance of the pumping stations?

Going forward it is vital that, with regards to the infrastructure around the pumping stations, all parties work together and explain to residents what actions are going to be taken to mitigate the risks. The river walls were smashed away, no help, no explanation, residents need to know.

Dredging – The river was dredged to quicken the flow. Three parties need to get together to inform local councillors and residents and find a strategy."

Councillor K Morgan (Hirwaun)

"This represents residents and my own feedback during and since.

We feel unsupported by RCT, frustrations with calls to the Call Centre on the night. This meeting has been a long time coming and as local member I echo the residents' frustrations. I had to chase the Highways van for sand bags. In the Major Incident Recovery Board it mentions the impact on hundreds of properties which were flooded, the damage to a number of culverts and NRW mention the River Cynon culvert which was "deemed a risk to public safety but on private land".

In Rhigos there was flooding on Rhigos Road, which took the impact of the water coming over the sides of the river embankment from the River Cynon.

I feel unsupported as I am having to chase all organisations.

The NRW report didn't give the events justice and the Chief Executive of NRW stated that "The challenge is bigger than any one organisation can tackle alone."

We need an Independent Inquiry to scrutinise the reports from all those responsible"

Councillor P Jarman (Mountain Ash East)

"NRW have said that the floods in February 2020 were a once in a generation event and yet the maps of the flooding issued by the Environment Agency Wales 40 years ago are the same maps. The infrastructure in Mountain Ash has had very little attention. Why the similarities in 1979 and 2020?

Planning Development in a flood plain- I thank Mr Evans for his presentation – What authority does NRW hold in objecting to proposed developments in flood plains? NRW always say it's up to the local authority whether they grant or not, can you (NRW) formally object?

So much misery could have been relieved if you had displayed the skills to give evacuation warnings. With regards to the forward plans for Treorchy, Rhondda and Treherbert, have any local members been involved?

Mountain Ash — all the sediment and debris emanating from Nant Ffrwd culvert meant that Mountain Ash was inaccessible for days. Was there ever any intention of notifying residents that consultants have been employed by the local authority regarding Caegarw flooding? Why wasn't I notified so that I could co-ordinate and encourage residents to engage?

What is the process after this? Will we be debating the issue?

I have grave concerns regarding the lack of emergency plan for those Members newly elected in 2017. The plan on the website dates from 2011 which has been reviewed, on the 7th March, the new plan had been with SLT one week before. There is no emergency plan to rely on. No-one told me there was a flooding event in Mountain Ash, so how best are we to support our communities?"

Councillor A Morgan (Mountain Ash West)

"The response – the culverts became overwhelmed in the ward and the river was running through the centre. It was on a huge scale but thankfully no-one lost their life. Officers rang me and were with me from 10pm until 2.30am. Cars were being swept down the river in Pontypridd. At 2.24am I and the Council's Emergency Planning Officer were ringing staff to make sure they were all aware of the situation. By 6am, or before, most of the SLT and Emergency Planning Officers were already on hand and dealing with the emergency.

I went around the ward to meet with residents. No officers would have time to ring or email when it happened in the early hours but SLT responded by 6.30am. The Council quickly established the Major Incident Recovery Board.

Calls did get through to make the council aware of the flooding across the county borough. Sandbags did arrive but it was only then that staff realised that they were dealing with a major incident. Details of the Resilient Road funds to repair and future-proof key transport routes across RCT are available to read in the Cabinet reports.

I organised and held a public meeting in my ward and updated residents myself. Afterwards I made the decision to leave my ward and drive the 4x4 jeep, it took over an hour to get to Abercynon and we failed to get through the B4275. We were flagged down by a Fire Engine asking for assistance, a 7.5 tonne vehicle was lost in deep water on the A4059 and the Emergency Services couldn't get through. With the best intentions, some locations just couldn't be reached.

We need to look at events but we can't respond to a natural disaster, which needs local plans, understanding and partnership working.

Welsh Government is funding everything that the council submits but it will take a sustained approach. Staff did all they could on the day."

Councillor S Rees-Owen (Pentre)

"I saw the devastation. I was awoken at 3.30am and saw the videos.

The NRW report talks about better communication, Pentre was never vulnerable to flooding until the felling of the trees. Both residents and volunteers helped out.

Communications & Support – Local residents look to their local members for help and support. It's difficult to be able to support them without the information they need e.g. Facebook posts about people being awarded £500 grants and sessions for filling in forms but soon only Covid-19 related matters were reported, I had to chase up these matters and officers responses on behalf of residents.

Sandbags were lacking. The Call Centre advised that only those areas already flooded were eligible for sandbags. There was a lack of criteria.

I wasn't aware that the council had made the decision to stop the collection of household goods, I was told it had been withdrawn, although Mr Wheeler did collect the furniture.

