



## 9.30 Welcome

10.00 **Gwent CCRA** - what it aims to do and leader's roles during and after the analysis

10.15 **Learning from CCRAs elsewhere** - implications for leaders

10.40 **Exercise 1** - Exploring strategic, institutional, operational and community level concerns/opportunities

11.15 **Exercise 2** - Gwent's current capacity for adaptation - existing strengths and room for improvement?

11.35-11.50 **Break**

11.50 **Effective integration** - leaders' roles in policy, advocacy, action and governance to address climate risk

12.00 **Exercise 3 - Leadership scenarios** –working in different arenas

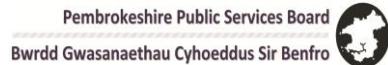
12.30 **Exercise 4 - Reflection and discussion**, personal leadership roles in climate risk and adaptation.

12.55 **Close**



# Gwent CCRA Leadership Seminar # 1

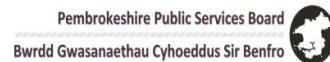
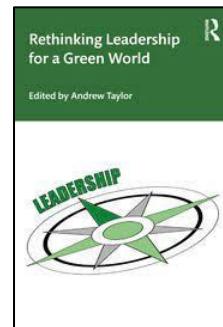
## Climate risk experience we are bringing in



Parc Cenedlaethol Arfordir Penfro  
Pembrokeshire Coast National Park



**Dr Alan  
Netherwood**



working together on climate risk



**Dafydd Thomas**



**Bannau  
Brycheiniog**



Usk NMB  
Clwyd NMB





**WP1**  
**INFORMATION SHARING**  
Oct – Nov 2025

**Desk-based Research**

Communications Plan

Gwent-wide Information Sharing Workshop

**Climate Leadership Seminar 1**

WP1 Briefing: What have we learnt about climate risk and adaptation from information sharing?

**WP2**  
**EXPLORING CLIMATE RISKS GWENT WIDE:**  
Nov-Dec 2025

4 themed expert half day **surgeries** – online using CCRA3 and Met Office Data

**Infrastructure**  
**Natural Resources**  
**Economy**  
**Community**

Engaging officers from Blaenau Gwent Caerphilly Monmouthshire Newport Torfaen

WP2 Briefing: What have we learnt from exploring area-wide risks?

**WP3**  
**COMMUNITY CLIMATE RESILIENCE**  
Jan-Feb 2026

5 half day face to face '**community workshops**' to ground-truth expert views community workshops 1 in each local authority area

**5 Deep –dive case study workshops** (places; interests; issues; people with affected parties (face to face, hybrid and online tbd)

WP3 Briefing What have we learnt from engaging the community on climate risk?

**WP4**  
**LEADERSHIP TO ADDRESS CLIMATE RISKS**  
Feb-March 2026

**Climate Leadership Seminar 2**

- priorities
- arenas and activities to influence
- evidence needs

**Climate Leadership Seminar 3**

- strategic, operational, institutional, community responses
- engaging affected communities
- corporate working
- governance
- resources

WP4 Briefing: What have we learnt about engaging leadership on climate risk?

**WP5**  
**MOVING FROM CLIMATE RISK ASSESSMENT TO ADAPTATION**  
March 2026

**CCRA Technical Report including**

Synthesis and analysis of material emerging from WP1-WP4

Narratives on key risks

Narratives on Deep dives

Reflections on Leadership

Advisory recommendations :

Priorities for Adaptation 2026-2031

**CCRA Summary Report** (Web-based Public Facing)

We can expect by mid-century (next 2 decades)

- warmer and wetter winters
- hotter and drier summers
- high variability of extreme weather
- increase our exposure to weather-related hazards:
- increased frequency and intensity of wildfire.

We can also expect

- increases in average and extreme temperatures, in winter and summer.
- flooding and water scarcity (drought)
- increased coastal flooding and erosion from sea level rise
- sea temperature rise and ocean acidification.

