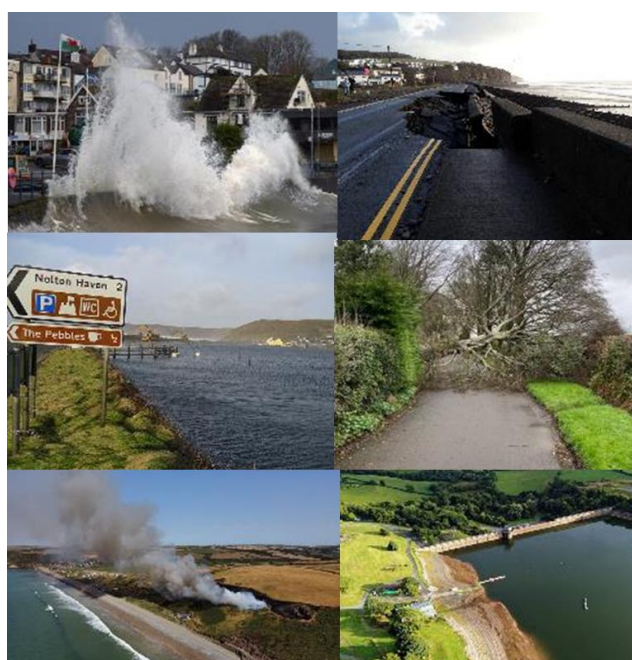




A CLIMATE RISK PROTOCOL Report

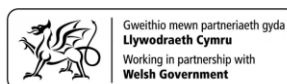
FOR COLLABORATING WITH COMMUNITIES ON CLIMATE ADAPTATION IN PEMBROKESHIRE

March 2023



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Ariennir y prosiect hwn gan Gronfa Her Meithrin Gallu Arfordirol Llywodraeth Cymru, a weinyddir gan WCVA

1. INTRODUCTION

- 1.1 Netherwood Sustainable Futures¹ ² and Well-being Planner³ were commissioned by Pembrokeshire Coastal Forum in February 2023 to develop thinking on a Climate Risk Protocol for agencies, public bodies and the third sector, to guide their work with at risk communities, as climate change impacts in Pembrokeshire in coming decades. They were also tasked to provide some initial ideas for a network of communities who might work together on this issue. The work was funded via Pembrokeshire Nature Partnership, by Welsh Government's Coastal Capacity Building Challenge Fund, administered by WCVA.
- 1.2 This report provides an overview of this work during February and March 2023 and as such provides a 'think piece' for
- Pembrokeshire Public Service Board (PSB), Pembrokeshire County Council (PCC), Pembrokeshire Coast National Park Authority (PCNP), PLANED and others that work with communities on development, forward planning, and service provision.
 - Community groups representing individual communities, communities of interest and the wide variety of bodies that work to support communities including members of Pembrokeshire Association of Voluntary Services (PAVS)
 - Businesses, including farm businesses, leisure industry, retail, service, and supply operators that work within communities and have their workforce in potentially affected communities; and business groups for key sectors of the local economy
- 1.3 Developing a Climate Risk Protocol is one 24 actions committed to in the PSBs' Pembrokeshire Climate Adaptation Strategy adopted in 2022
- 1.4 This commitment had followed a six-month process of partners in Pembrokeshire utilising evidence from the UK Climate Risk Assessment 3 and its Wales-level analysis to explore 61 risks from projected climate change⁴. This analysis found a wide range of potential impacts on Pembrokeshire's communities with clear implications for those situated on the coast and inland, for public services, infrastructure, nature conservation, for health and for business and industry.
- 1.5 It was clear from this analysis that forward planning for impacts of climate change would necessitate new ways of working between communities and the bodies and organisations that support them, as climate change impacts in coming years. One potential way of achieving this would be to develop a Climate Risk Protocol which would help to set out how both communities and the bodies that support them, could work together through this change.

¹ <https://uk.linkedin.com/in/dr-alan-netherwood-074184a>

² Netherwood Sustainable Futures' Dr. Alan Netherwood has recently worked for the UK Climate Change Committee on the UK Climate Risk Assessment and is the author Climate Change Risk Assessment 3 for Wales. His current work on climate adaptation in local government in Wales has delivered a climate leadership programme and land-based decarbonisation support for WLGA; Alan has undertaken climate risk work for local authorities, Ministry of Defence and Welsh Government and RNLI amongst others. In 2022 he supported partners in Pembrokeshire Public Services Board to develop Wales' first county-wide climate adaptation strategy He is also an Honorary research Fellow at Cardiff University leading a Climate Adaptation Pathways Project. Alan is also widely published on this issue.
<https://www.routledge.com/Rethinking-Leadership-for-a-Green-World/Taylor/p/book/9781032041841>

³ The Wellbeing Planner provides customer focused services that help groups of people to work together more effectively. Success in a team, a community or business is based on shared understanding to inspire collective action. As the Wellbeing Planner, Dafydd has recently been working with groups of people to work together to tackle complex issues such as helping communities adapt to a changing climate; working with partners across river catchments and exploring collective actions to strengthen the foundational economy.
For more details visit www.wellbeingplanner.co.uk

⁴ <https://www.pembrokeshirecoastalforum.org.uk/climate-adaptation-strategy/>

- 1.6 In order to inform this work, NSF, WBP and PCF worked together to establish and deliver the following process within a tight six-week timeframe: a literature review of the use of protocols and the experience of agencies working with communities on climate risks; three workshops to engage partners agencies, public bodies, third sector, existing networks and community groups to develop thinking on the protocol; 1-1 discussions with representatives of the above; and analysis and reporting on the work. The following paragraphs provide more detail on these steps.
- Workshop #1 (02.03) focused on: the background to the protocol concept; a reminder of climate risks to communities in Pembrokeshire, lessons that could be drawn from elsewhere; principles and depth of working with communities; support needs for communities and those that support them; and how a protocol might help.
 - Workshop #2 (09.03) explored: potential cumulative and combined change in communities because of climate impacts; the ripple effects of these impacts in a scenario using an 'imaginary' Middle-haven community; and the resulting conversations, relationships and action which might result. This would help partners to think about the scope of what a protocol might need to cover.
 - Workshop#3 (20.03) explored: the results of #1 and #2; and what 'rules might need to be set out at various stages of a draft protocol: through initial engagement with a community; to local risk analysis; to developing adaptive actions; and delivering those actions.
- 1.7 NSF developed the material to stimulate discussions in each workshop and provided the analysis and was the key author of this report. WBP provided expert facilitation using Xleap software to record the outputs of each workshop and provided insight into how a Protocol might be used across Pembrokeshire through a network of communities; PCF, as the lead for this project and funding recipient sought to engage potential attendees through correspondence and sharing of materials from the workshops. They also provided input into the workshops given their experience of working in the Havens, Amroth and Newgale on climate change.
- 1.8 The quality of input from those attending the workshops⁵ provided valuable insight into how a protocol might help and what it might contain. Similarly, 1-1 discussions⁶ enabled the consultants to gather views from different perspectives.
- 1.9 Clearly the time inhibited better representation, especially of the community sector in this dialogue. It is recommended that PCF build on this work and use this document and its contents to engage with community groups, Town and Community Councils, PAVS, and PCC Elected Members from April 2023 onwards, to get their perspective on how a protocol could support them as Pembrokeshire's climate changes.
- 1.10 This report is written not just as a reportage of what was done and what people said, but rather an analysis of the insight gathered, to inform continued dialogue on the protocol.