We have had flooding since and things have improved. Mr Daniel Hitchings has gone above and beyond. When there is a forecast for bad weather I ask questions and I can communicate to residents.

Could Mr Owen Griffiths spend some time with us to go through his power point presentation he delivered in the meeting?

The NRW report – residents don't have faith in organisations investigating themselves, that is the reason for calling for an Independent Enquiry as there are many, many lessons to learn. Communication and Support need to be improved."

Councillor Weaver (Pentre)

"There was a blocked culvert.

I regularly contact residents to ask how they are, they are frightened of another flood. Work is still being carried out and residents need to be put at ease, to know that their homes will be safer, flood doors are a good idea.

Communication needs to be improved, it wasn't very good. I walked the streets with sandwiches. The Salvation Army helped and other religious groups in the main.

We need to feedback to our residents. They need support and Councillors need support to ease the stress, we are out on a limb. There is no-on to support me to support others."

Councillor H Fychan (Pontypridd Town)

"Every resident and business deserves to have their say.

The key recommendation this committee should make is that there should be an Independent Enquiry into the floods. In 5 minutes I can't do justice to the evidence of all the businesses and residents affected in my ward, and the Overview & Scrutiny Committee doesn't have the capacity to fully investigate and compile all the evidence. And even if we were able to as a Council, are we best placed to investigate ourselves?

As referenced by Councillor Jarman, we haven't looked at why the Emergency Plan was outdated which was a failing. We have received no training since the floods nor before. Neither was the plan implemented as it should have been. There has been no scrutiny of this.

Also, I have never received an answer it why was there an IT upgrade that weekend when officers knew that a serious event was likely? We couldn't access the contact numbers and emails etc, nor information about what support the Council would provide for residents. Also, why was there no communication with all Councillors? There are lessons to be learned such as a text alert to Members which would provide them quickly with the relevant links. It could be one message to everyone. Communication was not good enough.

Mr Owen Griffiths mentioned the volunteers and coordinators. I'm still not sure the Cabinet understand how important a role the volunteers played, and that this wasn't coordinated by the Council but rather by themselves with support from us as Councillors. I contacted the Leader on the 16th February offering to coordinate support; I was asked not to do anything for 24hrs and that I would receive more information on the Wednesday, and that I was not to contact Council officers. So I was out helping flood victims, and yet had no support or information from the Council and felt like I was being treated as a nuisance, rather than part of the response. There must be someone to communicate with us. We set up a Community Centre with Councillor Powell and Councillor Eleri Griffiths, had it not been for that there would have not been no coordinated support for those affected.

I must be able to explain to residents and businesses how we are going to protect them in the future and what lessons we have learnt in order to do so. We need an Independent Inquiry."

Councillor T Leyshon (Rhondda Ward)

"In lower Trehafod there was up to 4ft of water in homes. The pumps have been replaced but residents are not confident. The warnings and alarm systems came after the floods, this needs to be looked at. The height of the river is a concern, it came within inches of the top of the Trehafod wall. Natural Resources Wales always used to dredge the river, I would like to see that resumed.

Residents were the saviours of the day as was the community centre who opened their doors. We had IT connected to the community centre which was great. It worked well and we got Ipads out to residents."

Councillor E Griffiths (Rhondda Ward)

"On the first day of the flooding I was unable to reach Trehafod so I took the opportunity to support Pontypridd and Trallwn. I came across Council Housing Officers which were of good support and by the time I reached Trehafod they had already put things in place. Volunteers helped greatly. I was expected to answer questions about council services such as could residents stay in their homes or did they need council accommodation? I had no training to deal with it. I had a phone a number of officers.

One recommendation is to look at communication so that information is passed on. I did expect there to be a community hub within 48 hours to share information. I and fellow councillors knocked on doors to check on residents, should be part of an Emergency Plan.

There was a meeting in Pontypridd on how to clean houses, Councillor Powell said it should have been given to everyone where there was filthy water. The information came from Public health Wales. I did receive communication from Welsh Water about the pumping station.

I must praise the volunteers. I have read the Emergency plan now, it does say it would bring the volunteers together, to work with them, the local network need to reinforce how they support their communities.

There is a strong case for an Independent Inquiry, to look at the role of the three large organisations. We need an overall picture of the situation."

Councillor Webber (Rhydyfelin Central & Ilan Ward)

"With regards to Councillor Fychan's comments about Cabinet and not being aware, please don't assume we're not aware.

My ward has been flooded many times in a year. Lots of families are from Newydd Housing who are responsible for some of the houses following the floods. Many homes need to have flood doors put onto their properties. The water took away a retaining wall in the ward.