After 2050, the extent of further climate change will depend on future global emissions of greenhouse gases.

If the world cuts emissions rapidly to Net Zero, there is a good chance of limiting global temperature increase to below 2°C.

If not, we will see higher levels of warming and much more extreme impacts.

See CCRA3: Wales Summary Report

<https://www.ukclimaterisk.org/wp-content/uploads/2021/06/CCRA-Evidence-Report-Wales-Summary-Final.pdf>



“The UK is strikingly unprepared for the impacts of the climate crisis”

UK Climate Change Committee April 2023

Met Office modelling **averages** for **Newport** in a 2°C scenario (4°C)

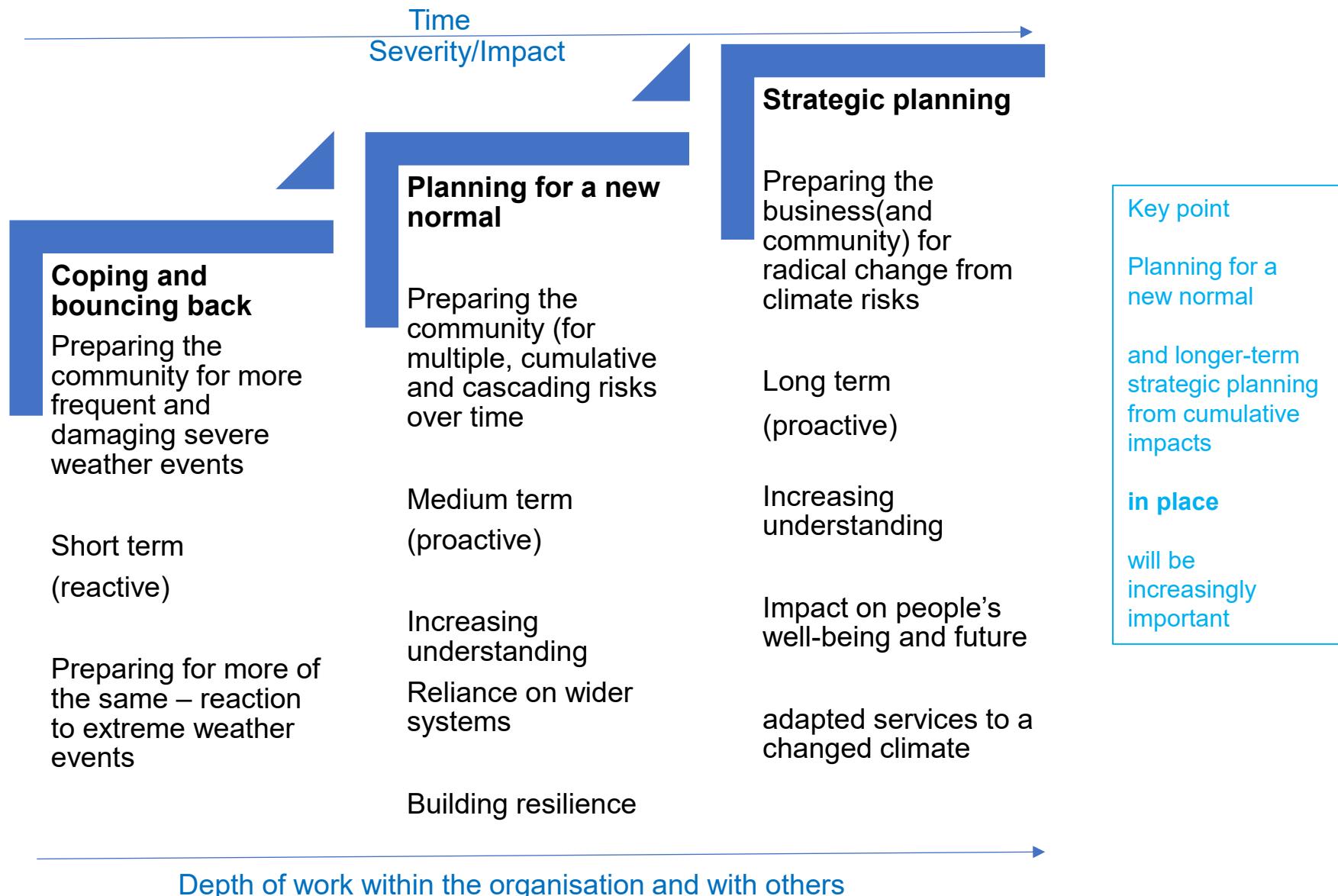
Winter (averages)  
Precipitation +12% (+26%)  
Temperature +1.3 °C (2.7)



