Chapter 7b - Adaptation and Resilience to Climate Change

Flood Risk

There is extensive national policy on flooding, which will need to be considered in relation to development at risk of any type of flooding. The policies and proposed allocations of this plan have been informed by a Strategic Flood Risk Assessment, which should also be used to unform neighbourhood plan production and relevant development decisions.

It should be noted that the Environment Agency is publishing new national risk information for flooding that will include future scenarios accounting for climate change. The timetable set out is that in December 2024 a 'National assessment of flood and coastal erosion risk in England 2024' report will be published that sets out new national flood risk assessment (NaFRA2) data. During the early part of 2025 'Risk of flooding from rivers and sea' and 'Risk of flooding from surface water' data will be released. In Spring 2025 the NaFRA2 'Flood zone' data on 'Flood map for planning' will be released. When the data is published, the SFRA will be updated if necessary and any changes to the plan required as a result will need to be incorporated if possible.

Developers should consult with East Devon District Council, Devon County Council, the Environment Agency and South West Water at an early stage to discuss flood risk including requirements for site-specific FRAs, detailed hydraulic modelling, and drainage assessment and design.

The Environment Agency consider that historic development has contributed to increased flood risk in East Devon and that new developments can reduce this risk through implementing flood compensation storage areas, Natural Flood Management (NFM), and restricting SuDS discharge rates to below greenfield runoff rates.

The broadscale cumulative impact assessment for East Devon highlighted the potential for development to have a cumulative impact on flood risk. Catchments have been identified as high, medium or low risk. New development can potentially increase flood risk and thus the need for incremental action and betterment in flood risk terms across all of East Devon is appropriate.

35. Strategic Policy AR 01: Flooding

All development should minimise the impact and mitigate the likely effects of climate change on existing and future occupants, together with the wider community and environment, through the delivery of developments and communities which are resistant and resilient to future floods.

This will be achieved by:

a. Requiring development proposed in a flood risk location from any source to demonstrate that there is no sequentially preferable location and, if necessary, that development complies with the exception test (unless this has been undertaken through a site allocation in this plan).

b. Requiring a Flood Risk Assessment (where appropriate in terms of national planning policy and guidance) which demonstrates that the development, including the access and egress, will be safe for its lifetime, without increasing or exacerbating flood risk elsewhere and where possible will reduce flood risk overall. For areas within 5m horizontal distance of Flood Zone 2, where there is no detailed modelling, assessment of this Zone with climate change will need to be undertaken in accordance with the most up-to-date Environment Agency hydrology, hydraulic modelling and flood risk mapping. Any flooding measures proposed in the FRA should respond to the specific requirements of the site and respect the character and biodiversity of the area. These FRAs should also identify opportunities for the development to provide wider community flood risk benefit through measures such as additional storage on site (oversized SuDS, natural flood management techniques, green infrastructure and green-blue corridors), and/ or by providing a Partnership Funding contribution towards any flood alleviation schemes.
   Where a Level 2 SFRA has been undertaken on an allocated site, the 'Requirements and guidance for site-specific Flood Risk Assessment' set out in the relevant site sheet should be taken into account when submitting an application and designing a scheme.

c. Ensuring that space is provided on all development sites for the inclusion of SuDS designed to reduce the volume and rate of runoff to less than greenfield rates, as informed but the 'Sustainable Drainage System – Guidance for Devon'. Surface water run-off should be managed as close to the source as possible. Preference will be given to systems that reduce pollution risks and contribute to the conservation and enhancement of biodiversity and green infrastructure where practicable. Within Critical Drainage Areas, SuDS should result in a reduction of existing runoff rates.

d. Protecting land required for flood management, including natural floodplains.
e. Not permitting proposals for basements in areas at risk of flooding.
f. Where appropriate, the opportunity for Natural Flood Management in rural areas, SuDS retrofit in urban areas and river restoration should be maximised. Culverting should be opposed, and day-lighting existing culverts promoted through new developments.

The SFRA has shown that some catchments are at a high risk of cumulative flooding. In these areas, development proposals should help to reduce flood risk overall by demonstrating that:

a. The design and layout of the proposed development safeguards any areas identified in the Natural Processes Mapping for floodplain reconnection, riparian woodland, additional floodplain woodland or runoff attenuation features.
b. Any FRA considers the potential cumulative effects of all proposed development and how this affects sensitive receptors.
c. There is a suitable surface water management plan for storm events during construction to support the Construction Drainage Phasing Plan.

