



Climate Emergency Development Plan Document

**Topic Paper: Coastal Change and Flood
Management**

July 2020



This is one in a series of topic papers produced to inform the preparation of the Council's Climate Emergency Development Plan Document (DPD)

Topic Paper
Renewable energy
Natural climate solutions
Town Centres
Mine water energy and deep geothermal
Energy and Sustainable Construction
Coastal Change and flood management
One Planet Development/Alternative living
Transport
Agriculture and Rural Sustainability

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Executive Summary

Rates of coastal erosion and incidents of flooding are expected to increase throughout this century due to the increasing frequency and magnitude of storms and rising sea levels as a result of climate change.

There is a greater emphasis on river catchment areas and basin management plans in the new National Planning Policy Framework (NPPF) (para 170 & 171). This reflects the increasing acceptance of the importance of managing flood risk at the catchment level.

Cornwall Local Plan Policy 26 sets out the Local policy in relation to flood risk and coastal change. The policy states that development should take account of and be consistent with any adopted strategic and local flood and coastal management strategies including the Shoreline Management Plan and Catchment Flood Management Plans for Cornwall and the South West River Basin Plan.

The Cornwall Local Plan does not allocate a formal Coastal Vulnerability Zone or Coastal Change Management Areas (CCMAs) to provide further detail of the implantation of Coastal Change policy. The designation of CCMAs is currently deferred to Neighbourhood Plans in line with the recommendation of the Local Plan Inspector. This has yet to happen in the majority of cases and strategic action is required to clarify the situation and opportunities for co munity driven resilience of coastal areas. It was agreed that a short-term objective would be the development of a Coastal Change Chief Officer Planning Advice Note. The Chief Officer Guidance Note has now been published to provide interpretation of existing national and local policy.

A strategic approach needs to be developed to Coastal Change and flooding through the development of covering the following:

1. Examine further the appropriateness of the approach being proposed in respect of the Cornwall Coastal Vulnerability Map;
2. Determine the approach of the Council to designation of Coastal Change Management Areas;
3. Flooding – Revise Strategic Flood Risk Assessment using EA data/mapping to include updating of flood zones in relation to climate change predictions;
4. Surface Water Flooding - Use EA data/mapping of surface water flooding and flows to revise and adopt a Surface Water Drainage constraint map;
5. Consider the impact of climate change on water resources and evidence relating to Cornwall and whether this will justify the adoption into policy of optional technical standards designed to facilitate water saving
(<https://www.gov.uk/guidance/housing-optional-technical-standards>)
6. Examine the potential linkage between Natural Flood management and new development within Critical Drainage Areas and the ability to make a functional link and requirement for new development to contribute to the creation or reestablishment of natural features such as tree planting or hedge lines or changes to land management that will reduce flood risk in the catchment.

What is this topic paper about?

The Council is preparing a new Plan to set the framework for dealing with climate change. This will sit underneath the Local Plan and forms the strategic framework for planning decisions. This topic paper summarises the latest available evidence on coastal change and flood management. Reflecting the wide scope of this topic there are a number of overlaps between this paper and the other papers.

To view all the topic papers and the latest update on the Climate Emergency DPD, please visit www.cornwall.gov.uk/climatechangedpd

Can I comment on this topic paper?

The Climate Emergency DPD topic papers are factual in nature and set out the planning policy context and current issues in Cornwall, along with potential future approach to inform policy development. There will be opportunities to comment on the content of the Climate Emergency DPD at various stages of its development. As such we are currently seeking views on these topic papers, in particular any gaps in evidence.

If you wish to be kept informed of any forthcoming consultation, please email climateemergency.dpd@cornwall.gov.uk with your contact details.

Introduction

Rates of coastal erosion and incidents of flooding are expected to increase throughout this century because of the increasing frequency and magnitude of storms and rising sea levels as a result of global warming.