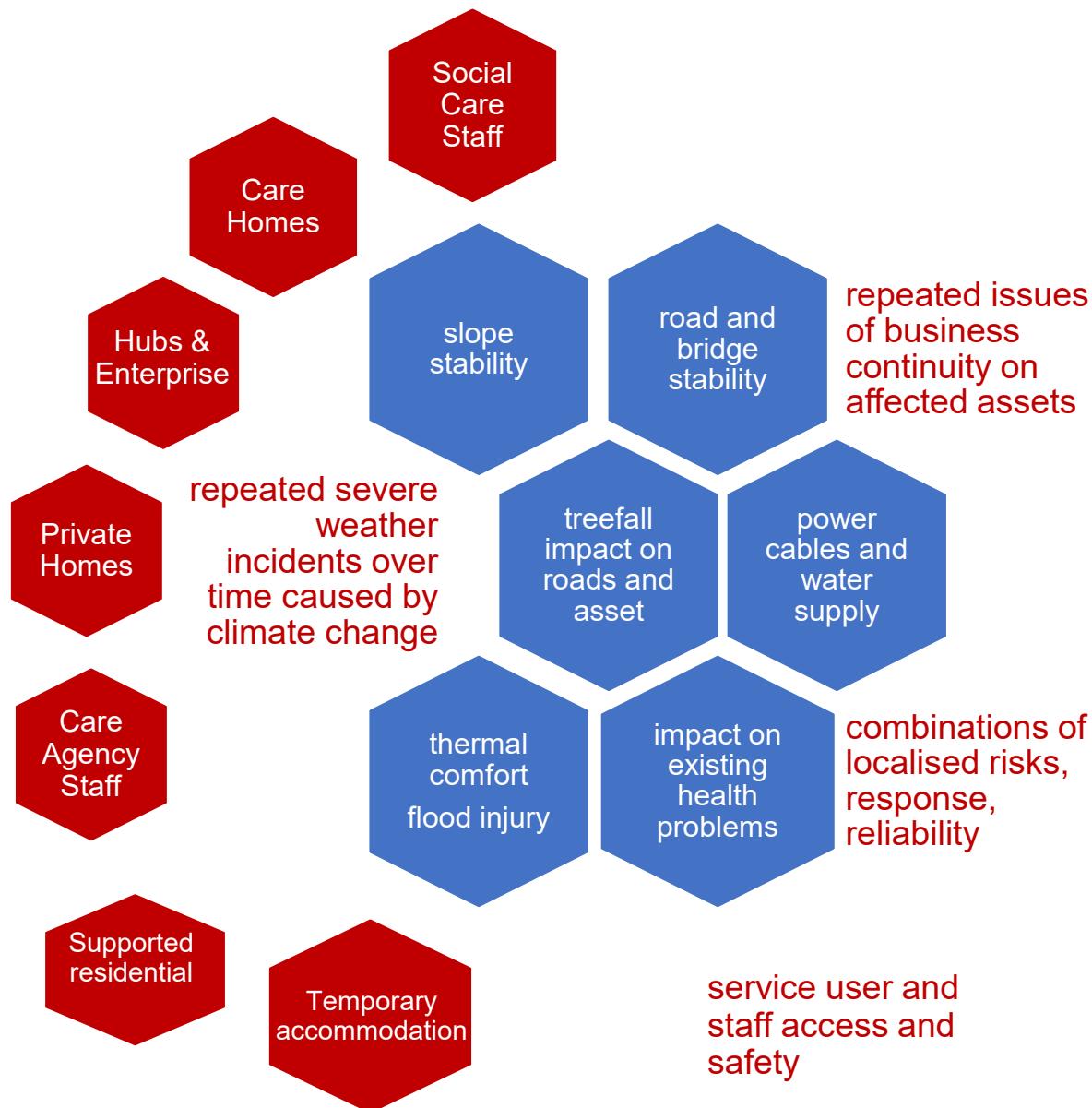
Summer (averages)  
Precipitation -16% (-36%)  
Temperature + 2 °C (4.5)