⁵ The following were represented at the workshops: PCC (regeneration, countryside, climate change, flood risk) PCNP (planning) FUW, Bluestone National Park Resort, Pembrokeshire College, Friends of Pembrokeshire Coast National Park, Newport Town Council, Natural Resources Wales, Welsh Local Government Association; PCF

⁶ 1-1 discussions by NSF were with NRW, PCNP (planning, climate change and corporate) PCC (planning) PLANED and Friends of Pembrokeshire Coast National Park

It is important to recognise that this report provides an overview of work in progress on this issue which can inform the work of partners in Pembrokeshire during 2023.

The report is structured as follows

Section	Content	Page Number
2	CLIMATE RISK PROTOCOL CONCEPT what a protocol is, how these have been used and how this might apply to climate risk and adaptation in Pembrokeshire	4
3	WHAT CAN WE LEARN FROM COMMUNITY LEVEL CLIMATE RISK WORK ELSEWHERE? analysis on what principles and approaches need to be considered in developing a protocol, based on learning elsewhere and partner's insights	6
4	SUPPORT NEEDS OF COMMUNITIES ON CLIMATE RISK AND FOR THOSE THAT WORK WITH THEM Exploring support needs in communities which may experience various levels of impacts and risks from climate change over time. '	8
5	COMBINED AND CUMULATIVE CLIMATE IMPACTS IN 'MIDDLEHAVEN' – A SCENARIO 'Middlehaven' -a scenario where climate impacts have combined and have accumulated over time.	10
6	WHAT COMMITMENTS MIGHT A CLIMATE RISK PROTOCOL INCLUDE? Exploring the commitments that could be made at various stages of working with communities on climate risk from initial engagement to local risk and analysis, to adaption planning and delivery	12
7	HOW A CLIMATE RISK PROTOCOL MIGHT BE USED IN PEMBROKESHIRE outlines how a protocol might be used across a network of communities and organisations in the County; and next steps to develop the Climate Risk Protocol during 2023	14

Appendices:

Appendix A – Pembrokeshire Communities at Risk from Surface, Tidal, & Fluvial Flooding & Coastal Communities at Risk

Appendix B – Organisations That May Be Involved in the 'Middlehaven' Climate Scenario

2. WHAT IS A PROTOCOL?

2.1 Protocols have been used for many decades to support work between government, institutions, and communities in many ways – in areas of conflict, to contexts where natural resources are being exploited, to determine how land is to be used; to protect cultural identity; and to help to

determine a way forward where difficult choices are being made⁷. They have been used internationally and locally by the UN, by national and local government and by third sector organisations – all seeking to engage communities in dialogue and forward planning. A protocol can be thought of as a *'system of 'rules' that explains the conduct and procedures to be followed in each situation.*

2.2 Protocols have been used to help to guide work between communities, communities of interest and institutions to:

- exchange information
- establish dialogue
- negotiate options
- prevent and resolve conflict
- develop understanding
- build capacity of stakeholders
- provide advocacy for communities
- to identify and resource actions

Words associated with protocols often include:



2.3 Some examples of protocol development and process are provided in the footnotes below. The consultants have drawn on these to inform the analysis in this report.

2.4 For climate change in Pembrokeshire the benefits of a protocol might be to

- **exchange information** for example about potential risks in communities including to roads, services, and power
- **establish dialogue** for example about ways to build resilience in services that communities rely on
- **negotiate options** for example for delivery of social care or flood prevention
- **prevent and resolve conflict** –for example. on 'decommissioning' community assets or relocating householders
- **develop understanding** for example about who is responsible for what, and what can and cannot be done
- **build capacity** of stakeholders to understand cumulative and combined climate risks and their consequences
- **provide advocacy** e.g., for communities politically to represent their views and be properly engaged in decision making about their future
- to **identify and resource actions** for example drainage schemes and tree

⁷ See the following for examples of protocol use:

<https://www.unep.org/resources/report/community-protocols-common-underlying-principles>

<https://naturaljustice.org/wp-content/uploads/2013/08/Brief-intro-BCP.pdf>

<https://naturaljustice.org/publication/community-protocols-toolbox-2016/>

<https://www.communityplanningtoolkit.org/sites/default/files/AberdeenCityCouncilCEProtocol.pdf>

planting regimes to adapt to climate
change

2.5 Rather than rushing to drafting a protocol with many 'ought to's and must do's – the consultants sought to take partners through a process to explore the nature and detail of what working with communities on climate risk might entail in coming decades. This is explored in the following sections.

3 WHAT CAN WE LEARN FROM COMMUNITY LEVEL CLIMATE RISK WORK FROM ELSEWHERE?

- 3.1 As part of the project, participants considered some of the lessons learnt from previous work with communities on climate risk including: a recent national report *Working together to adapt to a changing climate: flood and coast* (2023) from DEFRA, NRW, Welsh Government and Environment Agency⁸; Transboundary Adaptation Learning Exchange (TALX) covering Ireland/UK collaborative work on coastal adaptation⁹; West Wales pilot work in Fishguard & Goodwick delivered for Pembrokeshire PSB¹⁰; PCFs support to communities in the Havens¹¹ and their CCAT (Coastal Communities Adapting Together) education project¹²; the recent experience of PCC and others working in Newgale on coastal adaptation¹³.
- 3.2 In addition, as part of Workshop #2, participants also explored in detail the experience in Fairbourne, Gwynedd¹⁴ from 2013 -23. Over this period, the community and the organisations that have supported them have been working to try and plan forward for a future where continued coastal defence is unsustainable due to predicted climate change impacts on the coast and inland. A multi -agency group has supported awareness-raising meetings, counselling, mock evacuation exercises, feasibility studies, workshops on options and master-planning. After 10 years of work with the community there are still many issues to resolve, including the ongoing social support required; details of programmed relocation and/or adaption of the community; resettlement planning for residents; the financial implications of adaptation options; and who makes key decisions.
- 3.3 Participants also considered the relevance of both the WCVA Principles of Public Engagement¹⁵ and the Well -being Future Generations Act “ways of working” ~~to~~ to the protocol. It was felt that while these principles provide important background to the way that institutions and groups work with communities, however, they do not tell us what approach we should take in working with them on climate risk.
- 3.4 Analysis and exploration of this material has helped participants in this protocol project explore what these activities meant for effective ways of working with communities on climate risk. The following paragraphs set out what will be critical issues to consider in developing a climate risk protocol in Pembrokeshire.
- 3.5 **Setting the context for communities** - it will be important to: introduce the concept of climate risk and explain its relevance to a community’s specific locality; framing the issue to focus on adaptation as separate from decarbonisation: drawing on local knowledge of impacts from severe weather now and explore what increased severity and frequency might mean for the communities future well-being; it will also be important to acknowledge and understand the political/power issues between community and ‘authorities’.
- 3.6 **Framing the issue at different scales and to multiple audiences** - it will be important to consider climate impacts and solutions: at different scales ranging from individual households; to build assets and natural assets within a community, to the impact of climate change on services and connections across the local area and county; with a future focus to distinguish between how an issue is managed now to think about resilience under different future climate conditions; to different audiences – residents, landowners, politicians, institutions.

