## **Appendix D: Summary of main enablers and barriers to adaptation in England and Wales**

This table focuses on core aspects of flood and coastal erosion risk management.

	<b>Enablers</b>	Barriers
Strategic direction	Adaptation features strongly in the national FCERM strategies (particularly for England). These strategies acknowledge the need to adapt in the face of climate and coastal change. The English strategy explicitly calls for adaptive approaches to planning for flooding and coastal change.	There is a lack of policy instruments/implementation mechanisms and strategic/practical guidance for supporting adaptation initiatives, particularly the roll-back or relocation of people and properties. Interviewees called for stronger leadership and strategic support in this regard.
	Shoreline Management Plans (SMP) establish policies (Advance the line, hold the line, management realignment or no active intervention) over the short term (0-20 years), medium term (20-50 years) and long term (50-100 years) for coastal units.	The non-statutory status of SMPs often comes into conflict with statutory duties or care and responsibilities under the Highways Act 1980 to maintain public rights of way. Weak legislative duties to 'regard' SMPs also mean that SMP policies can be overlooked in decision making.
	Long-term investment scenarios (LTIS) (England) underpin decisions about appropriate policies and include a portfolio of measures for FCERM under different climate change scenarios.	There is a reported lack of awareness of SMPs outside the FCERM community and poor accessibility to the plans themselves.
	J	Societal expectations for state intervention can result in calls for defences and political pressures to defend, even in instances where it may be unsustainable to do so.
		Adaptation is not an explicit objective within the National FCERM Strategy for Wales and adaptation is discussed in the limited context of coastal change.

	Enablers	Barriers
Roles and responsibiliti es	Coastal Groups are an established part of FCERM governance, bringing together representatives from local authorities (including FCERM, emergency)	Responsibilities for implementing adaptation are fragmented and lack clarity.
	management and spatial planning departments), the Environment Agency/Natural Resources Wales and other leading stakeholders (for example, Natural England, National Trust, Network Rail). Coastal Groups are responsible for producing and overseeing the implementation of SMP Action Plans.  • In general, the Flood and Water Management Act 2010 has helped to clarify roles and responsibilities in FCERM, with duties to cooperate and share information credited for improving collaboration between RMAs.	<ul> <li>There is a lack of shared problem ownership for adaptation and 'buy-in' from other government departments and sectors.</li> <li>Governance silos and misalignment in planning/funding cycles make it difficult to align agendas and activities for joined-up working, with priorities sometimes coming into conflict.</li> <li>Coastal Groups have a voluntary, non-statutory status, which can make it difficult to encourage/sustain participation from leading stakeholder groups.</li> </ul>
Resources	<ul> <li>In FCERM funding, climate change allowances (including peak river flow, peak rainfall intensity, sea level rise and offshore wind speed and extreme wave height) ensure climate change considerations are factored into projects, schemes and strategies funded via FCERM-GiA (Environment Agency, 2020b).</li> <li>In Wales, the impacts of climate change must be considered in economic appraisal (Welsh Government, 2017b). Business case guidance also requires the sustainability and wellbeing performance of FCERM measures to be considered, including the adaptability and resilience of options to future change (Welsh Government, 2019c).</li> <li>(Managed) adaptive approaches are emphasised in</li> </ul>	<ul> <li>FCERM funding is weighted towards the protection of people, property and businesses, and reductions in flood probability, therefore making it easier for defence-based schemes to achieve more favourable cost-benefit ratios and inadvertently disadvantaging adaptation initiatives (although to some extent, changes to partnership funding in England may help to lessen this).</li> <li>Shortfalls in revenue/resource funding were consistently identified by interviewees as an ongoing weakness within FCERM governance. This has significant implications for maintaining the standards of protection provided by existing defence assets, as well as delivering a wider remit of activities in FCERM, including adaptation initiatives.</li> <li>There is a lack of funding mechanisms to assist the</li> </ul>