Sea Level rise 27-45 cm  
(88 cm by 2080s) – may be more extreme

AMOC (Atlantic Current)



## Leaders need to think about ripple effects across portfolios of responsibility



### Key point

Reductionism within the organisation can be a major risk in itself  
needs systemic thinking

NATURAL ENVIRONMENT & ASSETS	INFRASTRUCTURE	HEALTH COMMUNITIES & BUILT ENVIRONMENT
N1. Terrestrial species and habitats	I1. Infrastructure networks (water, energy, transport ICT)	H1. Health and wellbeing (temperatures)
N2. Terrestrial species and habitats (INNS)	I2. Infrastructure services (riverine)	H3. People, communities and buildings (flooding)
N4. Soils	I3. Infrastructure services (coastal)	H4. Viability of coastal communities (sea level)
N7. Agriculture	I4. Bridges and pipelines	H5. Building fabric
N8. Forestry	I5. Transport networks	H7. Health and wellbeing (air quality)
N10. Aquifers and agricultural land	I6. Hydroelectric generation	H8. Health (vector borne disease)
N11. Freshwater species and habitats	I7. Subterranean and surface infrastructure	H9. Food safety and food security
N12. Freshwater species and habitats (INNS)	I8. Public water supplies	H10. Health (house water supply)
N14. Marine species, habitats and fisheries	I9. Energy generation	H11. Cultural heritage
N16. Marine species and habitats	I10. Energy	H12. Health and social care delivery
N5. Natural carbon stores, carbon sequestration	I11. Offshore infrastructure	H13. Education and prison services
N6. Agricultural and forestry productivity	I12. Transport	Opportunities
N17. Coastal species and habitats	I13. Digital	H2. Health and wellbeing (high temperatures)
N18. Landscape character	<b>BUSINESS &amp; INDUSTRY</b>	H6. Household energy demand
<b>Opportunities</b>	B1. Flooding of business sites	<b>INTERNATIONAL DIMENSIONS</b>
N3. New species	B2. Coastal business locations and infrastructure	ID1. Food availability, safety, and quality
N9. Agricultural and forestry productivity	<b>B3. Business production processes</b>	ID3. Migration
N13. Freshwater species and habitats	B4. Business access to finance, investment, insurance	ID4. The UK's international interests and responsibilities
N15. Marine species, habitats and fisheries	B5. Reduced employee productivity in businesses	ID5. Changes to international governance affecting the UK
CCRA3 can help us to identify broad risks to focus on and interpret at service and locality level	<b>B6. Supply chains and distribution networks</b>	ID7. International trade routes
	B7. Changes in demand for goods and services	ID8. Risk to the UK Financial Sector
		<b>ID9. Risks to Public Health from Overseas</b>
	<b>Priority risks for service</b>	ID10. Risk multiplication to the UK
	Broader risks impacting on service	Opportunities
	Risks from support 'systems'	ID2. UK food availability and exports
		ID6. Increased trade for the UK

Key point

using CCRA3 risk categories can be clunky at an organisational level

it's meant for governments and nations not organisations and services

An entrypoint to consider risks

Pembrokeshire  
Swansea  
Vale of Glamorgan  
Cwm Taf Morgannwg  
North Wales  
Gwent  
NRW Guidance  
Local Partnerships

