

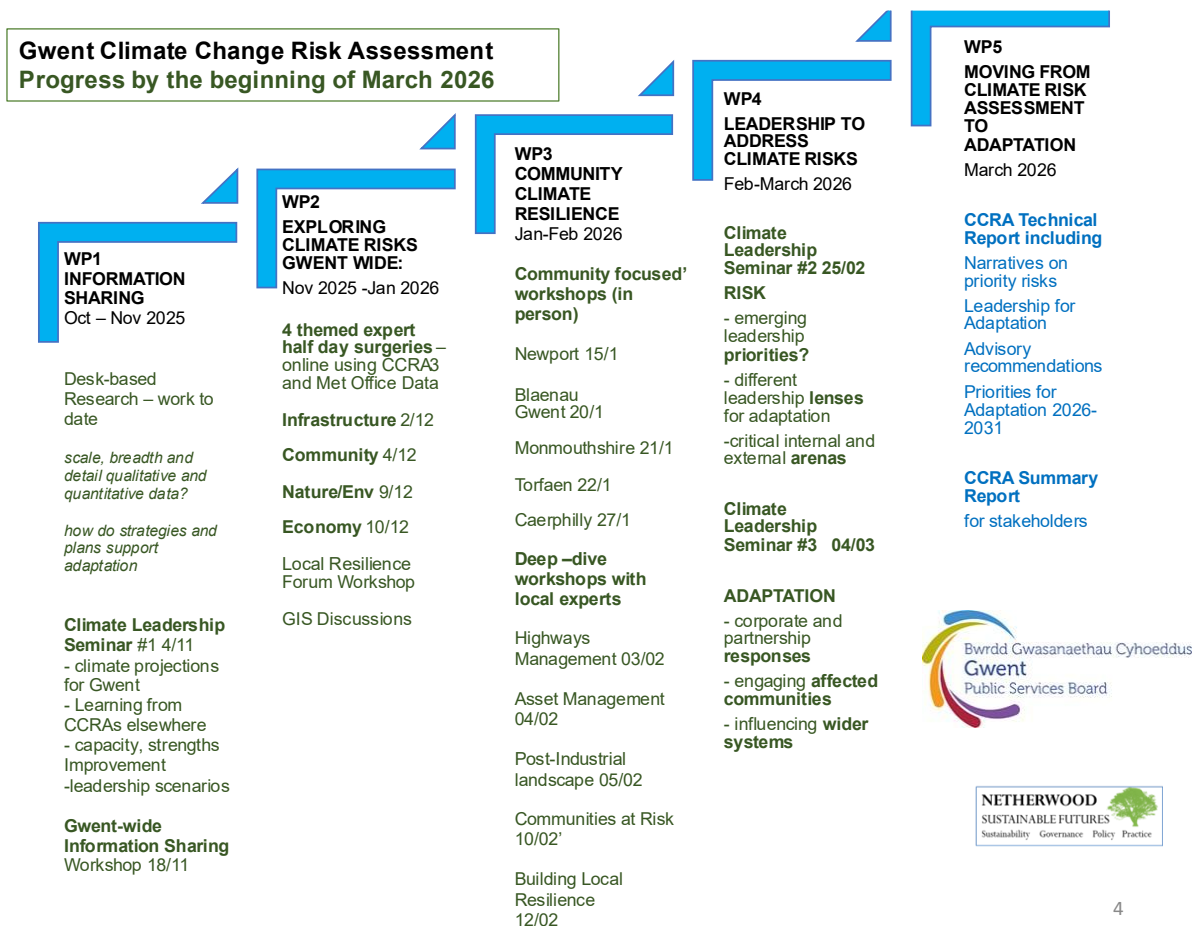


Dr. Alan Netherwood
 Banc Olive, Taliaris,
 Carmarthenshire SA197DD
alan.netherwood@gmail.com
 0782 464 1366
 5th March 2026