<u>Enablers</u>	Barriers Barriers
possible or economically efficient, a precautionary approach is advocated in FCERM funding guidance.	for example, Defra's Coastal Erosion Assistance Grant). Furthermore, budget silos make it difficult to access cross- sectoral funding.
<ul> <li>Recent changes to partnership funding include updated payment rates to better account for wider benefits (particularly environmental benefits), mental health impacts and recognition of the benefits for properties that will become at risk within the lifetime of defence assets due to the impacts of climate change (Environment Agency, 2020e).</li> </ul>	Coastal Groups lack dedicated resources. Membership and participation, particularly among local authorities, is restricted by wider resource constraints in local government.
<ul> <li>Established information resources, programmes and structures to underpin decision making and climate change adaptation, such as the UK Climate Change Risk Assessment<sup>1</sup> (HM Government, 2017), UKCP18 and UKCIP toolkit<sup>2</sup>, as well as monitoring programmes (for example, Wales Coastal Monitoring Centre and Regional Coastal Monitoring Programme in England).</li> </ul>	<ul> <li>Although the necessity of proactive community engagement is recognised, this is resource-intensive and resource constraints are (and are likely to continue) restricting this. More creative methods of meaningful engagement are encouraged, but will require additional training and capacity building to expand the skillset of community engagement officers, as well as potentially requiring input from specialist engagement practitioners.</li> </ul>
Knowledge resources to inform and support adaptation, such as the Defra/Environment Agency/WG/NRW R&D Programme and forums for	

<sup>&</sup>lt;sup>1</sup> Including newly-launched <u>UK Climate Risk website</u>.

<sup>&</sup>lt;sup>2</sup> The <u>UKCIP toolkit and Adaptation Wizard</u> provides a 'how to' guide on using UKCIP resources to assess an organisation's vulnerability to climate change to inform adaptation planning.

	Enablers	Barriers
	<ul> <li>knowledge exchange (for example, Coastal Groups Network, Flood&amp;Coast annual conference).</li> <li>Technological resources, with advances in risk modelling and mapping to maintain a national picture on all sources of flooding and coastal erosion, and direct resources accordingly.</li> </ul>	
Spatial planning	<ul> <li>National Planning Policy Framework (MHCLG, 2019a) and Planning Policy Wales (Welsh Government, 2018a) state that Local Development Plans should avoid development in vulnerable areas. In England, areas subject to physical changes to the coast should be designated as a Coastal Change Management Area.</li> <li>Recent revisions to planning policy in Wales - Technical Advice Note 15 (TAN 15) - establish a stronger presumption against highly vulnerable development in medium-high risk areas (Welsh Government, 2019b).</li> <li>Revisions to the National Planning Policy Framework (England) give more clarification that the sequential approach in plan-making should take into account current and future impacts of climate change, while safeguarding land from development that is required, or likely to be required, for current or future flood management (MHCLG, 2019a: para.157).</li> <li>The Sequential and Exception Tests in England, and the Justification and Acceptability Tests in Wales, steer development away from high-risk areas and help</li> </ul>	<ul> <li>Spatial plans only need to have 'regard to' SMPs. In England, research indicates that up to one third of Local Plans for coastal locations show no evidence of using the SMPs (CCC, 2018).</li> <li>SMPs adopt a 100-year planning horizon (sub-divided into 3 epochs), whereas strategic policies within Local Plans are only required to look 15 years ahead. Consequently, it is possible that SMP policies beyond this period may not be represented within Local Plans or within designated Coastal Change Management Areas; thus, inadvertently heightening exposure to coastal risks. This issue is further compounded by the fact that Hold the line policies (excluded from CCMAs) may be economic unsustainable in the future (CCC, 2018; Defra, 2020f).</li> <li>The Highways Act 1980 places a statutory duty on highway authorities to maintain existing public rights of way (PRoW), which can come into conflict with the nonstatutory status of SMPs; the process of legally changing, diverting or closing PRoW is highly complex and timeconsuming.</li> <li>There is a reported lack of awareness of SMPs and disconnection between spatial planning departments and</li> </ul>

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ensure that any development on the flood plain satisfies a number of conditions. For applications in flood risk areas, planning applicants must submit a Flood Risk Assessment (England) and a Flood Consequence Assessment (Wales) to demonstrate how these tests have been met and how risks will be managed over the lifetime of the development, taking into account climate change and the vulnerability of users.

- Local (Development) Plans are established on the basis of a Strategic Flood Risk Assessment (England) and Strategic Flood Consequence Assessments (Wales). Under the Planning and Compulsory Purchase Act 2004, development plans must include "policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change" (section 19(1A)).
- (Strategic) Flood Consequence/Risk Assessments must include allowances for climate change (Welsh Government, 2016d; MHCLG, 2019a,b; Environment Agency, 2020c).
- Local Planning Authorities must consult the Environment Agency/NRW and LLFAs for proposed developments in at-risk areas. Notification directions and call-in powers are in place to monitor applications where the LPA is minded to grant permission contrary to advice.

FCERM/emergency management departments (involved in Coastal Groups) within local authorities.