### Key point

Gwent approach  
marrying data,  
expert and  
community views  
to build capacity  
for adaptive action



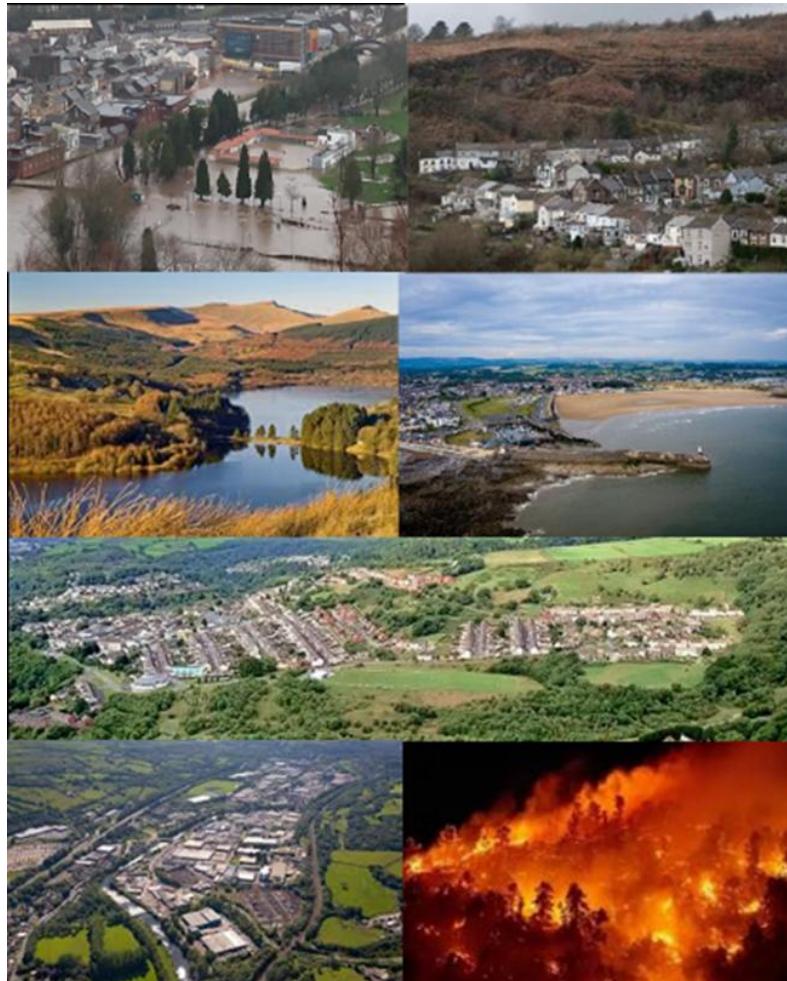
### Emerging approaches

- Technocratic – data and model driven
- Process driven
- Iterative – expert and community driven



These are the 11 priorities you should be concerned about 2025-30 and beyond

- A. Post-industrial landscape (multiple risks at scale)
- B. Climate resilient communities
- C. Infrastructural pinch points
- D. Transport Infrastructure (road, rail, bridge)
- E. Wildfire management
- F. Asset management
- G. Social care and health provision
- H. Maintaining utilities (energy, water, sewerage, food, ICT)
- I. Nature conservation management
- J. Institutional responses to climate risk
- K. Resources and finance for climate adaptation



### Key learning points

combinations of risks makes this a complex issue for public organisations and their partners

climate risk not just an operational issue to be dealt with within silos

It involves multiple institutions

working at different spatial levels

in different locations

different types of working than at present

- partnership
- strategic
- institutional
- operational

How do asset managers engage with this complexity to ensure future asset resilience?