Councillor Powderhill called by 3pm and by 9pm the community centre was open for families to safely bring their children. No one could expect to get through to the call centre.

The amount of culverts that are there, the ward below gets flooded which affects the cottages in Upper Boat as there's an area in the river where its course changes but I don't want to be an expert in this area.

We represent our communities to the best of our abilities but there are lessons to be learned. My ward is a lucky recipient of a Flood Prevention Scheme. I bought myself a megaphone with a siren to prepare for such events. I do suggest that NRW give people advance warnings as a number of individuals in my ward have been flooded.

I have to pay tribute to the staff, they worked themselves to the bone and they did their best."

Councillor Bonetto (Taffs Well Ward)

"By the time Nantgarw got the warnings it was under water, the basement flats on Cardiff Road were flooded.

The community was fantastic, they set up sites for clothes and food distribution and thanks to Griffith's construction (Taffs Well Metro Depot)

On Sunday we couldn't access Nantgarw, the only exit was on a dinghy. This has left the residents nervous and when it rains they live on their nerves. If higher defence walls are built it will only shift the flooding further down.

How can I reassure my residents? Every drop of rain that falls they start to panic. I thanks everyone who worked so hard."

Councillor M Powell (Trallwn Ward)

"I was elected as a local member to Trallwn in 1999 and I know that lots of places are built on flood plains with pluvial flooding as an additional problem.

On Sunday, 16th February I was standing in Zion Street next to a senior council officer of the Council. I diverted the Housing Officer to Coedpenmaen Community Church to help. I was organising a 4x4 to help get people out. I asked for the Fire Brigade to come and rescue an elderly couple. One resident collapsed with a heart attack and died. I couldn't get the emergency services to come in and help.

This needs to be resolved.

I asked for a leaflet to be provided and laminated so residents would know how to contact the relevant services and officers. Vehicles were left outside and without warnings were left in the wrong place and couldn't be moved. The River Taff was swelling 800 cubic metres per second.

I'll be supporting the call for an Independent Inquiry. This local authority has done nothing to protect the bridge which is our heritage.

I opened the Community Centre in Trallwn with little support from the local authority, initially until the end of the week, we used it for three and a half weeks supplying food to Pentre and the Rhondda ward. I note that Ynysybwl have not been included on the list today. Our communities helped each other."

Councillor S Powderhill (Treforest Ward)

"Treforest had three different types of flooding. Officers were amazing and the culverts were cleared quickly. The blocking of the Castle Inn Bridge was caused by debris and objects and caused the flooding in Cardiff Road. Niagra Street and surrounding streets were flooded up to the first floor of the properties.

Our Officers were amazing, this was a National disaster. I knew where to go and what to do from day one. I set up the Community Centre that morning and there were many other councillors like me. These were unprecedented times.

How can we alleviate the flooding to Niagra Street, Egypt Street, Nile Street? If we build up the flood walls it will push the problem to Rhydyfelin and Hawthorn.

I look forward to the section 19 report. I thank the community, they are angry but all things in place we did an amazing job."

Councillor E Webster (Treorchy Ward)

"There was a major flooding in Dumfries Street that flowed down from Callum Street when the culvert failed because of debris from the water course. There may be a case for litigation as there have been reports of illegal structures being built in the water course upstream. The culvert isn't suitable to deal with the excess debris. There are serious problems and we are asking the council to get an additional backup drainage system to give residents confidence.

There was flooding from Dumfries Street up to the main street to Stag Square, residents were still unblocking one of the culverts late into the morning.

I would like to thank Owen Griffiths for looking at measures on the mountainside to divert the watercourse to go behind the cemetery so in future less water will come down into the system and into the residential area.

Swn-Yr-Afon – The river wall eroded and a sink hole opened up and took the ground away. Natural Resources Wales are denying responsibility for the wall as is the council, meanwhile the hole is getting bigger.

High Street – This has been flooded three times in the past 7 years and after the flash flooding in June, Welsh Water assessed the pump house which functioned within limits but the RCT drainage system couldn't cope on the highway. No-one has accepted responsibility and residents need to know what needs to be done to prevent this happening again.

There are private landowners who have land on the mountainside and often lanes aren't adopted but the council won't take responsibility. I have cleared drains myself but responsibility needs to be taken for these assets. Mountain water runoff is a major problem for many of our residents and we need to find ways of forcing these landowners to ensure the safety and integrity of adjacent properties.

The Members Services line is great but isn't effective under these circumstances. Is the line fit for purpose?"

Councillor W Jones (Treherbert)

"We didn't experience anything like everyone else but the response from the Council was very quick. I have issues with NRW. We live at the top of the valley. The river wall is in terrible condition and the force of the water pulled the trees and rubble away and took it down the valley. I hope NRW will take responsibility."