



Dorset Climate Change Adaptation Framework Workshop

18 June 2019

Report: Appendix 2

Supported by



Delegates were divided into eight workshop groups and two groups looked at each of the following themes: natural environment and natural assets; infrastructure; people and the built environment; business and industry.

Groups discussed the following questions:

Q1: What are the key risks relevant to the topic area and what impacts/opportunities could we expect?

Q2: What do we need to do, who needs to be involved and are there any existing groups/forums/structures which could be utilised or is a new working group required?

Q3: Is there interest in working collaboratively to develop a joint adaptation framework, and if so, how does this group prefer to communicate?

The discussions captured within the workshop are listed below.

Topic: Natural Environment & Natural Assets				
Q1: Key risks	Q1: Impacts/Opportunities	Q2: Adaptation action(s) required	Q2: Partners	Q2: Groups
Displacement	<ul style="list-style-type: none"> Built environment pressures – Port of Poole disappears needing new infrastructure Coastal squeeze of communities Population increase 	<ul style="list-style-type: none"> Redistribution of land ownership (National Trust) Net gain built into all development Planning policy change away from mitigation Nature-first culture and education 		Dorset Coast Forum



Energy	<ul style="list-style-type: none"> • Different types of new businesses and motivation to generate own energy • In-town industrial sites • Energy/social equality 	<ul style="list-style-type: none"> • Small-scale renewables where it would have least impact – building political support • Wind turbines for small-scale domestic supply • Local energy networks • Nationalization 	<ul style="list-style-type: none"> • Dorset AONB • Local authorities (provider/purchaser) • Communities • Circular economy business • Housing associations • Investment and green banks (SW Mutual / Triodos) • SSE (grid) 	<ul style="list-style-type: none"> • Dorset AONB Partnership • Dorset Coast Forum • LEP • Wessex Water • Catchment Partnerships
Flooding	<ul style="list-style-type: none"> • Pollution • Infrastructure damage • Biodiversity loss • Saline intrusion • Food production loss • Soil loss 	<ul style="list-style-type: none"> • Woodland and wetland creation – bigger & more resilient habitats • Control development in floodplains • Policies for better drainage • Public awareness of drainage 	<ul style="list-style-type: none"> • Local authorities • Wessex Water • Environment Agency • DEFRA • Landowners and developers 	<ul style="list-style-type: none"> • Flood risk management groups • Catchment Partnerships
Fire	<ul style="list-style-type: none"> • Biodiversity loss • * Managed fire • Likely to worsen • Grazing improvement 	<ul style="list-style-type: none"> *Natural area fire plans Education Site management may need to change – creating reduced fire load 	<ul style="list-style-type: none"> • Landowners • Fire services • Police • WFF • Conservation 	<ul style="list-style-type: none"> • Upton Heaths Partnership • Wild Purbeck Partnership



Drought	<ul style="list-style-type: none"> • Biodiversity loss or change • Soil loss • Water scarcity/export • Wildfire risk • Food and fuel scarcity • Infrastructure damage • Crop failure • Pollution 	<ul style="list-style-type: none"> • Species diversity, tree age diversity • Retaining water (ponds etc) • Fire planning • Slow river flow – natural flood management • Tree planting • Aquifer recharging • Soil management • Agroforestry • Rainwater harvesting • Green roofs • Shedding rivers • Sustainable drainage systems • Composting toilets • Connectivity between microclimates (n/s slopes) 	<ul style="list-style-type: none"> • Fire services • Local authorities • Police • Dorset Wildlife Trust • NGOs • Fisheries partners • Water companies • Councils • Communities • Regulators 	<ul style="list-style-type: none"> • Urban Health Partnerships • Catchment Partnerships • Farmers and landowners • Catchment Partnerships • Dorset AONB
Knowledge deficit	<ul style="list-style-type: none"> • Increased level of impact on society nature, business • Political inaction • Inertia/lack of action/opportunity 	<ul style="list-style-type: none"> • Informed decisionmakers • Awareness raising • Education • Use the right language • Longer-term thinking • Collaboration a/c political parties • Citizens' Assembly • Put science back in schools, communities, citizen science • Education packs for all issues with benefits • Wildlife-friendly schools • Lifelong learning in environmental sciences • Care farming 	<ul style="list-style-type: none"> • Politicians • DEFRA • NGOs • Universities • KMC • School strikes – Extinction Rebellion • Care farming • Dorset Studio School • 	LNP Climate Emergency Panel