⁸ <https://www.gov.uk/flood-and-coastal-erosion-risk-management-research-reports/working-together-to-adapt-to-a-changing-climate-flood-and-coast>

⁹ <https://talx.ie/>

¹⁰ https://www.ccatproject.eu/wp-content/uploads/2020/11/Dr-Alean-Netherwood_Cardiff-Univeristy.pdf

¹¹ <https://www.ccatproject.eu/report-lessons-learned-climate-change-engagement-with-the-havens-community/>

¹² <https://www.ccatproject.eu/>

¹³ <https://www.pembrokeshire.gov.uk/coastline-adaptation-plans/newgale-shingle-bank>

¹⁴ http://fairbourne.info/wp-content/uploads/2019/10/Fairbourne-Masterplan-Structure_Final-Issue-2.pdf

¹⁵ <https://wcva.cymru/influencing/engagement/>

3.7 Clarity of process – it will be important to develop a process where relationships and trust are built between the institutions and groups and the community so that any engagement is seen as a learning process for all; with transparent goals, objectives, clear outputs with shared outcomes. There will need to be clarity on the roles and responsibilities of key actors and their role in decision making.

3.8 Techniques to understand climate risk – there are multiple techniques which can be used to engage communities on climate risk including; risk assessment; ground-truthing; narratives; scenarios' mapping and 'conflict' analysis.' However, exploring and understanding vulnerabilities through these techniques should build evidence as a route to action, not as an end point.

3.9 Embracing complexity and contention – work on climate risk as time goes on, is likely to raise some difficult and complex issues for communities, their representatives and the institutions that serve them – for example re-routing roads; constraints on investment in infrastructure; services being undermined by persistent and increasing impacts. It will be important that work with communities properly explores the constraints of what can be done; and trade-offs between options for development and in some cases radical options of decommissioning assets or relocation. This will need institutions to develop skills to support communities through change and to provide both technical solutions and work to effect social and systemic change

3.10 Institutions adapting themselves – a strong theme emerging from this analysis was that that to deliver effective and meaningful support to communities, public institutions, for example PCC, PCNP and NRW will have to develop their own skills and capacity to work with communities, as changes to the climate impact in coming decades. They will need to set themselves up to address the tasks shown in the following list. It is recognised that delivering the above tasks in the future will need additional resources and skills from those available now, and that institutions will need to plan forward to meet demand in the following areas of work.

- understand the scale and combinations of climate risks in various places
- engage with those that will be impacted
- raise awareness of multiple risks and response
- use evidence coherently
- provide streamlined communication
- plan for 'business continuity' and/or 'letting things go'
- plan forward for changes to services and development in the community
- prepare communities for change
- understand and plan for financial implications
- provide effective, governance planning and support
- develop skills in conflict management
- provide coherent support between institutions

3.11 Leadership - much of the material and discussions among attendees, focused on the need for multiple leaders to work on this issue effectively. including the county council, with multiple responsibilities as community leaders through delivery of its services; local politicians who would be increasingly engaged in climate risk through local elections and political manifesto commitments; via officers from institutions who share data, develop policy and plan forward; and through community leaders themselves in town and community councils.

3.12 Community resilience – discussions as part of this protocol project acknowledged that one of the key outcomes of engagement with communities should be to enable them to focus on their own role in planning for and coping with changes to the climate. To do this they will need to understand:

- potential risk, likelihood, impact, and timescales;

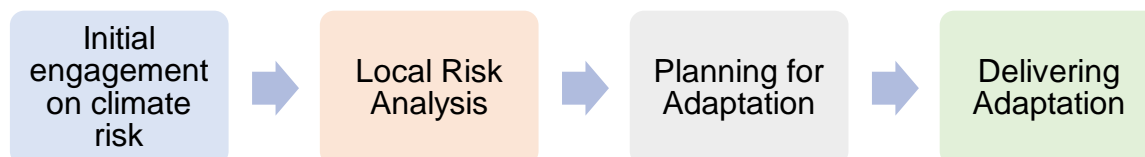
- who can do what to help and how;
- activities which they can do to build their collective capacity to cope¹⁶
- what contingency plans are needed for multiple risks in the places that they live
- the available capacity and from institutions to support them

Adaptation Scotland have produced an excellent illustrated practical guide to communities on what they can do for themselves to build climate resilience; focused on specific actions to regenerate nature; improve housing and the neighbourhood; support self-sufficiency; getting around; and growing skills and employment. This type of guide provides agency to communities.

A Climate Risk Protocol differs from this in that it would guide how institutions and groups work *together* to develop resilience, so that communities are able to influence factors that are out of their direct control (e.g., infrastructure; land use; services; emergency response; health care)

3.13 **Working with - not doing to** - the evidence from work elsewhere and the those involved in discussions, indicate that work on climate risk would need to involve *co-production*¹⁷ of plans for communities, between the institutions and groups that serve that support them and members of the communities themselves. The Co-Production Network for Wales¹⁸ outlines how co-production: values all participants and builds on their strengths; develops networks across silos; focuses what matters for the people involved; builds relationships of trust and shares power; and enables people to be change-makers and organisations to become enablers.

3.14 **A stepped approach to the Protocol?** We suggest from the above analysis that a potential protocol would need to support and guide *both* affected communities *and* those involved in supporting them, through a series of concurrent steps to address climate risks. We have called these steps *initial engagement on climate risk; local risk analysis; planning for adaptation and delivering adaptation*. These four steps are considered in more detail in Section 5 of this report.



