

Comprehensive update to Planning Practice Guidance on flood risk and coastal change

Main message

On Thursday 25th August 2022, government published a comprehensive update to the [Flood risk and coastal change](#) section of the Planning Practice Guidance.

Who are these messages for?

This briefing note is for those involved with the flood risk, sustainable drainage (SuDS) or coastal change aspects of development planning, including:

- Environment Agency staff
- local authority planning officers and elected members
- developers
- consultants undertaking flood risk assessment or drainage design

What's changed?

More detail is provided in [Annex 1](#) but key areas where improved guidance has been provided include:

- When/how the sequential and exception tests should be applied to improve speed, certainty and effectiveness
- Surface water flood risk and how it should be considered and addressed
- How to consider the safety of development and its potential impact on flood risk elsewhere
- How to take an integrated approach to flood risk management
- Safeguarding land for future flood risk management infrastructure
- The use of multifunctional SuDS and a clearer requirement for SuDS information with planning applications
- Natural flood management and other ways to reduce the causes and impacts of flooding
- The use of Shoreline Management Plans and Coastal Change Management Areas
- Unsustainable locations and how planning can support transition
- How Local Development Orders should consider flood risk
- The call-in process to improve consistency and maximise opportunities to resolve issues
- Development affecting reservoirs
- The latest supporting tools and guidance such as the CIRIA Property Flood Resilience Code of Practice and the Working with natural processes evidence directory

To help local planning authorities take stock of what they might need to do in response to this update, we've prepared a [LPA Checklist](#).

Why have these changes been made?

This update follows government's [Review of policy for development in areas at flood risk](#) which committed to a '*significantly revised and updated*' flood risk planning practice guidance. Changes were also needed as a result of updates to the NPPF and following other reviews such as the [Jenkins Review](#), [Public Accounts Committee](#) review and [EFRA Committee](#) review.

This update supports the Environment Agency goal for 'a nation resilient to climate change'

In our corporate plan '[EA 2025](#)' we state our ambition to be a stronger leader on climate adaptation and resilience, encouraging others to act now on the climate emergency and invest in adaptation.

Our [National Flood and Coastal Erosion Risk Management Strategy](#) acknowledges that "getting the right kind of growth in the right places is one of the main ways of achieving climate resilient places". It states that "Effective spatial planning is an essential tool for making land use choices that help to achieve greater flood and coastal resilience in places as well as wider environmental benefits". We've worked closely with Defra and the Department for Levelling Up, Housing and Communities over a number of years to provide advice on how this guidance could best be improved.

How have customers been prepared for the update?

Government has made a number public commitments to publish updated guidance, including in the [Review of policy for development in areas at flood risk](#) and, more recently, in the May [Chief Planner's Newsletter](#).

How soon should we, developers and LPAs start using the updated planning practice guidance?

Upon publication, the updated PPG will come into immediate effect and will be a material planning consideration for any ongoing and future planning application and planning policy work. The PPG is guidance, not policy, so it is unlikely to fundamentally change our approach to ongoing cases. In the unlikely event that its publication does have a significant impact on live cases, we advise you to notify relevant applicants and local planning authorities at the earliest opportunity.

Future updates

We welcome the updated PPG as it provides much-needed detail and clarification on how practitioners should implement existing policies. However, government has also indicated that it intends to publish an updated NPPF and to create national development management policies. We will continue to work with government on these wider reforms to ensure flood risk and coastal change remain central tenets of national policy. In due course, this may bring about the need for a further update to PPG which builds on the work done to-date. However, this should in no way prevent the updated PPG from being implemented in full in the meantime.

Contact for information

For queries about how this new guidance affects your local area, please contact your local Environment Agency Sustainable Places team in the first instance. You can find out how to contact them by emailing enquiries@environment-agency.gov.uk. For national queries about the new guidance, please contact Sam Kipling (sam.kipling@environment-agency.gov.uk) or Caroline Sutton (caroline.sutton1@environment-agency.gov.uk).