GWENT CLIMATE CHANGE RISK ASSESSMENT WORK PACKAGE BRIEFING NOTE

WP3: COMMUNITY CLIMATE RESILIENCE WP:4 LEADERSHIP TO ADDRESS CLIMATE RISKS

- This briefing note is part of a Gwent -wide Climate Change Risk Assessment being undertaken by Netherwood Sustainable Futures for Gwent Public Services Board, supported by Well-being Planner and Flourish. This work is being delivered over a 5-month period through a series of work packages (See diagram below) This is a briefing outlining work undertaken in **WP3: Community Climate Resilience and WP:4 Leadership To Address Climate** providing detail on; 5 face to face workshops held across Gwent in January and February 2026; 5 deep-dive workshops on Asset Management; Highways Management; Post-Industrial Landscape; Communities at Risk and Building Local Resilience and two Leadership Workshops held in February and March 2026. The briefing provides an indication of **interim findings** of the CCRA, which will be expanded upon and detailed in technical and summary reports by 31st March 2026.



2. **OVERALL PROGRESS OF THE PROJECT** the diagram above shows 4 work packages completed. Work is underway on producing technical and summary reports as part of WP5. The project has delivered 18 bespoke workshops between November and early March involving 295 people, totalling 37 hrs interface with PSB partners officers, public, voluntary, community and private sector actors, resulting in capacity building on climate risk and adaptation across Gwent. Feedback on this activity collected at teach session indicated participants felt informed, engaged, heard and were able to explore climate risk in each. Further details on participants are provided throughout this report.
3. The use of local expert insights, along with the consultant teams' expertise can provide the PSB with confidence that the CCRA has engaged fully to explore how combinations of climate risks are likely to impact across Gwent's diverse, landscapes, communities and economies. This has been a combined effort, drawing on rich professional and partnership data to beginning to 'lift the lid' on this complex and challenging agenda.
4. The CCRA is intended to provide the PSB, its constituent partners and stakeholders across Gwent with a foundational resource to work towards climate resilience. The following sections describe the approaches to the above engagement, giving an indication of some of the key issues emerging for this dialogue. These are interim findings prior to the final report.
5. **FACE-FACE WORKSHOPS** Five half day face-to-face workshops were January 2026, one in each local authority area¹. These workshops were attended mainly by representatives from public, third and community sector organisations, with some private and community input. The meetings had multiple aims; to sense check the analysis underway providing stakeholders with a chance to understand the work to date and contribute their insights; to localise the risk assessment as much as possible; to raise awareness among Council officers, members and partners about likely impacts; to understand more about the 'adaptation gap' the sufficiency of current approach; and finally to focus on types of support and information which will enable stakeholders to understand and act on climate risk. Appendix A provides an indication of infrastructural, economic, community-level and natural environment risks discussed and identified in these workshops.
6. Participants were also able to annotate maps to begin to indicate where they believed, based, on their local knowledge, different types of risks may emerge as climate impacts are felt more frequently and cumulatively across Gwent. (See Appendix B) these maps show locations which may experience repeated flooding wildfire, and locations which might experience impacts on post-industrial features; economic/business interests, health, access/highways/bridge resilience; housing, and community resilience and the natural environment. This information will be triangulated with documentary evidence and data in the final report to highlight key locations that are highly likely to experience combined and cumulative risks. It is recommended that this information is digitised after the CCRA by PSB partners. This information will enable the consultancy team to frame 'the key questions' for exploration in more detailed mapping² by partners post March 2026.
7. **HIGHWAYS MANAGEMENT DEEP DIVE** was run on Tuesday 3rd February 10-12.30 to enable a deeper understanding of climate risks to the highway and bridge network and access across Gwent; Participants included transport strategists, highways planners, highways engineers; planning officers; highways maintenance; countryside management; drainage managers; emergency planners;. This discussion focused on impacts on road and bridge materials and fabric; processes and systems that underpin highways and bridge management and other networks and the environmental factors that are

¹ Newport Thursday 15 January a.m. Newport Civic Centre; Blaenau Gwent Tuesday 20 January a.m. 2026 Llanhilleth Miners Institute; Monmouthshire Wednesday 21 January a.m. St Mary's Priory, Abergavenny, NP7 5ND; Torfaen Thursday 22 January a.m. Halo Pontypool Active Living Centre; Caerphilly Tuesday 27 January a.m. Caerphilly Miners Centre