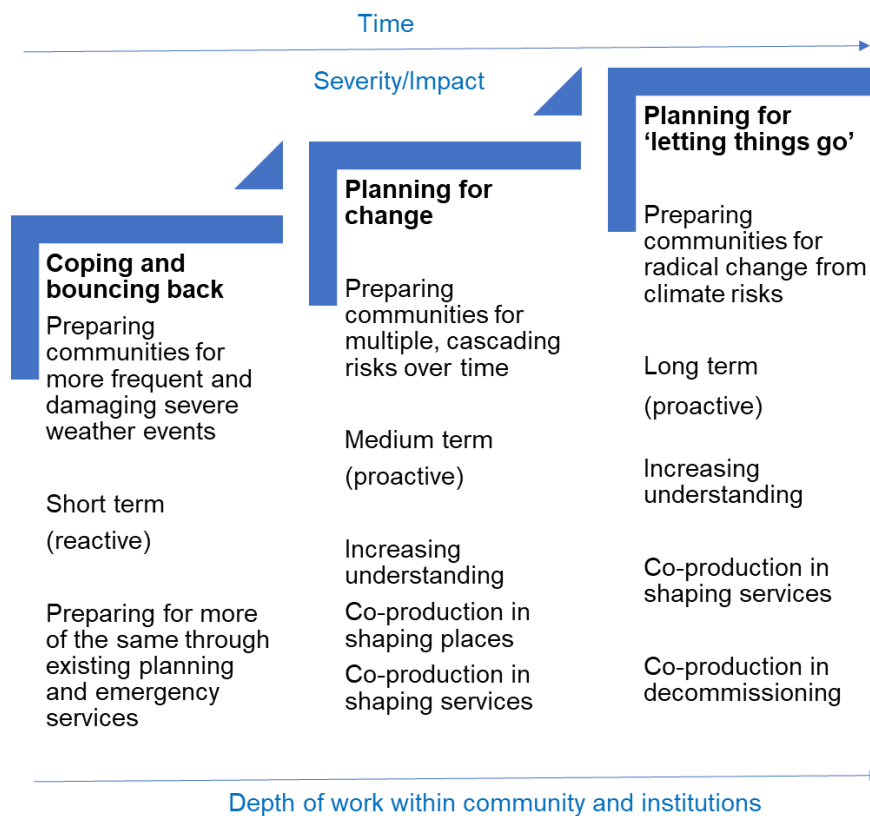
¹⁶https://adaptationscotland.org.uk/application/files/9116/7895/7609/Communities_Climate_Adaptation_Route_Map_Final_March_2023.pdf

¹⁷. According to Local Government Association “Co-production is focused on a relationship in which professionals and citizens share power to plan and deliver support together, recognising that both partners have vital expertise. Overall, co-production is fundamentally about seeing people as assets: people are no longer passive recipients of services, but are equal partners in designing and delivering activities to improve outcomes”. In the case of climate risk. For mor information on co-production <https://www.local.gov.uk/topics/devolution/devolution-online-hub/public-service-reform-tools/engaging-citizens-devolution-7>

¹⁸ <https://copronet.wales/>

4 SUPPORT NEEDS OF COMMUNITIES ON CLIMATE RISK AND FOR THOSE THAT WORK WITH THEM

- 4.1 A clear message from this work is that at a county level, different communities may be exposed to climate risk in vastly diverse ways, and therefore require various levels of support over time.
- 4.2 Work on the Climate Adaptation Strategy in 2022¹⁹ showed how 45 communities across Pembrokeshire are likely to experience vastly diverse levels of flood and coastal erosion in coming decades because of climate change. The key point is that if other climate risks from CCRA3 are also factored in, then there is likely to a diverse and unique set of risks for each community across the County. A protocol will have to account for this diversity of risk, need to work for different communities across Pembrokeshire with unique circumstances
- 4.3 Additionally, climate risks are likely to *combine* in individual communities, impact *cumulatively* over time, and in some cases, *cascade* because of increases in the severity and occurrence of severe weather events.
- 4.4 The consultants produced the following model to enable participants to think through this issue of diversity and change over time in relation to the protocol.



- 4.5 This model shows that there may be communities that will be able to thrive by just bouncing back from repeated severe weather events as they occur in a changed climate. However, there may be some communities (in the middle column) which begin to experience cumulative impacts which require local adaptation of infrastructure, land, services, health etc and need to plan for this change; finally (in the third column) there may be some communities that will experience more radical change as a result of a changed climate meaning that infrastructure; land; services

¹⁹ See table in Appendix A. data is drawn from NRW data supplied for the Pembrokeshire Well-being Assessment (2022) and PCNP data on coastal change management areas (2018)

are unsustainable, with major economic, health and other social impacts. Each of these types of community may need different support from the institutions and groups that support them. In the consultant's view, institutions will need to develop capacity to serve a variety of community needs as the climate changes.

4.6 This diagram resonated with participants, enabling them to understand and explore the diverse types of need that communities might have. The following list provides an indication of the reaction to this 'model' and what it might mean for the additional support that a Climate Risk Protocol needs to deliver:

For communities

- understanding exposure to risk and resilience for the place that they live and how risks will impact outwards and inwards
- understanding that effects can interact and compound over time – this is not about single events
- early engagement to explore decadal times
- engagement in risk assessment specific to their communities
- explore what they can expect from others and their role in resilience/self- reliance
- understanding the link between the climate and nature emergencies

For those who support communities

- increasing understanding of medium and long-term risks from climate change
- developing communication channels between institutions and communities
- not just the 'issue' but managing the consequences of climate change
- meeting a range of interaction needs depending upon impact severity and cumulative impact
- expectations -help communities explore what they can expect from others
- the way organisations need to evolve to collaborate with communities to work on this issue
- inform new service models for a future with a changed climate
- upskilling institutions on climate adaptation

4.7 This model also helped to focus participants on the areas of support where capacity would need to be built throughout coming decades. This included increased provision of the following:

- information
- advice
- counselling
- engagement
- finance
- practical help
- adapted services
- legal support
- local member advocacy
- and officer support

;

5. COMBINED AND CUMULATIVE CLIMATE IMPACTS IN MIDDLEHAVEN - A SCENARIO

- 4.8 The consultants also took participants through a second exercise in Workshop#2. which explored combined, and cumulative risks for a fictitious community 'Middlehaven' providing insight into the relationships, conversations and activities that might result from pervasive climate impacts over time. This provided a 'worked' example of the sorts interactions between communities and institutions that a Climate Risk Protocol might need to guide.
- 4.9 The diagram overleaf shows how climate change may begin to undermine well-being in Middlehaven over time by impacting on facets of community life (in blue circles) – with consequences of these impacts shown next to them. Participants were asked to discuss these and note down what sorts of issues might result from these impacts, what sorts of conversations these might lead to and who might need to be involved?
- 4.10 Participants were adept at identifying the issues that might to be discussed for each facet of community -life. These are shown in the table below.

Business

options for business finance and insurance
implications for supply and distribution workforce – accessing skills and journey to work.
sale value of business
dissipating market (e.g., visitors)
business-site maintenance
increased transport and commodity costs
logistics and costs of business relocation
contingency planning for severe weather (increased frequency and intensity)

Access to Services

access to essential services: water; food, transport, health care; schools
risks to Council services: waste; road maintenance
risks to community assets: shops; centres; businesses
contingency planning for severe weather (increased frequency and intensity)
financial implications to residents: council tax, utility bills, travel to work

Utilities

vulnerability and continuity of drinking supplies.
business supply (including agriculture)
sewerage networks and infra-structure.
bathing beaches water quality
electricity and gas supply.