Species loss	<ul style="list-style-type: none"> • Invasive species • Loss of biodiversity • Production of biomass in seminatural environments • Rewilding 	<ul style="list-style-type: none"> • Changing site management – flexibility in schemes to reflect land management • Beaver feasibility • Rewilding river corridors 	<ul style="list-style-type: none"> • Farmers and landowners • Representation (NFU, CLA) 	<ul style="list-style-type: none"> • LNP
Soil, food production and health	<ul style="list-style-type: none"> • Food production • Ecosystem services • Timber and fuel production 	<ul style="list-style-type: none"> • Improving organic matter in soil • Reduce soil loss • Farm appropriate crops • Manage hedgerows, woodlands and riparian habitats 	<ul style="list-style-type: none"> • Catchment Partnerships • Farmers and landowners (advisors) • Wessex Water • Environment Agency • Forestry Commission • Natural England • DEFRA • Local authorities 	<ul style="list-style-type: none"> • Catchment Partnerships • National Farmers’ Union • CLA • Farmers’ Facilitation Food Groups (clusters)
Habitat and biodiversity loss	<ul style="list-style-type: none"> • Loss of species and change in species • Loss of ecosystem zones • Loss of natural capital 	<ul style="list-style-type: none"> • More robust habitats (bigger and more resilient) • Linking habitats • Public engagement • Natural capital net gain in all decision making 	<ul style="list-style-type: none"> • NGOs • Universities • Local authorities • DEFRA • Forestry Commission • Private sector • MMO 	<ul style="list-style-type: none"> • Dorset LNP • Catchment Partnerships • Dorset LEP • Dorset Coastal Forum
Invasive species				
Pests and diseases				

Q3: Would you like to help develop a joint adaptation framework, and if so, how does this group prefer to communicate?

Email: Trello: Teleconferencing: Meetings: Other:

- Big gain is joining the various plans together – this is the framework
- Climate change mitigation adaptation group from Bournemouth & Poole
- Green Infrastructure Plans as a mechanism to deliver climate change Adaptation Plan
- How to draw into the discussion around? Teleconference – appropriate to the level of engagement required



Topic: Business and Industry

Q1: Key risks	Q1: Impacts/Opportunities	Q2: Adaptation action(s) required	Q2: Partners	Q2: Groups
Air quality	The impact that poor air quality has on the environment and people/ the workforce	<ul style="list-style-type: none"> • Create Clean Air Zones • Housing development planning in areas • Planting of trees, to absorb the CO2 	<ul style="list-style-type: none"> • Local Authorities • Forestry Commission 	
Business products/services counteracting positive change	<p>Businesses creating harmful products, or products that produce harmful or waste by products.</p> <p>Opportunities for companies to work together with circular economy principles, where one businesses waste is another businesses resource</p>	<ul style="list-style-type: none"> • Legislation to counter the waste products in manufacturing. • Working with businesses to deliver business behaviour change • Incentivising the use of waste products as resources, or actions to reduce the development of waste products. 	<p>Business community, such as:</p> <ul style="list-style-type: none"> • Chambers • BIDs 	Dorset Waste Partnership
Coastal erosion & Sea level rise	Both coastal erosion and sea level rise has an impact on the tourism industry. For example the rock falls at West Bay. Additional sea level rise will impact on the beaches of Dorset.		<ul style="list-style-type: none"> • AONB • SSSI • Local authorities • Environment Agency 	
Drought	A number of manufacturing processes need water to act as a coolant. With potential drought this would impact on businesses ability to deliver their products.	<ul style="list-style-type: none"> • Potential for planning to change for new buildings or development to harvest rainwater or make use of greywater. • Would a reservoir to hold water when it rains be suitable for potential drought? 	<ul style="list-style-type: none"> • Businesses • Government • Local Authorities • Wessex Water 	