² The project has engaged with Local Authority and NRW GIS officers to understand layered data available. A set of key questions will be framed in the technical report for the PSB to get into more granular mapping to understand combinations of climate risks post March 2026.

likely to increasingly impact on this essential infrastructure. A picture emerged of a highway, bridge and public rights of way network increasingly under strain in current climate conditions, which is likely to be severely impacted by combination of flooding, heat and ground movement related risks going forward. This is likely to have repeated and cumulative impacts on communities, public services and communities across Gwent

8. **ASSET MANAGEMENT DEEP DIVE** was run on Wednesday 4th February 10-12.30 to enable a deeper understanding of groups of assets and specific assets that may be at risk across Gwent; participants included asset and property management teams, planning and regeneration officers; those responsible for countryside management, tourism management assets; service managers with a responsibility for assets; and those involved in managing community assets from the third and community sector. This deep dive focused on the wide variety of built and land assets that will be impacted by multiple climate risks and the systems that underpin asset management – including corporate approaches and funding mechanisms. The discussion focused on impacts on the assets themselves, their environs on asset users. A picture emerged of a diverse public sector asset base that will experience ongoing and cumulative impacts as the climate changes – of particular concern are school properties and business/industrial sites. The role of land management in addressing climate risk was also highlighted.
9. **POST-INDUSTRIAL LANDSCAPE DEEP DIVE** was run on Thursday 5th February 10-12.30 to enable a deeper understanding of the complex risks involved in managing climate change impacts across the post-industrial landscape of Gwent. Participants included public sector managers with an understanding of spoil tip management; contaminated land; water pollution; mine-workings; subsidence, slope stability; tip remediation; impacts on assets/highways; post landslip management (impacts on essential infrastructure; and emergency planning). This discussion focused on the diverse nature of potential effects of climate change on a range of post-industrial features, the need to develop a much better understanding to enable proactive planning for change and key concerns of dispersed pollution from contaminated land and mine-working, the increased instability of slopes and subterranean features and their impacts on communities, the highway network and utilities. The relationship between vegetation, wildfire, tips and coal deposits. Climate impacts on canal bank stability and historical landfill were raised as a critical, priority issues to investigate
10. **COMMUNITIES AT RISK DEEP DIVE** was run on Tuesday 10th February 10-12.30: to enable a deeper understanding of how multiple, repeated, and cumulative risks might manifest in particular communities across Gwent, including socially disadvantaged communities, town centres farming and rural communities, in relation to poverty, social inclusion, access to food and health services. Participants included public and third sector staff working in community development, social inclusion; anti-poverty; supporting community level projects; regeneration teams and those involved in place-planning. The focus of the discussions recognised that Gwent's communities are highly likely to experience combined and cumulative effects and this complexity needs recognising to build effective community level resilience. Participants used a scenario community 'Pontillery' to explore how an 'at-risk' community s might be engaged, help to assess local risk, and plan and deliver adaptation alongside public bodies. This provided insight into breadth of challenges; complexity of engagement and communication; the current unpreparedness of communities and public services to address climate risk; the need to develop new skills to deal with existential risk of communities and the difficulty of political and social discourse.
11. **BUILDING LOCAL RESILIENCE DEEP DIVE** was run on Thursday 12th February 10-12.30 to identify how partners' current approaches to risk management, business continuity planning and local resilience work across Gwent may need to evolve to cope with repeated, cumulative climate impacts. This focused on operational, institutional, and strategic risks and adaptation. Participants included local resilience managers; those actively involved in gold, silver, and bronze emergency response; corporate risk managers, service managers regularly impacted by emergency planning (transport; assets; health; social services.) and third sector partners providing support to communities. The discussion as stimulated by examining the scope of UK, Wales level and Gwent approaches to Local Resilient Planning and current contents of corporate risk registers of public bodies. It was clear from discussions that the LRF deal with single events and response, and that current arrangement does not deal with the

longer- term increase of frequency and impact of repeated severe weather events. It was also clear that corporate risk management does not, at present sufficiently factor in climate change as a risk multiplier to corporate risks. A key finding was that current LRF and corporate risk management do not adequately reflect the scale of the risk challenge of ongoing climate change to either communities that will be impacted or public services planning.