Justification for inclusion of policy

There are areas of the District at risk from flooding from a variety of sources such as rivers and the sea in addition to local sources of flooding such as surface water. With climate change, the risks from these types of flooding are likely to be exacerbated. The NPPF makes clear that development should be directed away from areas at highest risk of flooding now and in the future.

This policy is based on the recommendations made in the SFRA.

Water supply

Population growth, climate change and environmental protection measures all put pressure on water resources and contribute to water stress. Building Regulations require all new dwellings to achieve a water efficiency standard of 125 litres of water per person per day (l/p/d), but there is an 'optional' requirement of 110 l/p/day for new residential development, which can be implemented through local policy where there is a clear need based on evidence. The water cycle study provides the evidence for more stringent water efficiency standards in East Devon and recommends the local plan adopt the lower limit of the Building Regulations (2022) of 110 l/p/d.

Strategic Policy AR 02: Water Efficiency

To minimise impact on the water environment all new dwellings should achieve the Optional Technical Housing Standard of 110 litres per day per person for water efficiency as described by Building Regulation G2.

Coastal change

The impact of a changing coastline, particularly through cliff erosion and increased risk of permanent coastal flooding (inundation), is a challenging issue for East Devon. We can readily see along some lengths of the East Devon coastline that the cliffs and coastline more generally is eroding. This is a natural process, though one that has and will increase as a result of increasing temperatures and sea level rise. In some cases, coastal defence work may be appropriate, for example to defend parts of coastal towns, though often it is very expensive and can have adverse environmental impacts. Along much of the East Devon coastline, however, the appropriate action is not to intervene and let natural processes happen. This plan needs to identify the impacts of any potential changes and develop policies to ensure that the risks are properly considered when making decisions on whether development proposals will be safe. We propose a number of draft policies relating to coastal change.

Coastal change management areas

We have worked with the University of Plymouth on a way to predict coastal erosion and flooding and have published a briefing paper and a topic paper on coastal change. The University of Plymouth have mapped areas that may be vulnerable to coastal change over the next 20, 50 and 100 years using the agreed methodology, which takes account of potential impacts from climate change through sea level rises. This work has been used as the basis for identifying coastal change management areas (CCMAs) in accordance with

the National Planning Policy Framework. Where a more detailed relevant assessment has been made through a Beach Management Plan, including to the east of Sidmouth, the CCMA line has been drawn to align with the more detailed work.

It should be noted that in December 2024 the Environment Agency will publish a 'National assessment of flood and coastal erosion risk in England 2024' report, which will update the National Coastal Erosion Risk Map (NCERM). This work will need to be considered before the plan is finalised for submission.

This is a highly complex topic, and it is recommended that the local plan is supported by supplementary planning guidance to give more details of how the CCMA approach would work in practice.

36. Policy AR03: Coastal change management areas (CCMAs)

Within the Coastal Change Management Area (CCMA) defined on the Policies Map, proposals for new residential development, including the conversion of existing buildings, will not be permitted.

Applications for non-residential development within the CCMA will be assessed in relation to the most up-to-date evidence available for when coastal change can be expected so that:

In parts of the CCMA expected to be at risk within a 0-to-20-year time horizon, only the following developments will be allowed: -

- temporary development directly related to the coast, such as beach huts, cafes, car parks or sites used for touring caravan and camping;
- temporary modifications to other existing commercial facilities where a positive link can be made to the local economy;
- mitigation measures for dealing with coastal change that are in accordance with the relevant coastal strategy or
- nationally significant infrastructure projects related to offshore development that are constructed to withstand the impacts of the expected coastal change.

In parts of the CCMA expected to be at risk within a 20-to-50 year time horizon, in addition to the development allowed in the 0 to 20 years zone the replacement, relocation and adaptation of infrastructure, commercial and community uses will be permitted, providing they require a coastal location and provide economic and social benefits to the local community.

In parts of the CCMA expected to be at risk within a 50 to 100 year time horizon, in addition to the development allowed in the 0 to 50 year zones, extensions to residential properties and householder applications may be acceptable.

All applications for development within a CCMA must show that it would not result in an increased risk to life or any property through the submission of a coastal change vulnerability assessment, which should be proportionate to the scale and nature of the development.

Planning permission for all development in a CCMA will be time limited according to the risk identified in the coastal erosion vulnerability assessment.