Evolution of the shoreline represents a threat to the sustainability of some coastal communities and these threats need to be managed through the planning process to ensure that development in areas subject to coastal erosion and flooding are sustainable and safe. Any mechanism to achieve this needs to ensure the continued sustainability of coastal communities in terms of access to facilities and services, location specific uses (such as those related to the sea) critical infrastructure for access, water and power and be clear regarding the appropriateness of certain types of development in areas likely to be affected by erosion. In addition, some nationally and internationally designated habitat and the provision of a continuous coastal path will be impacted through coastal erosion.

The Cornwall Local Plan does not allocate a formal Coastal Vulnerability Zone or Coastal Change Management Areas (CCMAs) to provide further detail of the implantation of Coastal Change policy. The designation of CCMAs is currently deferred to Neighbourhood Plans in line with the recommendation of the Local Plan Inspector. This has yet to happen in the majority of cases and strategic action is required to clarify the situation and opportunities for community driven resilience of coastal areas.

As part of previous work in relation to Coastal Change, it was agreed to undertake a series short, medium and long-term objective to develop Coastal Change policy.

It was agreed that a short-term objective would be the development of a Coastal Change Chief Officer Planning Advice Note. The Chief Officer Guidance Note has now been published to provide interpretation of existing national and local policy. However, in order to adopt formal policy for Coastal Change Management Areas a new or revised Development Plan is required. This can either be through a Neighbourhood Plan (one of the medium-term objectives). However, the adoption of CCMAs within neighbourhood plans is yet to happen in many cases and it does not provide for a strategic approach to coastal change in Cornwall. A medium to longer-term solution is through amendment of the current local plan or adoption of policy in a DPD to provide a strategic approach to formally designating Coastal Change Management Areas.

Further opportunities exist to clarify the position on the impacts of climate change on flood risk assessment of new development and designing development to reduce and mitigate flood risk. Natural Flood Solutions should be explored in policy to reduce the carbon footprint of risk reduction schemes and link ecosystem services provision to development.

Policy Context and Evidence

National Planning Policy

National Planning Policy Framework

Section 14 of the NPPF - [Meeting the challenge of climate change, flooding and coastal change](#) (paragraphs 155-165 Planning and flood risk) sets out the national planning policy with regard to flood risk

Section 14 of the NPPF - [Meeting the challenge of climate change, flooding and coastal change](#) (paragraphs 166-168 Planning and flood risk) sets out the national planning policy with regard to flood risk

There is a greater emphasis on river catchment areas and basin management plans in the new NPPF (para 170 & 171). This reflects the increasing acceptance of the importance of managing flood risk at the catchment level.

New to the NPPF is the following paragraph (165); Major developments should only be allowed in areas of flood risk where it can be demonstrated that it incorporates sustainable drainage systems, unless there is clear evidence that it is inappropriate.

Local Planning Policy

Cornwall Local Plan Policy 26 sets out the Local policy in relation to flood risk and coastal change. The policy states that development should take account of and be consistent with any adopted strategic and local flood and coastal management strategies including the Shoreline Management Plan and Catchment Flood Management Plans for Cornwall and the South West River Basin Plan.

This requires that development is sited, designed of a type and where necessary relocated in a manner that:

- Increases flood resilience of the area, taking account of the area's vulnerability to the impacts of climate change and coastal change and the need to avoid areas of flood risk, in the first instance, taking into account the vulnerability of the use proposed
- Minimises or reduces and where possible eliminates flood risk on site and in the area
- Enables or replicates natural ground and surface water flows and decreases surface water runoff
- The safeguarding of land to be functional flood storage, to make space for water at times of flood
- Where applicable, supports community-led local solutions to managing flood risk and coastal change
- Does not create avoidable future liability for maintenance for public bodies and communities

- Development proposals of 10 dwellings or more or over 0.5ha should provide a long-term water management plan.

