RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL

CLIMATE CHANGE CABINET SUB COMMITTEE

MUNICIPAL YEAR 2024/25

28th NOVEMBER 2024

CWM TAF MORGANNWG PUBLIC SERVICES BOARD - CLIMATE CHANGE RISK ASSESSMENT

REPORT OF THE DIRECTOR OF CORPORATE ESTATES IN DISCUSSIONS WITH THE THE DEPUTY LEADER, CABINET MEMBER FOR COUNCIL BUSINESS AND CORPORATE ESTATES AND THE CABINET MEMBER FOR CORPORATE SERVICES, YOUTH PARTICIPATION AND CLIMATE CHANGE

Author: **Leon Marenghi, Performance Management Officer and lead contact for CTM PSB Climate Change Risk Assessment.**

1. PURPOSE OF THE GUIDANCE

1.1 Provide the Climate Change Cabinet Sub Committee with a summary of the draft Climate Change Risk Assessment for the Cwm Taf Morgannwg (CTM) area, and

1.2 Set out the Council's next steps in response to the draft report.

2. RECOMMENDATIONS

It is recommended that the Members:

2.1 Note the outcomes from the draft report, as summarised in Section 5 of this report.

2.2 Review the Council's response to the draft report and note that an update will be provided at a future meeting of the Committee.

3. REASONS FOR RECOMMENDATIONS

3.1 The Climate Change Committee's Climate Change Risk Assessment 3 sets out, at the broadest level, the changes in climate that we can expect by mid-century (two decades away) from projections of climate change. This includes for Cwm Taf Morgannwg, warmer and wetter winters; hotter and drier summers; high variability of extreme weather and increased exposure to weather-related hazards: such as flooding, heatwaves, storm damage and wildfire. The aim of this climate change risk assessment is to explore the potential impact of combined and cumulative risks resulting from these changes in CTMs communities, their implications for public services and other sectors.

4. BACKGROUND

4.1 The Cwm Taf Morgannwg Public Services Board commissioned Netherwood Sustainable Futures and Well-being Planner to undertake a climate change risk assessment (CCRA) for the CTM area comprising Bridgend County Borough, Merthyr County Borough and Rhondda Cynon Taf County Borough.

4.2 The aim of the commission was to:

- Explore how combinations of climate risks resulting from increasingly impactful, and frequent severe weather events might affect the landscape, infrastructure, services, assets and diverse communities across CTM.
- Understand the likely cumulative effects of a changing climate on CTM and to begin to understand what issues may arise and where.
- Identify priorities for forward planning for climate risk across CTM to inform partners' approaches to climate adaptation.
- Provide an independent report informed by a wide range of opinion, evidence and data for the PSB and partners to use when planning forward and producing future climate adaptation activity.

4.3 The review is now complete, and a draft report has been prepared and provided to the CTM Partners. The report provides a set of issues that now need to be considered by each of the CTM Partners to establish if and how they might have a local impact. Section 5 of this report provides a summary of the issues and Section 6 outlines the Council's response to the draft report.

5. ISSUES IDENTIFIED FROM THE CWM TAF RISK ASSESSMENT

5.1 The draft report identifies a number of issues that each CTM Partner needs to review and consider to establish if and how they could have a local impact. The issues listed within the draft report are not necessarily risks in themselves but are broadly written in the style of consequences.

5.2 The issues contained within the report have been grouped under headings by the Authors, they are summarised as follows:

Post-Industrial Landscape

5.3 The unique post-industrial landscape is likely to be increasingly vulnerable to multiple risks resulting from a changed climate. This includes cumulative risks on specific places and assets across the area: from ground subsidence, changes in hydrology, slope stability, altering levels of mine water, soil water content, shrinkage and heave of soils, potential dispersed pollution from industrial sites, historic landfill and tips, surface water and river flooding; and impacts on housing condition, transport networks including railway track and road surfaces and buried infrastructure (electrical cables, sewage and gas and water pipelines). For CTM, due to its industrial legacy, ground movement, sink holes and impacts mine workings should be of major concern.