Annex 1: What's changed

Key details

- The 'design flood' now explicitly includes an allowance for climate change, and also accounts for surface water flood risk [see 'What is meant by a "design flood"?' (Para 002)' in [Planning and flood risk](#)].
- The hierarchical approach now prioritises avoidance approaches and passive techniques over others and now more clearly accounts for residual risk [see 'What process is used in plan or decision-making where flood risk is a consideration?' (Para 004)' in [Planning and flood risk](#)].
- Safety of development now more explicitly considers the impact of a flood on the essential services provided from development [see 'What to consider when determining whether a proposed development will be safe for its lifetime?' (Para 005)' in [Planning and flood risk](#)].
- Consideration of the likelihood of flood defence failure is inappropriate for planning [see 'How can the Sequential Test be applied to the location of development?' (Para 024)' in '[The Sequential approach to the location of development](#)'].
- Function floodplain starting point now 3.3% AEP not 5% (explicitly includes risk from the sea) [see Table 1: Flood zones in [Flood Zone and flood risk tables](#)].
- Lifetime of non-residential development set at 75 years as starting point [see 'What is considered to be the lifetime of development when applying policies on flood risk and coastal change?' (Para 006)' in [Planning and flood risk](#)].
- Guidance discourages new culverting and building over existing culverting [see 'How can natural flood management be delivered through new development?' (Para 067)' in [Reducing the causes and impacts of flooding](#)].
- Link to Defra FD2320 for methodology on calculating flood hazard to people (Para 005) [see 'What to consider when determining whether a proposed development will be safe for its lifetime?' in [Planning and flood risk](#)].

Sequential Test

- Clarity about when it needs to be applied – removed confusion about 'minor' [see 'How should the Sequential Test be applied to planning applications?' (Para 027)' in '[The Sequential approach to the location of development](#)'].
- Key terms defined (e.g. 'reasonably available', 'wider sustainable development objectives' [see 'What is a "reasonably available" site?' (Para 028)' in '[The Sequential approach to the location of development](#)'] and [see 'What is the Exception Test?' (Para 031)' in '[The Exception Test](#)'].
- Clearer roles and responsibilities – emphasis on LPA to choose area of search and consider if test is passed [see 'Who is responsible for deciding whether an application passes the Sequential Test?' (Para 029)' in '[The Sequential approach to the location of development](#)'].
- Encouragement for more cross-boundary working [see 'How can the Sequential Test be applied in the preparation of strategic policies?' (Para 025)' and 'How should the

Sequential Test be applied to planning applications? (Para 027) in [‘The Sequential approach to the location of development’](#)].

- Suggests approaches to improve certainty and efficiency, e.g. prepare guidance on areas of search and a register of ranked sites [see ‘Who is responsible for deciding whether an application passes the Sequential Test? (Para 029) in [‘The Sequential approach to the location of development’](#)].
- Clarity about when it is appropriate to move onto the Exception Test [see ‘What is the Exception Test? (Para 031) in [The Exception Test](#)].

Exception Test

- Table 2 (was table 3) shows flood zone incompatibility not whether ‘development is appropriate’ [see [Table 2: Flood risk vulnerability and flood zone ‘incompatibility’](#)]
- More guidance on key terms such as ‘wider sustainability benefits to the community’ and ‘reduce flood risk overall, where possible’ [see ‘How can it be demonstrated that wider sustainability benefits to the community outweigh flood risk? (Para 036)’ and ‘How can it be demonstrated that development will reduce flood risk overall? (Para 037)’ [‘The Exception Test’](#)]

Integrated approach

- Encourages catchment based approach [see ‘What is a Strategic Flood Risk Assessment? (Para 009)’ and ‘Who needs to be consulted when preparing plan policies?’ in [Planning and flood risk](#)].
- Stronger links to other strategies like water cycle studies and drainage and wastewater management plans [see ‘What is a Strategic Flood Risk Assessment?’ and ‘Who needs to be consulted when preparing plan policies? (Para 010)’ in [Planning and flood risk](#)].

Impact of development on flood risk elsewhere

- FRAs need to detail any increases in flood risk elsewhere [see ‘How to assess the suitability of development where there is a possibility it will increase flood risk elsewhere (Para 049)’ in [‘Addressing residual flood risk’](#) and [‘Site-specific flood risk assessment: Checklist’](#)]
- Guidance on compensatory floodplain storage [see ‘How to assess the suitability of development where there is a possibility it will increase flood risk elsewhere (Para 049)’ in [‘Other flood risk considerations’](#) and [‘Site-specific flood risk assessment: Checklist’](#)]
- Guidance on mitigating cumulative impacts on flood risk elsewhere [see ‘How to assess the suitability of development where there is a possibility it will increase flood risk elsewhere (Para 049)’ and ‘Are minor developments likely to raise flood risk issues? (Para 051)’ in [‘Other flood risk considerations’](#) and [‘The flood risk issues raised by minor developments.’](#)]

- Stilts/voids shouldn't be relied upon for compensatory floodplain storage [see 'How to assess the suitability of development where there is a possibility it will increase flood risk elsewhere (Para 049)' in section '[Other flood risk considerations](#)'.]