Energy Efficiency	Poorly efficient homes, especially social housing leads to more expensive accommodation. As a result this prices low income households out of area and has an impact on the workforce and	Retrofit projects on housing stock to increase energy efficiency of homes.	<ul style="list-style-type: none"> Local Authorities Housing Associations Private Landlords 	
Extreme events - Cold/Heat	Impact of extreme weather events on the ability for Businesses to operate in the usual way.	Ensure that businesses have the right business continuity/ emergency planning procedures/ policies in place	Business support agencies, such as: <ul style="list-style-type: none"> Dorset Gateway Dorset Growth Hub 	
Flooding	<ul style="list-style-type: none"> Financial losses relating to flooding of premises or workforce homes Impact of flooding to transport/ infrastructure stopping the movement of workforce or delivery of products/ supply chain products 	<ul style="list-style-type: none"> Flood Risk management Education of businesses to protect or change business operations for reliance on particular flooding routes Planning developments considered and not to be built on flood plains. 	<ul style="list-style-type: none"> Local Authorities Wessex Water Poole Harbour catchment 	<ul style="list-style-type: none"> River catchment partnerships Citizens' Assembly Resilience forums Haulage Associations Chambers of Commerce
Harness the natural environment	As there is additional heat, sunshine, sea level rise etc. This could be harnessed to generate energy.	Work with partners to explore options for projects where the natural environment could be utilised.	<ul style="list-style-type: none"> SSE Local Authorities 	
Extreme/ Prolonged Heat or Cold	<ul style="list-style-type: none"> Impact on the people, especially the elderly, which will impact on the care industry and NHS. Impact of heat or cold on staff/workforce and business operations – potentially needing to use additional energy to heat or cool Linked to the energy efficiency of buildings and regulation of temperature 	<ul style="list-style-type: none"> Work with the care industry and NHS to look at prevention. Changing working hours and business operations to work in hours where there are less extreme temperatures. Increase energy efficiency of buildings Businesses harness excess heat/ Policy changes on the above 	Encourage co-working spaces – support companies who already do this local authorities, neighbourhood plans	



<p>Congestion & Petrol /Diesel Cars</p>	<ul style="list-style-type: none"> • Opportunities for sustainable travel through public transport and walking and cycling. • Procurement of services which are difficult to reach 	<ul style="list-style-type: none"> • South East Dorset Urban Mobility Strategy to be implemented, strategy developed 2019 and delivery 2020. • Change working practices and encourage/incentivise workforce to travel to work sustainably or encourage working from home more. • Plan housing/ infrastructure development in a market town concept or with rural hubs • Procurement of goods and services in the local area 	<ul style="list-style-type: none"> • Local Authorities • Business commuter schemes • Transport Companies 	
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Topic: Infrastructure