Climate Resilient Communities

5.4 For some of the most vulnerable communities in CMT, the cumulative and combined risks from climate change, where people and households will become increasingly exposed to more frequent severe weather and its consequences - surface and river flooding, storm damage, wildfire, heatwaves and changes in groundwater levels may compromise the continued safety of residents. This may mean abandonment of communities in coming years. Public services and the private and community sector will increasingly need to develop evidence, services and skills to support these communities. For communities at severe risk -

institutional capacity and skills for communication, facilitation and forward planning will be needed. This is a collective risk and challenge for public services across Wales.

Infrastructural Pinch Points

5.5 Infrastructural 'Pinch Points' have been highlighted as a particular issue given the steep valleys where essential infrastructure such as energy, water, sewage, roads, rail, and information technology are co-located, sometimes integrated (for example pipes and cables on bridges, or IT and road infrastructure) and may be particularly vulnerable to combined failure as a result of multiple climate risks. This infrastructure may be both above and below ground.

5.6 Combined increases in repeated flooding, subsidence, erosion, scour, landslip and wildfire in these locations and subsequent failure or 'outages' on a regular basis, could impact communities, businesses and residents reliant on this infrastructure – if these risks are not planned for. The various impacts in the post-industrial landscape are also likely to influence the resilience of this co-located infrastructure.

Transport Infrastructure: Road, Rail and Bridge

5.7 Road, bridge and rail assets are highly likely to be increasingly compromised by combinations of climate risks in different locations across CTM in coming decades. Changes in ground conditions, subsidence, changes in hydrology, slope stability, slippage, altering levels of mine water, soil water content, shrinkage and heave of soils, treefall, potential dispersed pollution from industrial sites, undermining of historic landfill and tips, surface water and river flooding, storm damage from high winds and wildfire will all play a part. The effect of climate change on adjacent tree condition is also seen as a significant risk to slopes and embankment failure and continued disruption. These changes are likely to increasingly affect road surfaces and foundations and their associated drainage and cables, above ground assets, bridges footings and structure, and rail lines foundations, overhead infrastructure and bridges.

Wildfire Management

5.8 A combination of warmer conditions, more frequent heatwaves and change in rainfall and wind patterns are predicted to increase wildfire risk as a direct result of changing natural conditions (not solely as result of deliberately induced wildfire). Wildfires can occur across woodland, grassland (heath and moor) and peatland and have ripple effects on tip and slope stability, water quality, infrastructure, air quality and human health from particulates in the air and direct threat to life. A consequence of climate change is that there is likely to be larger areas of drier 'fuel' as a result of longer periods of hot weather, without the rainfall which reduces the risk of wildfire. Wildfire's impact is likely to be significant for CTM's natural areas – affecting community safety, water quality from run-off, air quality and damaging biodiversity.

Asset Management

5.9 All assets including built assets, land assets and assets associated with service provision need to be fit for purpose and essentially made 'climate proof' in order to deal with multiple cumulative risks such as:

- Providing thermal comfort in higher temperatures to staff, the public and students within the asset and the impacts on the 'fabric' of the asset.
- Resilience to the cumulative impacts of increasing numbers of extreme weather events in coming decades (surface and river, flooding, storms and heatwaves)
- Depending on the location the 'ripple' effects of these events the asset - slope stability, landslip, altering levels of mine water, soil water content, shrinkage and heave of soils, treefall, potential dispersed pollution from industrial sites, undermining of historic landfill and tips.

Social Care and Health Provision

5.10 Social care and health services in CTM will need to be planned so that they meet people's

needs in a changed climate. Hubs, care homes, residences, hospitals, treatment centres and other assets where services are delivered need to continue to function in a changed climate. This will include temporary accommodation which is used as part of emergency response. In the case of a catastrophic or severe weather/emergency event such as landslips, surface water flooding, sinkholes or contaminated land from dispersed polluted/toxic mine water, there is a major concern that the aftermath of these events will stretch social and health care services – with a slow burn of demand over an extended period. Staff skills, morale, capacity and burnout to support potentially increasing numbers of vulnerable service users has also been raised as a risk. Other key issues/impacts identified regarding this risk have been:

- Supply chain disruption for care homes and domiciliary care, negatively impacting their ability to provide thermal comfort and access to professional services.
- Increases in respiratory problems due to repeated overheating and wildfire.
- Mental health support for climate anxiety and disaster response.
- Increase in low level ozone and particulates in Air Quality Management Areas in repeated, long-lasting heatwaves.
- The switch from fuel poverty for heating to cooling.
- Impacts on housing conditions – damp in older housing stock.
- Climate risk impacting on environmental health e.g. waste and increased pest populations.