The current approach to determination of applications, the application of the Coastal Vulnerability Zone and CCMA is set out in Chief Officer Guidance for Cornwall but would be usefully incorporated into policy to provide greater certainty of application.

The policy sets out that Coastal Change Management Areas should be designated through Neighbourhood Development Plans. Where neighbourhood development plans have designated Coastal Change Management Areas and other coastal flooding policy, the Climate Emergency DPD will need to ensure that any policies developed are consistent with these areas. A review of Neighbourhood Development Plans that have adopted or are considering Coastal Change and Flooding Policy has been produced.

The following Neighbourhood Development Plans reference Coastal Change Management:

- Fowey (drafting) - Policy EN3 references the Fowey Estuary Management Plan
- St Minver cluster (made)- STMNDP1 references Marine Conservation Zones
- Crantock (made) - Policy I1 requires sewage capacity checks prior to development to manage drainage and protect the 'sensitive marine environment'.
- Newquay (made) - Policies CC1,2 and 3- Designated CCMA, development in locations vulnerable to coastal change and drainage management.
- Feock (made) - LS1 protects against the loss of, or encroachment onto beaches and the foreshore.

Evidence

- The Shoreline Management Plan - <https://www.cornwall.gov.uk/environment-and-planning/countryside/estuaries-rivers-and-wetlands/flood-risk/coastal-erosion-and-shoreline-management/shoreline-management-plans/>
- Local Flood Risk Assessment – due for its 6-year review in 2020- <https://www.cornwall.gov.uk/environment-and-planning/countryside/estuaries-rivers-and-wetlands/flood-risk/local-strategy/>
- Flood Risk Assessments: Climate Change Allowances – Changes how local planning authorities should use climate change allowances in flood risk assessments. <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

- Strategic Flood Risk Assessment - <https://www.cornwall.gov.uk/environment-and-planning/planning/planning-policy/adopted-plans/evidence-base/cornwall-strategic-flood-risk-assessment-sfra/>
- Planning for Coastal Change –Chief Planning Officer’s Advice Note - www.cornwall.gov.uk/coastalchange
- Cornwall Maritime Strategy - <https://www.cornwall.gov.uk/environment-and-planning/maritime-strategy/>
- Dynamic Risk Assessment study – maps communities at risk (incl. strategic infrastructure risks).
- Rapid Coastal Zone Assessments – heritage assets at risk from sea level rise, flooding and erosion. Cornwall Archaeological Unit.
- River Basin Management Plans are currently being reviewed by the EA. Includes Catchment Management Plans.
- Sustainable Drainage Policy for Cornwall - <https://www.cornwall.gov.uk/media/27672602/sustainable-drainage-policy.pdf>

The Shoreline Management Plan (SMP) for Cornwall and the Isles of Scilly makes recommendations on which Management Unit areas should be considered as part of the Development Plan process for designation as Coastal Change Management Areas. These areas are set out below: -

Original 2011 Areas (SMP 1)	
Portwrinkle	MA01
Downderry West and Seaton	MA02
Polkerris and Par Sands	MA06
Portmellon	MA08
Penryn	MA11
Coverack	MA15
Praa Sands East	MA18
Marazion and St Michael’s Mount	MA19
Long Rock, Eastern Green and Chyandour	MA20
Penzance, Wherrytown and Newlyn	MA21
Gwithian Beach and Godrevy	MA28
Portreath Beach and harbour	MA29
Polzeath	MA36
Perranporth Beach	MA30
Mawgan Porth	MA33
2016 areas (SMP2)	
Rame Head to Downderry	MA01
Hannafore, Looe	MA3
Par Docks to Black Head	MA07