Q1: Key risks	Q1: Impacts/Opportunities	Q2: Adaptation action(s) required	Q2: Partners	Q2: Groups
Changing climate and road network	<ul style="list-style-type: none"> Less reliance on infrastructure by focusing development (hospitals, schools, housing) on more sustainable locations 	<ul style="list-style-type: none"> Remote working policy/HR Invest in more sustainable transport networks (existing e.g. public RoW) – funding required Cross-ticketing for public transport Local Plans 	<ul style="list-style-type: none"> Dorset Council (planning/Local Plans, LTP, CIL/S106, public health) External funders e.g. Sustrans 	<ul style="list-style-type: none"> Dorset Local Access Forum
Sea level rise	<ul style="list-style-type: none"> Loss of infrastructure (e.g. Port of Portland) Beach replenishment 	<ul style="list-style-type: none"> Harbour wall improvements Salt marsh creation Relocation of communities Masterplanning 	<ul style="list-style-type: none"> Mineral planning/planning engineers Environment Agency Port of Portland developers 	<ul style="list-style-type: none"> Dorset Coast Forum
Flooding	<ul style="list-style-type: none"> Frequency of flooding Damage to infrastructure Opportunity to deal with drought conditions, in Dorset and elsewhere Cliff erosion Economic/social environment. <ul style="list-style-type: none"> -housing -coast path -conservation areas 	<ul style="list-style-type: none"> Land use and agricultural practices Building design-sacrificial rooms/floors etc Reservoir for floodwater storage and drought control Sustainable drainage system/ Water capture/Storage/Holding from 'hard surfaces' /building control Catchments to sea - mitigation/adaptation Coastal rollback-landscape Mindset-Central government- £-EA etc Joint working needed 	<ul style="list-style-type: none"> Water companies Environment Agency Wildlife Trusts National Farmers' Union Farming & Wildlife Advisory Groups Natural England Dorset Council (flooding team, planning) Highways England Network Rail DEFRA/LEP Local authorities Agriculture and Forestry Landowners/managers University-Wider UK/Europe 	<ul style="list-style-type: none"> Flood wardens Dorset Coast Forum



Heat	<ul style="list-style-type: none"> Road/rail deterioration More tourists and population growth 	<ul style="list-style-type: none"> Use of digital technology to communicate (particularly health/doctors) 	<ul style="list-style-type: none"> Dorset Council (planning, public health, emergency planning) 	
Power	<ul style="list-style-type: none"> More renewable power-opportunity Electricity-Macro/Micro generation OP-promotion 	<ul style="list-style-type: none"> Education/Information/awareness Incentives-Grants—meaningful, accessible info/language to people. Public benefit and involvement Planning guidance/restrictions Flagship/pilot building site-examples Food waste/waste products energy production 	<ul style="list-style-type: none"> Sustainable technologies Utilities Public body led -co operative -£ reinvested +expertise 	
Highways (People movement / Connection)	<ul style="list-style-type: none"> Materials/condition-robust? (different green materials) 'shared routes'-walk/ride/cycle-all ages needs Verge management-OP-Wildlife/GI/£ income Problem-washout/muddy/compaction/heavy footfall 	<ul style="list-style-type: none"> New technologies/materials Design 'cooler' environments, Tree planting Management of people movement Reducing traffic/sustainable transport Environmentally friendly solutions/Environment/aesthetic <ul style="list-style-type: none"> A) Physical infrastructure B) Connectivity-IT C) People management 	<ul style="list-style-type: none"> Local authorities-Highways England /DfT/Western Gateway//TRL-Transport Research lab (low cost/robust green materials. Technology. Planners-Creative solutions 	<ul style="list-style-type: none"> South West Highways Alliance Dorset Local Access Forum
	<p>Overarching Notes: <i>Constraints. Change of gov. Prescribed rules/regs How LAs work? IT Procurement</i></p>	<p>Overarching Notes: <i>Local people. Inform, educate, listen to. To allay concern, solve problems together, Mediator: all needs etc. Solutions Influencing political direction.</i></p>		

Q3: Would you like to help develop a joint adaptation framework, and if so, how does this group prefer to communicate?

Email: Slack-. E.g. more efficient discussion. Share info, contacts, updates. Frello: Skype Teleconferencing: Meetings:
 Meetings: Focus themes, Sub themes, catching up. Other: Combination. Slack sub groups. Working groups.