# Gwent CCRA Leadership Seminar #1

## Pembrokeshire CCRA: Lessons learnt

### **INFRASTRUCTURE**

- 1 - Roads & Highways Network
- 2- Energy Network
- 3 - Land Stability
- 4 - Port & Harbours
- 5- Water & Sewerage
- 6 - Pipelines & Cables Network
- 7 - Information technology
- 8 - Rail Network
- 9- Climate Adaptation Evidence Hub

### **NATURE & AGRICULTURE**

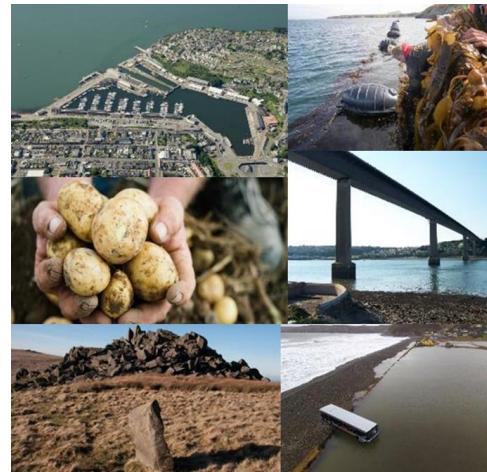
- NA1 - Designated Sites and Landscapes
- NA2 - Landscapes
- NA3 - Soil Resources
- NA4 - Saltmarsh & Seagrass
- NA5 - Coastal Land Management

### **COMMUNITIES**

- CM1 -Climate risk and Communities protocol
- CM2 -Community climate adaptation groups
- CM3 -Climate risk to Health and Social Services
- CM4- Wildfires in a changed climate
- CM5- Heritage Assets in a changed climate

### **BUSINESS AND INDUSTRY**

- BI 1 - Tourism Business Climate Risk Support
- BI 2 - Agri -Business Climate Risk Support
- BI 3 - Fishing Climate Risk Support
- BI 4 - Business & Industrial Assets
- BI 5 -Water Resources & future economy.



### **Key learning points**

inter-reliances

private sector interest

anti-collaboration

knowledge gaps

tapping institutional knowledge

communities of interest

protocol

land assets

### Climate Risks to Adult Social Services Users

impacts on service users from increasing number of severe weather events (wherever they receive the service)

#### *immediate risks in response to each event*

- thermal comfort
- flood protection
- storm protection
- supplies
- staff access
- air quality
- managing existing health problems

#### *cumulative risks*

- mental health (anxiety and depression)
- exacerbating existing health problems
- population displacement
- staff capacity/morale

### Climate Risk to support systems for Adult Social Services

resilience of infrastructural networks supporting on-site service delivery in multiple locations and contexts

- road and bridge networks
- digital networks
- public water supply
- energy networks
- supply networks
- combined risks ( e.g. storm damage, flood, slope stability combine)
- cascading risks (e.g. energy outage causes IT and water supply failure)

### Climate Risk to Assets where Adult Social Services are delivered

repeated and enhanced severe weather impacts on individual assets, resilience, vulnerabilities, business continuity and cost implications

- flood damage
- power outages
- storm damage to building fabric
- interrupted IT connectivity
- compromised water supply
- impeded access to assets for staff
- vulnerability of local emergency response assets

### Systemic risks to Service Planning from Climate Change

broader factors that combine with climate risks to stretch service delivery

- cumulative costs of recovery and bounce back
- resilience of supply chains service
- providers ability to manage risks
- availability of goods needed to deliver the service
- limited contingency in existing systems (e.g. temporary accommodation)
- seasonal impact from visitor economy
- staff morale/ capacity/ safety/burnout
- impacts of climate migration (UK and overseas)

### Key learning point

framing climate risks to different recipients on Senior Leadership Team is important to develop ownership and leadership

risk assessments are a tool for good decision-making – a means to an end

## Pembrokeshire Coastal Path National Trail - Climate Risks

Increased intense rainfall & storm frequency

- Water ingress on trail
- Wind damage to infrastructure



Extended periods of heat and drought

- Increased risk of wildfire
- Trail drying



Parc Cenedlaethol  
Arfordir Penfro  
Pembrokeshire Coast  
National Park



Pembrokeshire Coastal Path National Trail - Climate Risks  
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### Key learning

Granularity needed at a place-based level from combinations of risks. Informed by local knowledge.