Justification for inclusion of policy

The NPPF (paragraph 170) requires plans to reduce the risk of coastal change by avoiding inappropriate development in vulnerable areas and to identify coastal change management areas, known as CCMAs (paragraph 171). CCMAs are not necessary in areas where the Shoreline Management

Plan policy is to ‘hold the line’ and there is evidence that this can be maintained over the lifetime of the plan. Generally, the centres of our main coastal settlements are defended, and we have evidence to demonstrate that we can ‘hold the line’. We have not therefore identified CCMAs for any of our town centres. Paragraphs 172 and 173 of the NPPF set out the circumstances in which development will be appropriate in a coastal change management area. Our policy adds to national policy and we plan to provide greater detail through supplementary planning guidance.

Relocation of uses affected by coastal change

Where evidence shows that certain existing uses would be vulnerable to coastal change in the short term, we propose to maintain our current approach of allowing relocation in some circumstances to areas where development would otherwise be unacceptable.

37. Policy AR04: Relocation of uses affected by coastal change

Where there is robust evidence to demonstrate that permanent homes (with unrestrictive occupancy) or community facilities, commercial or business uses that are considered important to coastal communities are likely to be affected by coastal erosion within 20 years of the date of the proposal, proposals for relocation/replacement may be considered favourably subject to the following criteria:

a. The new development is located in an area at less risk of coastal erosion;

b. The replacement property is located close to the community from which it is displaced and has an acceptable relationship with it in terms of character, setting, local amenity and any special landscape designations;

c. Overall, taking both the existing and proposed buildings into account, the proposal should not have an additional detrimental impact on the landscape, townscape or biodiversity of the area, taking into account any special designations;

   The existing site is either cleared and restored with enhancements for nature conservation or put to use to benefit the local community within three months of the first use of the replacement. The future use of the site should be secured in perpetuity and provision made for public access to the coast where appropriate;

d. In the case of a residential proposal, the gross volume of the replacement dwelling is no larger than the one it is to replace.

Justification for inclusion of policy

There is a risk that some buildings and uses may be lost to the sea within the plan period, although current evidence suggests that this is not likely to affect large areas. This 'rollback' policy provides a flexible approach if the situation arises.

Development affecting coastal erosion

The broad national and local approach to coastal erosion (as set out in the Shoreline Management Plan (SMP)) is to defend the centres of the main settlements and allow natural processes to continue in the more rural areas. Large parts of our coastline are designated as a World Heritage Site, the integrity of which would be undermined if natural processes were not allowed to continue.

38. Strategic Policy AR05: Development affecting coastal erosion

Where compatible with the most up-to-date coastal policy (as expressed in the SMP or a strategy such as a beach management plan), the Council will promote proposals for sustainable coastal change management such as improvements to coastal defences or managed realignment, provided that they would not have an unacceptable adverse economic, social or environmental impact, including an unacceptable detrimental visual impact on a protected landscape.

To protect the integrity of the Dorset and East Devon World Heritage Site, the natural processes that created it will be allowed to continue, unless the safety and economic well-being of any coastal community would be undermined, provided that the implications of this for the World Heritage Site have been fully considered.

Where there is a conflict between allowing coastal erosion and protecting coastal communities from that erosion both interests will be recognised and wherever possible impacts will be mitigated where they arise.

Schemes that are incompatible with coastal policy are unlikely to be supported

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This policy seeks to balance the need for protective measures to reduce rates of coastal change (where these are compatible with coastal strategy) with the integrity of the World Heritage Site, which relies on coastal change processes continuing. It is important to set out that both interests will need to be assessed as part of any planning proposal. This will help guide decision makers and determine mitigation measures that may be undertaken, such as slowing rather than stopping erosion or displaying materials to aid

understanding of the outstanding universal value of the World Heritage Site (such as fossil displays in local museums). An example of where this policy would be relevant is in considering any application for rock groynes/islands as part of delivering a beach management plan at Sidmouth.

Links to marine planning

The NPPF (paragraph 170) requires local plans to take account of the UK Marine Policy Statement and marine plans. The adopted South Marine Plan is like the local plan in terms of enabling sustainable development, but it covers activities within the marine environment such as offshore wind farms, fishing, and submarine cables. The intertidal zone between the high and low water marks is where both land and marine planning systems overlap, but developments inland can also have the potential to have an impact on the marine environment. No potential conflicts have been identified between the marine and the local plans.