Safeguarding land & relocation of unsustainable development

- More detailed guidance on how to safeguard land for future flood risk management infrastructure [see 'How should land for future flood risk management infrastructure be safeguarded? (Para 011)' and 'What approach should be taken to making provision for the relocation of development and infrastructure? (Para 012)' in [Taking flood risk into account in preparing plans](#)].
- Unsustainable locations defined [see 'What approach should be taken to making provision for the relocation of development and infrastructure? (Para 012)' in [Taking flood risk into account in preparing plans](#)].
- Guidance on controlling development in unsustainable locations [see 'What approach should be taken to making provision for the relocation of development and infrastructure? (Para 012)' in [Taking flood risk into account in preparing plans](#)].
- Improved guidance on the role of planning in relocation of unsustainable development [see 'What approach should be taken to making provision for the relocation of development and infrastructure? (Para 012)' in [Taking flood risk into account in preparing plans](#)].
- Adaptation Plans are now cited as a source of information about the land that is likely to need to be safeguarded [see 'How should land for future flood risk management infrastructure be safeguarded? (Para 011)' in [Taking flood risk into account in preparing plans](#)].

Sustainable drainage systems

- SuDS definition now means 4-pillars need to be met – should discourage reliance on below ground storage. If SuDS aren't included, clear onus on developer to provide clear evidence that the use of SuDS would be inappropriate. [see 'What are sustainable drainage systems and why are they important (Para 055)' and 'What sort of sustainable drainage systems can be considered? (Para 056)' in [Sustainable drainage systems](#)].
- Clear requirement for 'SuDS Strategy' with planning applications (including Outline) – plus more detailed list of info needed in checklist [see 'What information on sustainable drainage needs to be submitted with a planning application? (Para 059)' in [Sustainable drainage systems](#)].
- Wider SuDS benefits acknowledged e.g. cooling, carbon sequestration, biodiversity net gain etc [see 'What are sustainable drainage systems and why are they important? (Para 055)' in [Sustainable drainage systems](#)].
- Encourages early consideration of SuDS [see 'What sort of sustainable drainage systems can be considered? (Para 056)' in [Sustainable drainage systems](#)].

- Encourages local policies for where certain types of SuDS would bring the greatest benefits [see ‘What sort of sustainable drainage systems can be considered? (Para 056)’ in [Sustainable drainage systems](#)].
- Highlighted need to check the need for a separate permit for SuDS [see ‘Are other permits needed for sustainable drainage systems? (Para 061)’ in [Sustainable drainage systems](#)].

Reducing the causes and impacts of flooding

- Whole new section – links to all our latest Natural Flood Management tools, maps and research [see ‘What is natural flood management and how can it reduce the causes and impacts of flooding? (Para 064)’ in [Reducing the causes and impacts of flooding](#)]
- Support for river restoration such as culvert removal and other ‘slow the flow’ approaches [see ‘What is natural flood management and how can it reduce the causes and impacts of flooding?’ (Para 064) in [Reducing the causes and impacts of flooding](#)]
- Support for coastal management approaches such as realignment, saltmarsh creation etc. [see ‘What is natural flood management and how can it reduce the causes and impacts of flooding? (Para 064)’ in [Reducing the causes and impacts of flooding](#)]

Coast

- Encourages more precautionary approach to designating Coastal Change Management Areas (CCMAs) [see ‘What are the considerations in defining Coastal Change Management Areas? (Para 072)’ in [Planning and development in areas of coastal change](#)].
- Allows more flexibility for existing buildings/land-use to enable transition [see ‘What development will be appropriate in a Coastal Change Management Area? (Para 072)’ in [Planning and development in areas of coastal change](#)].
- Clearer requirement for ‘vulnerability assessment’ when development proposed in CCMAs [see ‘When will a vulnerability assessment be required to demonstrate whether development is appropriate in a coastal change management area? (Para 074)’ in [Planning and development in areas of coastal change](#)].
- Need to consider Article 4 Directions to remove Permitted Development Rights in CCMAs [see ‘What issues do local planning authorities need to consider in relation to permitted development rights in coastal change areas? (Para 075)’ in [Planning and development in areas of coastal change](#)].

Other issues

- New guidance on how to consider flood risk and coastal change in Local Development Orders [see ‘What should be considered if bringing forward a Neighbourhood Development Order/Community Right to Build Order/Local Development Order in an area at risk of flooding? (Para 018)’ and ‘How can neighbourhood plans and

neighbourhood development/community right to build orders take account of coastal change? (Para 076)' in [Taking flood risk into account in preparing plans](#) and [Planning and development in areas of coastal change](#)].