**Corporate Commitment**  
(Explicit Requirement)

**Guiding Principles**  
(Scope Of Influence)

**Coordination and Capacity**  
(Advice)

**Plan or Programme**  
(Actions, deliverables, outputs)

**Leadership**  
(Managerial And Political Advocacy, Challenge)

**Service Business Planning and Redesign**  
(Embedded Process)

**Risk Management**  
(Accountability & granularity)

**Business Case Development**  
(Explicit As Part Process)

**Challenge/Scrutiny**  
(Framing Questions For Leaders)

**Planning Forward**  
(Opportunities In Forward Work Programmes: Strategic, Capital, Operations, Skills, Comms)

**Financial Implications**  
(Medium Term Financial Planning – LG Settlement)

**Capital Programme**  
(explicit consideration of climate risks and adaptation)

**Development Control**  
(explicit consideration of climate risks and adaptation)

**Supply Chain**  
(requirements of private and third sector deliverers)

## Key learning points

Integration

- risk
- business cases
- decision-making

Tapping institutional knowledge

Holistic thinking

Political member involvement

Layered, granular mapped data



**What stood out  
from the  
presentation for  
you?**

**What reminded  
you of your own  
situation?**

<b>STRATEGIC</b> CONCERNS AND OPPORTUNITIES	<b>INSTITUTIONAL</b> CONCERNS AND OPPORTUNITIES
<b>OPERATIONAL</b> CONCERNS AND OPPORTUNITIES	<b>COMMUNITY</b> CONCERNS AND OPPORTUNITIES

We are interested how you, as leaders, perceive climate risk in different contexts.

What issues will need leadership in a continually changing climate?

Dafydd will explain our first exercise on Xleap

## Exercise 2 - Gwent's – current capacity for climate adaptation strengths and room for improvement



- A. Post-industrial landscape
- B. Climate resilient communities
- C. Infrastructural pinch points
- D. Transport Infrastructure (road, rail, bridge)
- E. Wildfire management
- F. Asset management
- G. Social care and health provision
- H. Maintaining utilities (energy, water, sewerage, food, ICT)
- I. Nature conservation management

We are interested how you, as leaders, perceive Gwent's current capacity for climate adaptation

We have listed some of Cwm Taf Morgannwg climate adaptation priorities resulting from their CCRA above.

How well might Gwent's partners respond to these adaptation challenges?

Dafydd will explain our second exercise on Xleap

#### **Corporate Commitment**

(Explicit Requirement)

#### **Guiding Principles**

(Scope Of Influence)

#### **Coordination and Capacity**

(Advice)

#### **Plan or Programme**

(Actions, deliverables, outputs)

#### **Leadership**

(Managerial And Political Advocacy, Challenge)

#### **Service Business Planning and Redesign**

(Embedded Process)

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#### **Planning Forward**

(Opportunities In Forward Work Programmes: Strategic, Capital, Operations, Skills, Comms)

#### **Financial Implications**

(Medium Term Financial Planning – LG Settlement)

#### **Capital Programme**

(explicit consideration of climate risks and adaptation)

#### **Development Control**

(explicit consideration of climate risks and adaptation)

#### **Supply Chain**

(requirements of private and third sector deliverers)

We are interested what is needed within your own organisations to give greater attention and credence to climate risk and adaptation.

These are elements of corporate governance that were discussed with Merthyr Tydfil CBC.

What aspects of your own corporate governance might need development?