12. **CLIMATE LEADERSHIP SEMINARS** two online leadership seminars were delivered on 25th February and 4th March. They were designed to enable participants to engage and react to the emerging climate risk priorities; explore different leadership lenses for climate leadership (strategic, institutional; operational; and community) to consider priorities; explore different arenas where they could address climate risk; and focus on their role in delivering climate adaptation in areas of need. They were attended by Executive And Cabinet Members, County And Town Councillors, CEOs , Deputy CEOs, Directors, , Chief Officers, Heads Of Strategy and Programme Managers. The value of this input to the CCRA is firstly to build capacity of participants to understand the complexity and scale of the challenge from climate risk, and to identify what good leadership on climate risk might look like from themselves and others/.The material is still being analysed from these workshops, however participants felt that climate risk required the following.

- a **strategic** shift in the way climate risks are managed
- increasing **knowledge** and **skills** in leadership positions
- more **profile** in leaders' work
- to become **integral** in all decision making
- '**mainstream** investment' in adaptation
- climate risk considerations part of **business as usual**.
- **early** consideration in forward planning and business cases
- acknowledging **limitations** of current approaches
- building **business cases** to adapt
- a change the leadership **narrative** from "cost" to "core requirement"
- leaders need to plan for the **slow burn** impacts
- **honesty** with people-about constraints on business as usual.
- **evidence** and intelligence to support smart future planning
- effective **communication** and use evidence at a local level

Further insights from these workshops will be included in the Technical Report.

13. **EMERGING ' HEADLINES' FROM THE CCRA** Analysis and synthesis of key messages from the CCRA is ongoing between the timing of this briefing (6th March) and a draft technical Summary on 23rd March. However, the following paragraphs provide some broad initial messages to at this stage. Please refer to Appendix A when reading the following paragraphs)

- **Gwent's infrastructure** is highly likely continue to be impacted and degrade from combinations of heavy rainfall, extreme heat and erosion. The lack of availability of finances will continue to inhibit the climate adaptation required. Public sector partners and communities will need to plan for increased frequency and scale and costs of disruption to key infrastructure. Gwent's highways, bridges, built and land assets; sewerage infrastructure, co-located infrastructural 'pinch points; and the integrity of historical infrastructure including Monmouthshire & Brecon Canal are of key concern.
- **Gwent's economy** needs to be prepared for repeated and more severe weather events, causing cumulative impacts on the places where businesses operate, requiring businesses in town centres, on business/industrial estates and in the countryside to adopt business continuity+ approaches to deal with combinations of repeated risks as the climate continues to change. Climate risks will increasingly affect individual businesses, sectors and local economies.
- **Gwent's communities** are likely to experience repeated combined and cumulative effects from severe weather events on thermal comfort, accommodation, livelihoods, access to services, access to food, financial hardship and mental health. They will need support in the short, medium and long term. This support will need to be additional to emergency planning and

bounce back. Support bodies will need to plan for cumulative effects on communities; mindful of the erosion of capacity to respond from communities and the public sector from repeated events. Climate change will mean service demands from communities, are likely to change, especially as living in some locations and communities becomes untenable.

- **Gwent's natural environment & landscape** and its' ecosystem services (clean water, air, functioning soil, food production) are highly likely to be impacted by climate change, affecting food production, landscape features, water quality, biodiversity and habitats. Gwent Levels, river corridors, wetland features, coastal areas and Gwent's farmland are likely to be particularly impacted by combined risks. Effective vegetation, soil and water management will be needed in a more 'dynamic' landscape to 'stabilise' landscape features like slopes and slow down flood waters . Managing the impact of wildfire on vegetation will be critical to maintain stability of post-industrial features including coal and spoil tips; and to minimise impacts of wildfire on woodlands, biodiversity and human health.