- New guidance on how local design codes should account for flood risk / SuDS [see 'What should be considered for the preparation of local design codes? (Para 019)' in [Taking flood risk into account in preparing plans](#)]
- Encourages consideration of use of Article 4 Directions to address flood risk issues caused by Permitted Development Rights [see [Permitted development rights and flood risk](#) (Para 053) and 'What approach should be taken to making provision for the relocation of development and infrastructure? (Para 012)' in [Taking flood risk into account in preparing plans](#)]
- Greater clarity on how to follow the call-in process when EA advice not followed [see 'What must happen if a local planning authority wants to grant permission for a major development against Environment Agency flood risk advice (referral to the Secretary of State)? (Para 039)' in [The role of the Environment Agency and Lead Local Flood Authorities in assessing planning applications](#)]
- Guidance on development that may increase burdens on existing reservoir owners [see 'Who needs to be consulted when preparing plan policies? (Para 010)' in [Taking flood risk into account in preparing plans](#) and '[What emergency planning considerations are there in relation to reservoirs? \(Para 046\)](#)']
- Updated links to latest tools, guidance good practice (e.g. CIRIA Code of Practice for Property Flood Resilience, EA/ADEPT Flood Risk Emergency Plans for New Development guidance, WaterUK Sewerage Sector Guidance etc.)

Annex 2: LPA checklist

Following the update to PPG, LPAs are advised to check the following things:

Sequential Test

- Check your policies and procedures on applying the sequential test to ensure you're applying it to all relevant planning applications.
- Consider producing the following:
 - A ranking methodology for comparing relative flood risk between sites
 - Guidance on appropriate 'areas of search' for common development types
 - A register of 'reasonably available' sites

Planning applications

- Consider updating your local list of information requirements to reflect:
 - [Footnote 55](#) of the NPPF and the need for a Flood Risk Assessment
 - The requirement for a SuDS Strategy for all major development and all development in flood risk areas [see 'What information on sustainable drainage needs to be submitted with a planning application? (Para 059)' in [Sustainable drainage systems](#)].
 - Paragraph 074 requirement for a Coastal Vulnerability Assessment for development proposed in a Coastal Change Management Area, [see 'When will a vulnerability assessment be required to demonstrate whether development is appropriate in a coastal change management area? (Para 074)' in [Planning and development in areas of coastal change](#)].
- Consider your approach to Article 4 directions in flood risk and coastal change areas to prevent inappropriate development [see [Permitted development rights and flood risk](#) (Para 053) and 'What approach should be taken to making provision for the relocation of development and infrastructure? (Para 012)' in [Taking flood risk into account in preparing plans.](#)]
- Check your process for referring relevant planning applications to the Secretary of State when you intend to grant planning permission against Environment Agency advice [see 'What must happen if a local planning authority wants to grant permission for a major development against Environment Agency flood risk advice (referral to the Secretary of State)? (Para 039)' in [The role of the Environment Agency and Lead Local Flood Authorities in assessing planning applications](#)]

Local Plan and Strategic Flood Risk Assessment (SFRA)

- Check your local plan and SFRA guidance are aligned with the new PPG, particularly to reflect:
 - the hierarchical approach to addressing flood risk set out in 'What process is used in plan or decision-making where flood risk is a consideration? (Para 004)' in [Planning and flood risk](#).

- the revised starting point for function floodplain is now 3.3% AEP not 5% (explicitly includes risk from the sea) [see Table 1: Flood zones in [Flood Zone and flood risk tables](#)]
- the need for an integrated approach to water management e.g. by ensuring alignment/synergy between documents like water cycle studies and drainage and wastewater management plans [see ‘What is a Strategic Flood Risk Assessment? (Para 009)’ and ‘Who needs to be consulted when preparing plan policies?’ in [Planning and flood risk](#)].
- the need to identify unsustainable locations, where relevant, and to manage existing and new development accordingly [see ‘What approach should be taken to making provision for the relocation of development and infrastructure? (Para 012)’ in [Taking flood risk into account in preparing plans](#)].
- the need to safeguard land needed for future flood and coastal risk management infrastructure [see ‘How should land for future flood risk management infrastructure be safeguarded? (Para 011)’ in [Taking flood risk into account in preparing plans](#)].
- the need to identify Coastal Change Management Areas, where relevant [see ‘What are the considerations in defining Coastal Change Management Areas? (Para 072)’ in [Planning and development in areas of coastal change](#)].
- That certain types of sustainable drainage systems in certain locations will bring the greatest benefits [see ‘What sort of sustainable drainage systems can be considered? (Para 056)’ in [Sustainable drainage systems](#)].

Local Design Codes

- When preparing local design codes, refer to the new guidance on how local design codes should account for flood risk / SuDS [see ‘What should be considered for the preparation of local design codes? (Para 019)’ in [Taking flood risk into account in preparing plans](#).]