Land

risks to soil resources
where nature -based solutions might help
implications of land loss
water access for agriculture
impacts on the inter-tidal zone
the role of SUDS
approach to protected sites
managing increased tree disease
effect on water in the catchment
opportunities for new crops
grants and finance available
loss of biodiversity

Roads

vulnerability of road network
risks to service continuity and business interests
cascading risks (e.g., surface, substrate, subsidence, windfall, and utilities) over time
increased costs over time and investment approach
alternative approaches to B road maintenance
set out options - no intervention, 'affordable' scenario, best scenario.
plan for adaptation, rerouting, or loss.

Health

targeted messaging to vulnerable groups to overheating and cold
air quality pollen, ozone, and particulates (from wildfires)
flood action planning for events
risks to mental health
access to health care

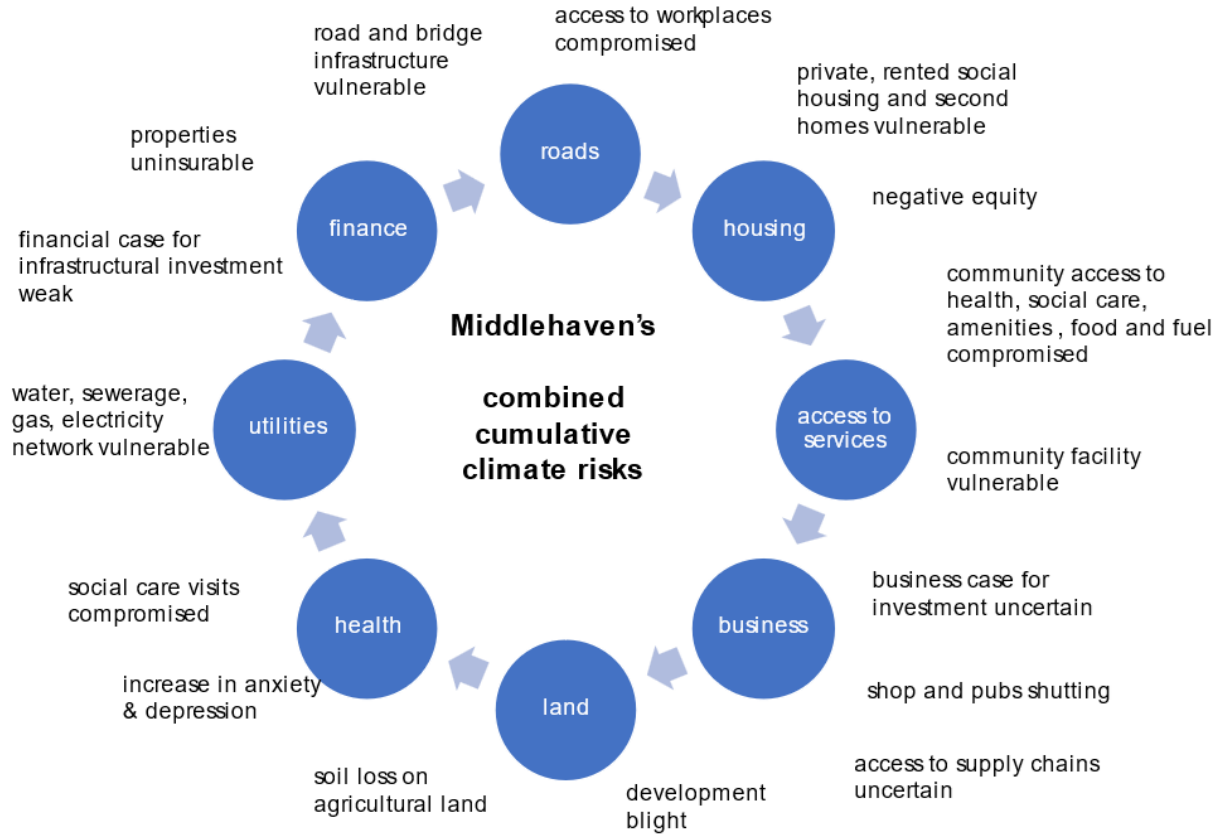
Finance

Increased business costs
 Access to business finance
 Property value and sale
 Public sector maintenance costs

Housing

risks to existing housing stock
 implications to property owners of diverse types (value/insurance/adaptations)
 options for finance, compensation, relocation

Pembrokeshire Climate Risk Protocol:
 Place-based support needs: ripple effects of climate risk on Middlehaven



4.11 They were also able to identify the broad range of organisations and interests that might need to be involved in these discussions in Middlehaven²⁰. This exercise provides an indication of how, for just one community, there may need to be multiple conversations between the community and a wide variety of institutions to respond to the 'ripple' effects of climate change.

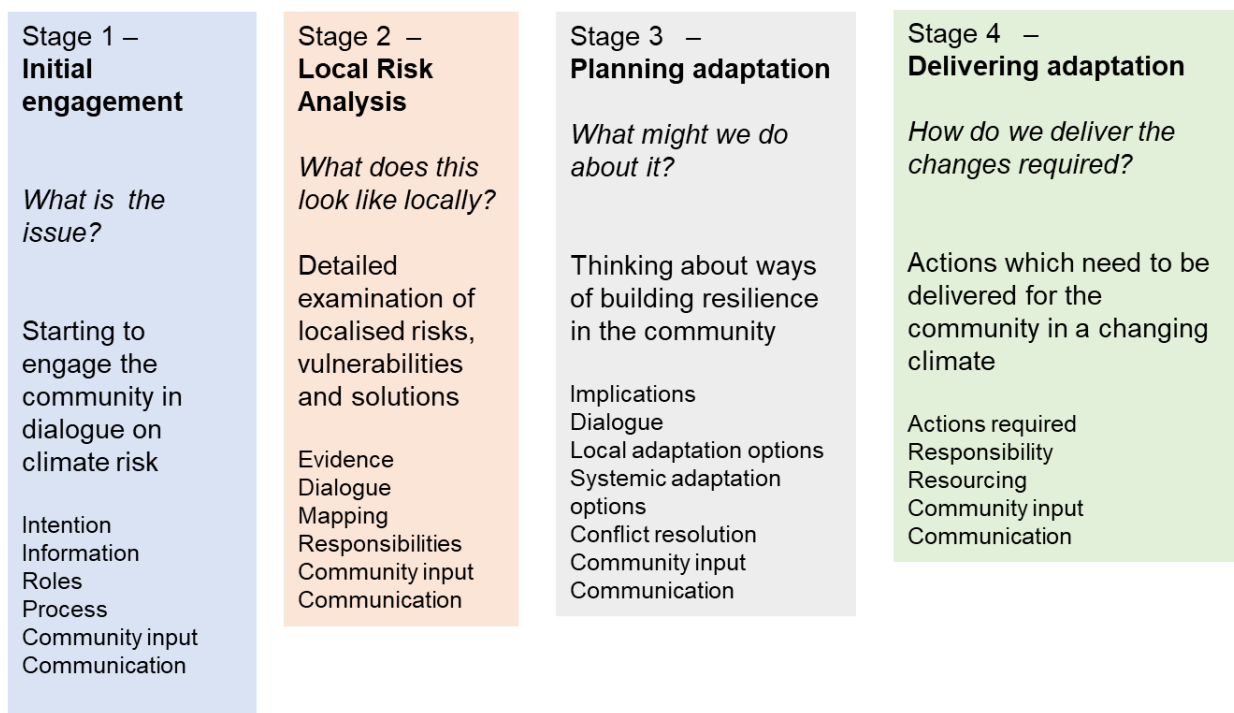
4.12 It was acknowledged that services already exist to address many of these issues. However, the key issue for service providers is that climate impacts are likely to increase or alter service demand over time, for example, health, infrastructural maintenance, or business support. This will need planning for.