- Reported resource constraints are restricting the ability of the Environment Agency/NRW and LLFAs to comment on individual planning applications and provide technical flood risk advice (although the use of Standing Advice for minor developments helps to mitigate this).
- There is lack of enforcement in spatial planning, which is attributed to a shortage of resources and capacity within LPAs. As a result, a reactive approach to compliance checking appears to have established, whereby LPAs respond to complaints or issues raised by third parties. Therefore, monitoring compliance is highly variable.
- Developers lack accountability and liability.
- In Wales, the absence of climate change allowances from the Development Advice Map, upon which the Local Development Plans are based, has been criticised; although these concerns will be addressed through revisions to TAN15 and the replacement of the Development Advice Map with a Wales Flood Map (Welsh Government, 2019b).
- Planning decisions are monitored in Wales through the Sustainable Development Indicators (which includes information on the number of planning permissions granted and refused in Zones C1 and C2). This relies on information being returned by LPAs on an annual basis. However, not all LPAs consistently return this information,

	Enablers	Barriers
	The 'Code of Practice for Property Flood Resilience' published December 2019 provides guidance for planners, homeowners and businesses for	with resource constraints meaning that this activity is often de-prioritised.
implem Benchn assessi constru and ma	<ul> <li>implementing property flood resilience measures.         Benchmark/standards are outlined (related to hazard assessment, property survey, options development, construction, commissioning and handover, operation and maintenance).     </li> <li>In England, a Household Flood Resilience Grant Scheme has been accessible in the wake of significant</li> </ul>	Despite the recommendations of the Pitt Review (Pitt, 2008), Building Regulations have remained unchanged, yet amendments to Part C ('Site preparation and resistance to contaminants and moisture') and Part H (Drainage and water disposal) could give the legal impetus for property-level flood resilient and resistant construction, and site-level sustainable drainage.
	flood events (for example, 2015 to 2016, 2019 and 2020) to promote the uptake of property flood resilience measures.	Grants for property-level flood resilience measures are not included within the core package of the Flood Recovery Framework in England (DCLG, 2017b), but instead administered on a reactive basis. Household grants are not available in Wales.
Insurance mechanisms	Previous agreements between the insurance industry and the UK government have helped to maintain access to insurance for those in high risk areas. Flood Re (introduced in 2016) will maintain access to affordable insurance for these households and help address inequalities created through the private	There is a risk that Flood Re could reduce the sense of urgency required, and even disincentivise risk mitigation as financial incentives have been removed. Moreover, this may be exacerbated by policyholders not being aware of their entry into the scheme.
	<ul> <li>insurance market.</li> <li>Flood Re establishes a temporary arrangement (until 2039) to manage the transition towards risk-reflective pricing, which in turn should incentivise the uptake of</li> </ul>	<ul> <li>The gradual rise in premiums towards risk-reflective levels may ultimately impact upon penetration and disadvantage certain groups. Managing a socially-just transition towards risk-reflective pricing will be essential.</li> </ul>
	property-level measures. According to the latest update, Flood Re is now offered through 90% of the home insurance market.	Uncertainties regarding the transition towards risk- reflective pricing remain. No explicit targets for managing this transition were outlined in the National Adaptation Programme (CCC, 2018). Without monitoring, it is impossible to evaluate the effectiveness of this

• Flood Re has promoted the 'Build Back Better' campaign. Proposals have been outlined for permitting the payment of claims which include a limited amount of resilient and/or resistant repair, above and beyond the flood-related loss, as well as lowering premiums upon the uptake of property level flood resilience measures (Flood Re, 2019). Flood performance certificates (similar to energy performance certificates) are also being advocated as a means of documenting resilience/resistant measures that have already or could be implemented and raising awareness among property buyers (Flood Re, 2018). These are crucial mechanisms for reducing both the costs of future flooding and building resilience and adaptative capacity at the household scale.

**Enablers** 

 Mirroring the former Statement of Principles, eligibility requirements for Flood Re mean that only properties built before 2009 may be entered into the Scheme, therefore maintaining this additional mechanism for deterring development away from at-risk areas. **Barriers** 

governance arrangement and to identify how any advantages and disadvantages are distributed. In particular, monitoring changes in penetration of cover over time will be vital for identifying potential changes and variations in the ability of communities to recover.

- Realising the risk reduction benefits of property-level measures may be more challenging for some; inequalities could be exacerbated with the transition to risk-reflective pricing.
- Research has shown that insurance incentives alone are unlikely to drive significant change in householders' behaviours (Oakley, 2018). Therefore, it is important that Flood Re is not seen as the panacea, and alternative approaches to facilitating uptake of property-level resilience are pursued as part of a system-wide approach.
- Like-for-like reinstatement is still standard practice in the wider insurance industry.
- The absence of insurance for coastal erosion remains.