Maintaining Utilities (Water, Energy, Food and ICT)

5.11 There is much cross over with this risk specifically with 5.5 and 5.9, but this area focuses more upon the long-term viability of water/sewerage networks, energy networks, food networks and information technology networks and their ability to function and meet people's needs as the climate changes or in case of a severe/catastrophic weather event. Vulnerabilities in long-term maintenance include:

- Water Networks: the resilience of ageing water, sewerage infrastructure and private water supply.
- Energy Networks: energy infrastructure above and below ground to multiple climate impacts from flooding, drying, landslip, storm and wind damage and subsidence and the potential disruption to supply to homes and businesses.
- Food Networks: supply chains to repeated transport disruption affecting food distribution to supermarkets and smaller food retailers and the ability food producers to maintain outputs, supplies and markets.
- ICT Networks: power loss, inability to access affected sites, damage to cables and fibre on bridges, storm and ice damage to overhead cables; damage from wind-blown debris (including trees) and impact on other utilities supporting ICT facilities such as digital infrastructure, data centres, base stations and network connections.

Natural Environment

5.12 Potential issues listed under Post-Industrial Landscape and Wildfire Management have highlighted the critical role that the natural environment plays in stabilising slopes and spoil tips, reducing run- off and maintaining water quality in CTM. There are many areas that could be impacted by a changing climate such as terrestrial, aquatic, coastal and marine habitats and species, soils, landscapes, forestry, and agriculture. The following risks have been identified:

- Severe weather events, high rainfall, flooding and wildfire reducing slope and spoil/coal tip stability.
- Soil loss and mineralisation (washing out organic matter) of soils caused by increased rainfall and run-off.
- Dispersed pollution contaminating land and sediments with negative effects on biodiversity.
- Drying out of peat landscapes at scale across upland areas and the scale or re-wetting required.

- Reduced river and stream flow impacting on aquatic habitats and species.
- Impacts on forestry production due to soil loss and changes in local hydrology.
- Deterioration in the condition of designated sites (SSSIs, Local Nature Reserves etc.) and the loss of characteristics leading to their designation.
- Deterioration of peat, woodland and grassland habitats from increased wildfire.
- Managing invasive species along river corridors (Himalayan Balsam and Japanese Knotweed) Oak Processionary Moth in woodland.
- Impacts on key species of biodiversity value including butterflies, orchids, arctic alpine species, salmon and otter.
- River habitats deteriorating due to rising water temperature and lack of shade from trees along riverbanks.
- Impacts on both forestry and agriculture from increased pests, pathogens and disease.

Institutional Response

5.13 How all public bodies in CTM approach, view and lead on climate change is an inherent part of each of the risks explored so far. The CCRA has identified that climate risk has little to no profile in many plans that are critical to the way that public services are delivered. Institutions engaged in the CCRA do not currently have whole organisation approaches to climate risk. The CCRA suggests that work is needed in CTM to develop capacity to explore the complexity of climate risk across traditional silos and partnerships, and to integrate this issue properly into the work of the public sector and its partners.

Resource and Finance

5.14 The backdrop to this assessment are both short and medium-term resource constraints on public funding. These constraints could affect the public and other sectors across CTM for the foreseeable future, there is less available resource to meet service demand and less capacity to plan forward for issues such as climate change. There is no additional funding for addressing climate risks. There are two aspect of this risk – overcoming potential inertia due to the lack of designated funds at an organisation level; and the knowledge gap around adaptation costs at a community and strategic level.

6. THE COUNCIL'S RESPONSE TO THE CLIMATE CHANGE RISK ASSESSMENT REPORT

6.1 For the Council to consider the issues listed within the draft report it now needs to review them and assess whether they could apply to our local area. The Council will apply the following framework when considering the draft report, as required within Welsh Government's 'Wales Climate Adaptation Strategy'.

Leadership

- The Council will provide leadership and take ownership of the issues that may apply across our local area.
- We will identify relevant Officers that will assess each of the issues raised and form a local response for consideration.