4.13 It was felt that a potential protocol will not address all these issues, impacts, or ripple effects. But it may offer a 'minimum' standard' for what support communities can access to enable themselves and others to plan forward for a changed climate – and avoid a Middlehaven scenario.

²⁰ See APPENDIX B – ORGANISATIONS THAT MAY BE INVOLVED IN THE 'MIDDLEHAVEN' CLIMATE SCENARIO

5. WHAT COMMITMENTS MIGHT A CLIMATE RISK PROTOCOL INCLUDE?

- 5.1 Previous sections of this report have explored what issues a Climate Risk Protocol might need to address across Pembrokeshire, as climate change will impact on different communities based upon their own unique sets of circumstances. These sections have also identified a key issue of the institutions and a groups that support communities needing to adapt themselves, by considering climate risk in the work that they do and thinking forward about the kinds of services that communities might require to cope. This is valuable information to inform a potential Climate Risk Protocol.
- 5.2 Workshop #3 enabled participants to reflect on the above material and get into more detail of the potential *contents* of a protocol. To enable this the following diagram was provided. This suggest four stages that communities could be taken through as part of a Climate Risk Protocol from initial engagement to delivering adaptation (as suggested in Section 2 of this report). Through these stages, a community (and the organisations that are working with them) could be taken on a journey from being introduced to the concepts of climate risk and adaptation in Stage 1, to ground-truthing what this might mean in their community in Stage 2, to planning what they need to do to cope/thrive in stage 3; and delivering adaptation actions to build resilience in Stage 4



- 5.3 An exercise was run to think about what commitments or rules could be assigned to each stage. The rationale for this exercise was to explore whether this 4 -stage process might be a potential structure for a Climate Risk Protocol, and to develop thinking on specific commitments that could be made at each stage. To do this, attendees were asked what sort of phrases/commitments might be used at each stage by completing these sentences:

We (the collective) would....
 We will.... (From those supporting communities)
 We would expect.... (From the community)

- 5.4 The following tables show the responses from participants for each stage. Note these are *ideas* about the sort of statements that could be used in a Climate Risk Protocol and are indicative.

Climate Risk Protocol Stage 1 - Initial Engagement

We (the collective) would	We will....	We expect....
<p>increase understanding of the implications of climate risks</p> <p>present information on projections and risks in an accessible way</p> <p>present information on climate risk impartially using the best available information and data, and interpret this data for the community</p> <p>work collectively to provide coherent information</p> <p>provide arenas for discussion that the community can access</p> <p>seek a wide variety of views from the community on climate risk; including homeowners, businesses, landowners</p> <p>listen and engage with each other to hear each-others' concerns, insights, views, and ideas</p> <p>explore climate risks alongside other community priorities.</p> <p>provide a clear explanation of responsibilities of agencies, public bodies and groups involved.</p> <p>identify actions which help in building community climate resilience and work together to implement them</p> <p>provide the resources to support the discussion and be clear about the process we are going through and</p>	<p>focus on where those involved can support each other through climate change</p> <p>aim to build up trust and develop a positive relationship between the community and the organisations, groups and individuals that support it</p> <p>provide an iterative process to take the community's concerns, insights, views, and ideas on climate risk and develop these into adaptation actions</p> <p>assist with ensuring all voices are heard and conflict is minimised</p> <p>provide time and space for all to air their views.</p> <p>create a feedback loop where communities are listened and where forward plans can be refined and reinforced to reflect the communities' views</p> <p>help to communicate our findings to relevant institutions</p> <p>provide a long-term commitment to working collaboratively if this is necessary</p> <p>not walk away from the conversation if it gets difficult, contentious and seek to minimise conflict where this might</p> <p>will not impose solutions onto communities but from the start look to share power and responsibility to build up trust.</p>	<p>the community to bring people to the table to explore climate risks and solutions</p> <p>community leaders to engage including councillors and leaders representing community groups</p> <p>communities to be open to explore change: as a result of climate impacts and through tackling climate risks</p> <p>young people in the community to engage to represent future generations who may live in the community in a changed climate</p> <p>homeowners, businesses, landowners, and other interests to be represented</p> <p>a commitment to explore multiple climate risks and their solutions over decadal times</p> <p>communities to actively engage other son this issue to ensure their views are represented and heard</p>

5.5 Attendees were also able to focus on Stage 2 of the potential Protocol structure

Climate Risk Protocol Stage 2 – Local Risk Analysis

We (the collective) would	We will....	We expect....
<ul style="list-style-type: none"> • focus on analysing climate impacts on: access to services. infrastructure utilities land health economy and other key issues • help each other to develop different future scenarios to inform potential options. • interpret data/information to aid understanding of risks and solutions • ensure that all involved have a basic understanding of the science and data available and what this tells them • listen to local expertise and opinion on risks. • work to identify opportunities specific to locality. • identify areas of potential conflict or competing priorities • support each other to investigate specific issues particular to their community in the context of climate risk e.g., crops, soils, trees, insurance; road access. 	<ul style="list-style-type: none"> • use evidence-based data to look at local risks. • interpret maps and data to enable the community you understand the nature, scale, and likelihood of risks. • Be clear on who is providing what information, in what form and when • weigh up all the perceived risks and consult locally on those we might have missed. • draw on local knowledge on land, infrastructure, nature, and the community to inform our thinking. • balance discussions on risks with discussions on opportunities. • present information in a clear and understandable way - including in ways that various sectors of the communities can understand. • link communities to potential solutions to help address climate issues for specific local level issues. • ensure understanding of the community's place in the wider physical landscape and how this may affect climate impacts and solutions • provide a community climate risk 'profile; to support adaptation planning 	<ul style="list-style-type: none"> • all stakeholders to work together openly in a genuine spirit of cooperation to optimise the outcomes. • institutions to share and interpret their data to inform local risk analysis. • sufficient resource allocation from organisations to enable community specific data / information / opportunity identification. • community leaders to bring community knowledge to the process. • openness, cooperation, time input to coordinate local risk analysis

5.6 Attendees also provide insights in the Planning Adaptation phase. It needs to be acknowledged that participants in Workshop#3 had limited time to address this stage. This should be revisited by PCF (Pembrokeshire Coastal Forum) and partners post March 2023 (see section 6)