14. The report will emphasise to the PSB and Gwent's stakeholders that climate risks are complex, will grow over time and that new approaches to managing multiple risks will need to be developed to minimise and manage risks to Gwent's communities and landscapes. Many current systems, services, strategies, partnerships are not designed to manage this the scale of impact, nor its complexity. Approaches to climate adaptation within individual institutions and across will partnerships need to develop at strategic, institutional, operational and community levels.
15. The Technical report due by 31st March will provide an overview of the CCRA, analysis and synthesis of work undertaken at each stage; descriptions of priority risks that need to be addressed at a Gwent level; and for each priority risk; key issues for managing the risk Gwent-wide; and recommendations for each on climate adaptation action over the next five years. Appendices will provide information on the qualitative and quantitative data and documentation used in the CCRA; and a completed risk matrix based on 44 national risk categories being used in the UK CCRA4 by the UK Climate Committee³
16. The Summary report, informed by the above , will also be produced by 31st March with graphic design input, intended for local leaders, decision-makers, and key influencers across the public and voluntary sectors in Gwent. Its aim is to summarise key risks; act as a signpost to the technical report, enable onward engagement and act as a foundational asset to support further engagement work in this space. It will be designed to that the text is extractable to be used by stakeholders in their own work on climate risk in different arenas and contexts.
17. NSF and NRW are reporting progress to the PSB Scrutiny Committee 18th March (using this briefing), and NSF is delivering an interactive session on the CCRA on 26th March to inform the final draft of the Technical Report. This session will examine the recommendations from the CCRA and focus on the forward actions of institutions and the PSB going forward post March.
18. **SUMMARY COMMENTS** This briefing note is aimed at informing project partners and others about the overall progress of the CCRA project as the consultants work in the final weeks of the project on the final reports.

Dr. Alan Netherwood
Netherwood Sustainable Futures
6th March 2026

³ This data is also being held on a Gwent CCRA database which has been used to aid analysis in this project. This will provide the PSB with a legacy resource to maintain and build upon as climate adaptation work progresses.

APPENDIX 1: Climate risks explored in face- to -face workshops

INFRASTRUCTURE	LOCAL ECONOMY	COMMUNITY-LEVEL	NATURAL ENVIRONMENT
bridge condition	access to finance	access to health facilities	agricultural production
built assets	access to insurance	access to work/workforce	canal stability
built assets - environs	agricultural output (food)	air quality from wildfire and heatwave	coastal erosion
built assets - utilities	business insurance	business continuity for social services	contaminated land
canal resilience	business park resilience	damage to historic assets	current landfill
coastal flood defence	clean- up costs	development blight	designated sites
co-located infrastructure	energy networks	financial impacts	dispersed pollution
dispersed pollution	industrial park resilience	food supply – continuity	ecological connectivity
emergency response assets	IT networks	housing condition	forestry production
energy infrastructure above ground	location/cost decisions	insurance cover	historic landfill
energy infrastructure below ground	overseas supply chains	IT networks	invasive species
historic landfill	port/harbour infrastructure	long term community feasibility	minewater
IT infrastructure	product supply networks	mental health impacts (all ages)	peatland erosion
pipelines, cables, networks	production processes	public rights of way	reservoir stability
post industrial landscape	tourist activities	public service business continuity	river erosion
rail infrastructure	tourist sites	public service finance	soil loss and mineralisation
reservoir resilience	transport networks	repeated flood damage	tree loss – disease – windfall
river flood defence	water network	road access	water quality in rivers and lakes
road condition	workforce access	storm damage to housing stock	water supply
slope condition		thermal comfort for the vulnerable	wildfire (woodland, heath, peat)
spoil tips		water supply	
subsidence			
waste facilities	CLIMATE RISKS DISCUSSED AND IDENTIFIED IN FACE TO FACE WORKSHOPS		
water infrastructure			
public rights of way			

APPENDIX B: Exploring ‘what and where’ in the face– to -face workshops

Gwent CCRA
Building a picture of what and where:
early indication of combined climate risks and pinch points



Newport

Key points
 Locational data has been collected to illustrate where combined risks may play out. This has helped in capacity building needs:

- triangulating with documentary evidence
- digital mapping post March



Monmouthshire



Torfaen



Caerphilly



Blaenau Gwent