Service Resilience

- The Council will consider how each of the issues could have a local impact, assess what actions are already in place and ascertain whether there are any gaps in controls or actions.

Community Resilience

- The Council will consider whether adaptation work is required to manage any issues and how local communities can become involved in this work.

Partnership and Collaboration

- The outcome of our response to the draft report will be fed back to our CTM Partners.

6.2 It is important to note that the issues listed within the report do not come as a surprise to the

Council. Most, if not all, have already been considered and arrangements are in place to manage them. To put this into context, the Council has the following strategic risk within its strategic risk register:

SRR 26
If the Council does not plan and invest resources into mitigating the physical impacts of climate change (including sustainable solutions), then the effects of extreme weather events on our residents and businesses will be heightened.

6.3 The strategic risk identifies a list of controls and actions, a copy of which can be found here.

6.4 Work will now take place to 'map' the issues raised within the draft report to the issues that we have already identified. If there are gaps, then appropriate controls and actions will be put in place where relevant. An important aspect of this work will be to assess where there may be particular local / geographical areas of risk (i.e. areas that could be impacted where multiple risks or issues are present).

6.5 An update will be prepared and reported to a future meeting of the Committee. It will also be shared with our CTM Partners.

7. EQUALITY AND DIVERSITY IMPLICATIONS / SOCIO-ECONOMIC DUTY

7.1 There are no equality and diversity or socio-economic duty implications as a result of the recommendations set out in the report.

8. WELSH LANGUAGE IMPLICATIONS

8.1 There are no Welsh Language implications as a result of the recommendations set out in the report.

9. CONSULTATION / INVOLVEMENT

9.1 Consultation, involvement and engagement was a key part of the development of the Cwm Taf Morgannwg PSB Climate Change Risk Assessment with an emphasis on gathering available quantitative and qualitative data by engaging with key institutions and local experts from the outset and through a series of work packages. In all, the approach has engaged 221 individuals exploring climate risk over 6 months from 33 organisations, including PSB partners, representative bodies from business and third sectors, local councillors, emergency planners, community groups and residents. Consultation and feedback on the draft CCRA is still currently open and a final report is expected before the next PSB Board Meeting on 12th December 2024.

10. FINANCIAL IMPLICATION(S)

10.1 There are no financial implications as a result of the recommendations set out in the report.

11. LEGAL IMPLICATIONS *OR* LEGISLATION CONSIDERED

11.1 There are no legal implications as a result of the recommendations set out in the report.

12. LINKS TO THE CORPORATE PLAN / OTHER CORPORATE PRIORITIES.

12.1 The Council has committed to becoming a Carbon Neutral organisation by 2030 and to work with residents and businesses to ensure the whole County Borough is Carbon Neutral as close as possible to the 2030 target. This particularly supports the well-being objective

'Nature and the Environment' of the Council's Corporate Plan 'Working with our Communities' 2024-30.

12.2 The Well-being of Future Generations Act asks public bodies to work better with people, communities, and each other, to meet the Sustainable Development principle. The Council's approach to the implementation of the Act agreed by Cabinet is to make sure that its requirements are embedded into the everyday business.

12.3 The purpose of this guidance is to provide an overview of the key cumulative climate issues across the CTM region and offer recommendations on how to approach proactive management of these key issues, in line with the new Wales Climate Adaptation Strategy. Any future actions that may arise as a result of the recommendations of the Climate Change Cabinet Sub Committee, and any actions resulting from this supporting guidance, will embed the five ways of working and seven national well-being goals as highlighted in the Well-being of Future Generations Act (Wales) 2015.

13. CLIMATE CHANGE IMPLICATIONS

13.1 The intention of the CCRA report is to help inform the Council on the issues that need to be considered in respect of the potential implications for our residents, businesses and communities.

14. CONCLUSION

14.1 The climate change risk assessment draft report that has been prepared for the Cwm Taf region provides us with a valuable and independent assessment of current and future potential issues that we need to be aware of and need to manage.

14.2 The draft report will now be reviewed by Council Officers and mapped back / compared to the issues that we are already aware of and managing as part of our strategic and operational risk management arrangements. Once this exercise is complete then an update will be reported to this Committee and to our Cwm Taf Partners.

LOCAL GOVERNMENT ACT 1972

AS AMENDED BY

THE LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985

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