Climate Risk Protocol Stage 3 – Planning Climate Adaptation

We (the collective) would	We will....	We expect....
<ul style="list-style-type: none"> • take the data from the risk assessment and produce a set of priorities. • work together to identify and discuss potential solutions. • agree who does what based on statutory responsibilities, expertise and resources. • be clear about the opportunities and constraints. • agree triggers <i>and</i> timescales to deliver preferred adaptation options. • be mindful of the effect an intervention can have on other priorities - unintended consequences • analyse pros and cons of potential solutions and criteria to prioritise those to pursue • focus on lifetime costs of adaptation action - not just upfront costs. 	<ul style="list-style-type: none"> • present adaptation opportunities and what can and cannot be done • be receptive and open to innovation solutions. • provide multidisciplinary scrutiny / advice in developing local adaptation plans. • ensure those involved in delivery of services are aware of 'asks' and involve them in conversation. • develop a roadmap or plan for adaptation with tangible resources for delivery • not over-promise • use the broad reach of multiple agencies to provide best practice solutions / suggestions / sources of finance. • ensure understanding of the community's place in the wider physical landscape and how this may affect potential solutions 	<ul style="list-style-type: none"> • all stakeholders to work together openly in a genuine spirit of cooperation to optimise the outcomes. • community leaders to bring community knowledge to the process. • openness, cooperation, time input to coordinate local risk analysis

5.7 Attendees were able to think about commitments which might be made in Stage 4 of the Protocol: Delivering Adaptation. Again, it needs to be acknowledged that participants in

Workshop#3 had limited time to address this stage. PCF and partners should revisit this post March 2023 (see section 6)

Stage 4 of Climate Risk Protocol –Delivering Climate Adaptation

We (the collective) would	We will....	We expect....
<ul style="list-style-type: none"> • use the reach of multiple agencies to source funding, research, and design best practice adaptation measures. • try to retain an "objective" overview of the entire process. • maximise the skill sets and expertise for effective delivery of adaptation priorities. • ensure we have a joined approach to acting on adaptation projects in communities where there are similar issues. i.e., one funding bid for multiple similar projects in multiple localities. 	<ul style="list-style-type: none"> • measure the impact of actions taken to ensure they are having the desired effect. • provide management support for delivery of community projects. • lobby government to ensure that policy and financial enablers are in place to deliver adaptation. • ensure delivery is 'visible' - open and honest. • balance proactive actions from the plan with reactive actions in response to opportunities (such as a funding source). • remain invested in adaptation activity over the long term. • keep all stakeholders up to date on process / successes / challenges. • tie in delivery actions to our business planning where it is required (e.g., road maintenance, tree surveys). 	<ul style="list-style-type: none"> • communities to identify their own contribution to adaptation actions. • communities to counter negative thinking and focus on positive steps to increase resilience

5.8 This exercise provided, in a short amount of time, an indication of what types of commitments might be made in a Climate Risk Protocol. It demonstrates the complexity of what it might mean to open dialogue on climate risk with communities and follow up initial engagement with a process to follow that leads to action. Identifying and clarifying commitments at each stage is a work in progress and needs development

6 HOW A CLIMATE RISK PROTOCOL MIGHT BE USED IN PEMBROKESHIRE

- 6.1 Adapting to climate risk is a complex problem for communities and the organisations and bodies which support them. There is a need to increase local understanding of the issues and actions around climate risk to engage communities meaningfully on climate adaptation. This commission has explored the merit of developing a Climate Risk Protocol for Pembrokeshire to achieve this.
- 6.2 This project has suggested that a Protocol could be a valuable tool to engage communities at risk from climate change. It would also help to engage bodies and organisations in developing a more coherent approach to working with communities on climate risk and build their own capacity to work with communities on this issue.
- 6.3 The exercises in the workshops have enabled those involved to understand more about how potential climate risks might play out in communities in Pembrokeshire, affect the services that communities are able to access and understand the multiple support needs in different communities as the climate changes.
- 6.4 We have found from those that we have engaged with that they see the following key benefits of a Protocol like the framework explored in Section 5, it would
- function as a catalyst to bring communities, organisations, groups, and individuals together to address climate risk, using common vocabulary and process to move from initial engagement to delivering climate adaptation – with clear expectations and commitments from both communities and the bodies and groups that support them
 - enable institutions to reflect on the sort of support that will be required to help communities plan for and thrive in changed and changing climate – and address this in their forward planning and organisational development
 - act as a potential catalyst for a network of communities to work together and support each other across the County on this issue – with the Protocol providing a common structure to support collaborative work
- 6.5 A key question to resolve, and beyond the scope of this commission, is *which* communities and *how many* communities might be prioritised to work through the Protocol. Capacity to engage with communities is an issue for the organisations which serve them, so there will need to be a careful selection, should the Protocol be developed and used in a 'pilot phase' and beyond. Similarly, it will be important that communities that are engaged understand that this type of process will require active participation throughout the process outlined in Section 5 and their capacity to engage, timewise might be a significant factor
- 6.6 Part of the commission from PCF was for the consultants to explore how a potential network of communities working on climate adaptation might function, and what value this might bring. Pembrokeshire has a thriving third sector, with many established networks working on food, health, resilience planning²¹, volunteering and a host of other issues. How might a network on climate risk sit alongside these? This was raised as an issue in 1-1 discussions and the consultants reflected on effective practice on developing community networks to explore this question. It is important to note that the following paragraphs are the consultants view on this issue, and PCF and partners may wish to assess some of these ideas and assumptions out in future work on the Protocol during 2023.

²¹ For example PLANED have worked with communities to develop community resilience plans which have in the past helped to focus the community on actions to support themselves,

6.7 We suggest that developing Pembrokeshire-wide Network using the Climate Risk Protocol as central framework may have several benefits to communities including

- sharing knowledge about climate risks and how they will impact on the places that they live. A county wide network could redistribute power and knowledge to communities so that they could help to identify and manage climate risks, working alongside key agencies.
- support groups and communities in talking to one another about climate risks, addressing common barriers, sharing solutions, and finding common ground to build consensus on the challenging decisions that lay ahead.
- building a voice for local communities and create broader alliances – to influence decisions, leadership, priorities, and policy which might affect them, including financial support.
- help different community groups through personal contacts, organised visits, surgeries, public displays, exhibitions, facilitating communities of interest, learning exchanges, sharing practice within the county and beyond to help inform and inspire each other
- help individuals or local community groups step back from their immediate concern and appreciate a wider view or gain a different perspective. This might help with issues of mental wellbeing and emotional strain associated with climate change

So, as well as potential 'outputs and outcomes related to climate adaptation planning., we suggest that a network of communities working on climate adaptation could help to build the County's 'social capital' to address climate risk in coming years. This has the added value of providing the institutions, bodies and groups that support communities with valuable insights into what is needed, what works and what does not – and a method of focusing the right resources to where they are needed.