Topic: People and the Built Environment

Q1: Key risks	Q1: Impacts/Opportunities	Q2: Adaptation action(s) required	Q2: Partners	Q2: Groups
Flooding- Surface, Ground and Coastal	<ul style="list-style-type: none"> • Damage/destruction of infrastructure • Remediation costs • Difficulty getting insurance • Transport & congestion • Public health issues - private water, food production, flood water/sewage etc... • Surface/ groundwater flooding • People, buildings, community resilience • Displacement /temporary accommodation 	<ul style="list-style-type: none"> • New build standards e.g SUD, building materials, green roofs. • Planning – do not build in flood plain, SUDS etc... • Public Health Information • Forward planning water resources • Wetland creation / reservoirs • Strengthen local resilience • Modelling/evidence base • Emergency planning • Understand what everyone is already doing • Leadership, scalable small project 	<ul style="list-style-type: none"> • Water Companies • Public Health • Local Authorities • Transport • Environment agency • Town/Parish Councils • Landowners • Developers • Emergency planners • Coast Forum 	<ul style="list-style-type: none"> • Resilience Forum • Civil Contingency Unit (CCU) • Regional/national flood groups • LEP • LNP • Stour catchment initiatives • Area forums • Coast Forum
Congestion	<ul style="list-style-type: none"> • Air Quality • Economic loss 	<ul style="list-style-type: none"> • Sustainable travel • Smarter working 	<ul style="list-style-type: none"> • Everyone and everything 	



Heat/heatwaves	<ul style="list-style-type: none"> • Overheating of buildings • Impact on most vulnerable (elderly, young & underlying condition) • Increase demand on health services • Increase need for cooling (Carbon emissions) • Opportunity for tourism but possible increase congestion. • Risk of foodborne disease • Greater risk of Wild fires. • Impact Local communities. • Damage Infrastructure. • Invasive species 	<ul style="list-style-type: none"> • Heat alerts to social care/health bodies • New build regs - building materials, green roofs etc.. • Local plan – long term planning/design, place shaping, green infrastructure, urban trees • Retrofitting buildings... green walls, insulation, shading - opportunity on Council assets • Home insulation / advice through healthy homes project • Signposting & assisting grants/bids for retrofit measures • Education & behaviour change • EHO project around invasive species & foodborne disease 	<ul style="list-style-type: none"> • Local Government • Developers • Care homes, • NHS, extended family, Communities, • Government LEP • Social housing providers • Public health • Private sector landlords • Environmental Health • Met Office • Resilience programmes • Planners • CAB/CVS • Communications/social media/media partners • Food Standards agency 	<ul style="list-style-type: none"> • Health & Well being board • Local Plan consultees • Strategic planning forum • Resilience forums
Cold	<ul style="list-style-type: none"> • Increased health risk to ageing population 	<ul style="list-style-type: none"> • Projects tackling fuel poverty e.g Healthy Homes Dorset • Building design 	<ul style="list-style-type: none"> • Public Health • Housing providers /Private landlords • Adult care • Utilities 	
Water shortage/ Water supplies	<ul style="list-style-type: none"> • Physical and mental health. Better use of outdoors. • Food suppliers. • Disease. • Health service disruption. 	<ul style="list-style-type: none"> • Building design. SANGS 		



Health	<ul style="list-style-type: none"> • Health & hygiene. • Food production. • Disease. 	<ul style="list-style-type: none"> • Water efficiency. Grey water usage. Education 	<ul style="list-style-type: none"> • Water companies • Local Authorities. • Environment Agency • Public Health 	
Human Migration	<ul style="list-style-type: none"> • Pressure on built environment. & local services. Infrastructure. 	<ul style="list-style-type: none"> • More housing & infrastructure. Second homes policy. 	<ul style="list-style-type: none"> • Local & national government. 	

Q3: Would you like to help develop a joint adaptation framework, and if so, how does this group prefer to communicate?

Email: Frello: Skype Teleconferencing: Meetings: Other: Mixed workshops pulling together wider groups