This slide could be used by you in your SLT after the Gwent CCRA to respond to the results of the assessment

### **Senior Leadership Team**

(Effective risk management for cumulative and combined risks)

### **Cabinet/Executive/SLT**

(Communicating resilience/loss to affected communities)

### **Asset Management**

(Dealing with vulnerable school assets)

### **Highways/Transport**

(Financing road and bridge - investment)

### **Social Services & Health**

(RPB Commissioning of Domiciliary Care)

We have produced 5 Leadership Scenarios for you to explore in Exercise 3. Each deals with a different aspect of climate risk.

We would like you to explore

- what sort of advocacy might be needed from leaders
- what sort of evidence they/you may need
- and who might need to be influenced

to address each risk

Dafydd will explain the Exercise

## **SENIOR LEADERSHIP TEAM** **(Effective long term risk management)**

1. Climate change is on the corporate risk register – but just deals with decarbonisation not climate risk
2. Climate change is listed on the community risk register – but just deals with flood risk
3. The Local Resilience Forum deals with individual severe weather incidents and their immediate effects – but doesn't focus on resilience to increased incidents, or cumulative and combined impacts over time.
4. Approaches to risk management aren't adequate to deal with complex, combined risks over time. New approaches to this long-term risk management need exploring.

What sort of advocacy might be required from members of SLT?

Who might need to be influenced?

What evidence might be needed?

## **CABINET/EXECUTIVE/SLT**

### **(Working with untenable communities)**

1. Evidence is mounting that certain communities will become increasingly untenable due to changing groundwater conditions and slope instability.
2. Partners have no precedent for working with these types vulnerable communities.
3. Silo working means that there isn't a clear understanding of what services these communities will require and how they will be delivered as vulnerabilities increase.

What sort of advocacy might be required from leaders?

Who might need to be influenced?

What evidence might be needed?

## **SOCIAL SERVICES & HEALTH PARTNERS** **(Commissioning Domiciliary Care )**

1. The Regional Partnership Board is commissioning Domiciliary Care Services for the next 5 years (care in people's homes from private sector providers)
2. Past approaches have required emergency plans and business continuity plans for individual severe weather incidents from Domiciliary Care providers.
3. Partners need to be sure that Domiciliary Care providers are preparing for more frequent, impactful severe weather events across the region and are preparing their services for a continually changing climate.
4. They need to evidence this as part of a bidding process in 3 months time.

What sort of advocacy might be required ?

Who might need to be influenced?

What evidence might be needed?

## **HIGHWAYS & TRANSPORT**

### **(Financing Road & Bridge Investment in a changing climate)**

1. The resilience of the region's road and bridge networks are under increasing pressure from combinations of surface water flooding, extreme heat, slope instability, tree damage and river scour
2. Existing budgets are struggling to manage maintenance backlogs on A and B roads, even without additional deterioration caused by climate change
3. Current evidence focuses only on flood risk. Annual budgets and emergency funding from WG are inadequate. Highways services are stretched to the limit now and will be further stretched in the coming decade due to climate impacts.

What sort of advocacy might be required ?

Who might need to be influenced?

What evidence might be needed?

## **ASSET MANAGEMENT**

### **(Dealing with vulnerable school assets)**

1. School buildings and grounds are increasingly being affected by storm damage, water ingress, thermal discomfort, surface water flooding, treefall, electricity, water and gas supply disruption.
2. Access to some schools is becoming problematic due to road conditions. Wildfire and slope stability are causing increasing concern
3. It is unclear how the Council will deal with this combination of problems at a strategic level.
4. The authority's Transformation Programme is now focused on designing schools service for the 21<sup>st</sup> Century – clearly climate change needs to be factored in.

What sort of advocacy might be required ?

Who might need to be influenced?

What evidence might be needed?

Finally, we would ask you to reflect on the discussions today and answer the questions opposite

Please use Xleap and we will open up the discussion

What do you think **your own personal leadership role** is on climate risk within the organisation and partnerships you work in?

**Who do you need leadership support from** to plan effectively for climate risk in your portfolio of work and spheres of influence?

You can enable others to lead on climate risk. **Who is the most important person (s) that you can enable?**