6.8 Drawing on our work elsewhere, and relevant literature, we suggest that there are number of network approaches and options that could be developed around climate risk and adaptation including in Pembrokeshire:

- an **informal network** could be created with a list of interested individuals on a spreadsheet. Information is shared on climate adaptation on a social media hub, advice is sought, and responses are given as and when. This could form part of an existing job role in a host organisation.
- a **community of practice** could be developed, this could involve communities and representatives of organisations that support them working together to focus shared activity, develop a shared learning agenda to deepen their knowledge and expertise on climate adaptation and interact on an ongoing basis. This could also form part of an existing job role in a host organisation.
- a **formal community climate risk network** – this structure might involve a development officer (hosted by an organisation) sharing information, organising opportunities to network, between communities, providing training, and coordinating countywide responses to decisions or processes on climate risk. Interested groups could be persuaded to become members to access support from this network.
- a **stand-alone independent network** with a formal membership, specific articles of governance. advisory board, development officer, programme of support, seeking external funding to support climate adaptation in communities.
- a network could operate as a **co-operative** to increase awareness and action on climate risk. A co-operative is an autonomous association of people working together to meet their

common economic, social, and cultural needs. It is jointly owned and democratically controlled enterprise. Notable examples of co-operatives include Catrefi Cymru (Community Care and Housing-related support in Haverfordwest) and PMR (a member owned farming cooperative also based in Haverfordwest).

- 6.9 Given that networks already exist which support community level activity, it will be important for bodies such as PCF, Pembrokeshire Nature Partnership, PLANED and PAVS (Pembrokeshire Association of Voluntary Services) to think about how a network of this type might fit in with their existing and planned activities. Could they host such a network, and bid for funding to support it?
- 6.10 While these more formal networks may seem excessive at present, we suggest that as we move into more challenging periods as climate impacts begin to be felt in coming decades, then the rationale for establishing more formal networks of mutual support may become more compelling.
- 6.11 The idea of a network of communities working together on climate adaptation is clearly an issue which needs further debate. The timescale of this project did not enable that. We recommend that PCF and partners revisit this during 2023 to develop their thinking on this. An important aspect of this will be to engage with communities and their representatives to see what they think of this concept.
- 6.12 In terms of the Climate Risk Protocol, we have provided background and detail on what a protocol on climate risk could cover, which includes a stepped process to work with communities on this issue. As stated in the introduction, this is a work in progress, with the scope of this project limited by the time of the funding
- 6.13 We suggest that PCF and partners, including the PSB, PCC, NRW (Natural Resources Wales) and PCNP continue to develop dialogue from April 2023 with community organisations on the Protocol content for each stage 1-4, to develop their thinking on this issue. It will be especially important to engage with community organisations such as PAVS, PLANED, Town and Community Councils and groups such Transition Bro Gwaun, Grwp Resilience Eco Dewi and Friends of Pembrokeshire Coast National Park to get insight into the community's role at each stage.
- 6.14 In our view the next stages once the engagement with the community sector is complete are firstly to develop a draft Climate Risk Protocol and consult on this via PCFs (Pembrokeshire Coastal Forum) networks and through their planned engagement activities; secondly to report to the PSB on this work; thirdly to secure support (staff time and financial) from the PSB partners to engage in detail with two or three communities to follow each stage of the protocol over a 12-month period.
- 6.15 We suggest that 'piloting' this Protocol or a version of it, could function as a learning process for both the pilot communities and the partners involved. This activity would provide a clear message to communities that public bodies and others are beginning to work on structured co-productive methods to support them through climate change. Delivering this approach would ensure that Pembrokeshire is once again at the vanguard of working on this issue in Wales.

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31.03.2023

APPENDIX A – PEMBROKESHIRE COMMUNITIES AT RISK FROM SURFACE, TIDAL, FLUVIAL FLOODING & COASTAL COMMUNITIES AT RISK

Community	Surface	Tidal	Fluvial	At Risk	PCNP CCMA	Shoreline post 2025 - 2055
Amroth						No active intervention post 2055
Angle		6				
Broadhaven S & C						Managed retreat post 2055
Broadhaven North						Managed retreat 2025-55 then no active intervention
Cilgerran			9			
Crymych			1			
Cym yr Eglws						Hold the Line and Nature Based Solutions
Dale		9				
Felindre Farchog			7			
Fishguard	9	7	5	4		
Fishguard Harbour						Hold the Line and Nature Based Solutions
Fishguard Lower						Hold the Line and Nature Based Solutions
The Gam						
Gelliswick Bay						
Goodwick	6	2				Managed retreat (Parrog) post 2025.
Goodwick Lower						Managed retreat post 2055
Haroldston Hill						Managed retreat post 2055
Haverfordwest	5	5	3	1		
Kilgetty			4			
Little Haven						Managed retreat post 2055
Llawhaden			10			
Lower Solva						Managed retreat post 2055
Lydstep	7					No active intervention post 2025
Martello, Llanreath Cleddau Bridge						Hold the Line and Nature Based Solutions
Merlin's Bridge	10					
Milford Haven		10	6			Hold the Line and Nature Based Solutions
Narbeth	8					
Neyland						Hold the Line and Nature Based Solutions
Nolton Haven						Managed retreat post 2025
Newgale						Managed retreat 2025-2055 then no active intervention
Newport	4	8				Parrog managed retreat post 2055
Newport Sands						Managed retreat 2025-2055 then no active intervention
Pembroke		3		2		
Pembroke Dock	2	4				
Porth Clais Inner						Hold the Line and Nature Based Solutions
Porth Clais Outer						No active intervention post 2025
Porth Gain						Hold the Line and Nature Based Solutions
Pwllgwaelod Bay						No active intervention post 2025
Saundersfoot			8			Managed retreat post 2055
Solva Harbour						Hold the Line and Nature Based Solutions
St. Dogmaels	3		2	5		(North) Hold the Line and Nature Based Solutions
Tenby	1	1		3		North and South Beach Hold the Line and Nature
Wisemans Bridge						No active intervention post 2025
Whitesands Bay						Managed retreat post 2025

This data is drawn from NRW data supplied for the Pembrokeshire Well-being Assessment (2022) and PCNP data on coastal change management areas (2018)

APPENDIX B – ORGANISATIONS THAT MAY BE INVOLVED IN THE 'MIDDLEHAVEN' CLIMATE SCENARIO

Local Authority

Elected Member
PCC Highways
PCC Planning
PCC Service Managers
PCC Asset Management
PCC Biodiversity

Businesses

Landowners
Farmers
Manufacturing
Retail
Leisure
Tourism
Food
Chamber of Commerce
Suppliers

Utilities

Dwr Cymru
National Grid
Western Power Distribution

Public Bodies

Natural Resources Wales
PCNP
Welsh Government
Hywel Dda UHB

Community

Householders
Housing Associations
Town Council
Community Council
Faith based groups.
Academic institutions.
PAVS

Others

Insurers
Banks/mortgage providers.
Farming Unions
Farm support bodies