Truro Tidal Basin	MA12
Lizard East	MA15
Mullion Cove, Church Cove and Jangye-ryn	MA16
Gunwalloe	MA17
Trewavas Head to The Greeb	MA18
St Agnes Head to Pentire Point West	MA30
Fistral Bay, Crantock and Newquay Bay	MA31 AND MA32
Trevelgue Head to Stepper Point	MA32 and MA33
Eglosyhayle left bank and Sladesbridge	MA35
Trebetherick Point through Pentire Point	MA36
Boscastle	MA37
Wanson Mouth and Higher Longbeak to Sharpnose Point	MA39 AND MA40

It is considered that additional evidence is required to bridge the gap between these recommendations and determining which areas the Climate Emergency DPD should take forward as CCMA's and the approach to this designation. The designation of CCMA's brings an expectation of a positive strategy to manage change, in some cases identifying land for relocation of vulnerable uses and infrastructure and devising resilience strategies – this work carries an expectation of significant community engagement and has not been carried out in the majority of areas. A consistent approach is needed to this process to increase certainty of actions and reduce potential blight. Consideration is needed on whether CCMA's should be designated in advance of plans being developed for adaptation of communities.

Further work on Coastal Change is also being carried out by The Environment Agency and would provide useful evidence for developing Coastal Change policy. These include:

- Carrying out of further studies into coastal communities in Cornwall. Where areas have been identified as needing further work to identify coastal erosion further survey work is being carried out. This comprises about 25 areas most of which are 'Hold the Line' areas. Work is underway and will be completed over a fairly short period of time.
- The Environment Agency is rolling out a review of SMP2 areas across the UK. As part of this nationwide review, Cornwall will be a pilot project for the work.

Future Approach

A strategic approach needs to be developed to coastal change and flooding through the development of policy in conjunction with the key stakeholders covering the following recommendations:

7. Examine further the appropriateness of the approach being proposed in respect of the Cornwall Coastal Vulnerability Map in terms of:
 - a. Robustness/soundness of the mapped area and approach to mapping;
 - b. Appropriateness of any percentage buffers included;
 - c. Linkages to CCMA designation and other mechanisms for positive planning;
 - d. Policy and standing advice options, including rollback and temporary uses/activities and approach to new development.

8. Determine the approach of the Council to designation of Coastal Change Management Areas (including the scale of that designation – the recommendation is the whole of the community rather than specific parts of a settlement) and whether this should be set out formally in the DPD or subject to candidate areas that require precaution to be applied to location of vulnerable development and uses within the plan period and triggers for formal designation
9. Flooding – Revise Strategic Flood Risk Assessment using EA data/mapping to include updating of flood zones in relation to the most recent climate change predictions. Revise constraints map for flooding to include climate change buffer. Introduce policy requirement to submit flood risk assessment within the climate change buffer areas.
10. Surface Water Flooding - Use EA data/mapping of surface water flooding and flows to revise and adopt a Surface Water Drainage constraint map. Develop policy to require consideration within schemes of surface water flooding risk, including existing and proposed (likely?) exceedance routes.
11. Examine the potential linkage between Natural Flood management and new development within Critical Drainage Areas and the ability to make a functional link and requirement for new development to contribute to the creation or reestablishment of natural features such as tree planting or hedge lines or changes to land management that will reduce flood risk in the catchment.

Policy options:

- Designate a Coastal Vulnerability Zone based on the recommendations of the Shoreline Management Plan, including the setting of an evidenced buffer. Set out the approach to be taken to development proposals within this zone, including the definition of appropriate and inappropriate uses;
- Designate Coastal Change Management Areas (CCMAs) and roll back criteria to allow communities to mitigate coastal change areas and critical infrastructure and [vulnerable uses](#) to be moved; or
- Designate candidate CCMAs and the criteria that will be applied to their designation and the requirement to produce a neighbourhood plan or other site allocation to plan for adaptation of the community
- Provide an exceptions policy to allow the migration of existing housing and vulnerable uses away from designated Coastal Erosion areas on the policies map subject to satisfactory decommissioning of the development to be replaced
- Require a contribution to Natural Flood Management measures such as land management, tree planting within the river/drainage catchment of the development.