



Department
for Environment
Food & Rural Affairs

Call for Evidence on Flooding and Coastal Erosion policy

July 2019



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Contents

Introduction	1
Confidentiality and data protection	3
How to respond.....	4
Topics and questions	4
The concept of resilience	4
A. What we understand by the term “resilience”	5
B. Describing outcomes, driving action and monitoring progress.....	7
Adapting to coastal change.....	10
C. Enabling action in coastal communities	11
Meeting the investment challenge	12
D. Corporation tax relief for business contribution.....	13
E. Local funding initiatives that harness community and private contributions	14
F. Developer contributions	15
G. Managing financial risks from flooding.....	16
Next steps.....	17

Introduction

1. Over the coming decades, flood and coastal erosion risks will increase as a result of population growth and climate change.
2. To ensure that we can continue to manage these risks effectively, the government will, by the end of 2019, set out its policy direction to better prepare the country for future flooding and coastal erosion – making the most of the opportunities for wider economic, social and environmental benefits in our towns, countryside and coast.
3. We will do this through a government policy statement on flooding and coastal erosion, a national infrastructure strategy and the decisions made in a spending review. The Environment Agency will also update its national strategy for flood and coastal erosion, informed by the new government policy statement and the responses to the Agency’s recent consultation.
4. As set out in the 25 Year Environment Plan, government’s priority is to “reduce the risk of harm to people, the environment and the economy from natural hazards including flooding and coastal erosion”.
5. The government is investing £2.6 billion between 2015 and 2021 to help manage these risks. This will attract more than £600 million of additional investment and will better protect 300,000 homes by 2021. Alongside this investment, the government is spending over £1 billion on maintenance of flood defence assets.
6. About 1 in 6 people in England live in properties which are at risk of flooding. Flooding can cause property damage, affect the health and well-being of those affected, disrupt essential services, cause loss of business and damage to cultural heritage and the environment. Fewer people are at risk from coastal erosion but the impacts can be dramatic, including loss of land and property.
7. Government’s future policy direction will be informed by a range of inputs including:
 - the [UK climate projections 2018](#)¹ and [Climate Change Risk Assessment](#)²;
 - the first [National Infrastructure Assessment](#)³;

¹ <https://www.metoffice.gov.uk/research/collaboration/ukcp>

² <https://www.gov.uk/government/publications/uk-climate-change-risk-assessment-2017>

³ <https://www.nic.org.uk/publications/national-infrastructure-assessment-2018/>

- information from the Environment Agency’s consultations on its [draft National Flood and Coastal Erosion Risk Management Strategy for England](#)⁴;
 - Flood Re’s report on the performance of the reinsurance scheme to date
 - responses to the consultation on [Improving our management of water in the environment](#)⁵ that considered raising funds to deal with flooding and coastal erosion;
 - responses on local authority funding for flood and coast as part of the [review of local authorities’ relative needs and resources](#)⁶; and
 - responses to the [Infrastructure Finance Review consultation](#)⁷, which looked at how best to support private investment in infrastructure.
8. It will also be informed by responses to this call for evidence and a complementary research project on understanding flood resilience, which is being commissioned alongside the call for evidence.
9. This call for evidence is an opportunity for you to provide evidence which will inform some specific aspects of government policy on flooding and coastal erosion, and influence the development of the government policy statement on flooding and coastal erosion.
10. The call for evidence focusses on some key flood and coast policy issues that the government is currently considering and would like additional evidence on:
- **What we understand by the term “resilience”** – asking how the term resilience is currently used, and whether the different aspects of resilience could usefully be brought together into one overall concept.
 - **Describing outcomes, driving action and monitoring progress** – seeking examples of cases where metrics have been used effectively to achieve an overarching outcome, and information on the advantages and disadvantages of using composite metrics to describe, drive and monitor flood and coast outcomes.
 - **Adapting to coastal change** – seeking information about what coast protection authorities have done to join up decisions about managing the coastline with wider plans and decisions for the area, and examples of whether councils have used, or tried to use powers to fund specific coastal erosion works or to create Coastal Change Management Areas.

⁴ <https://consult.environment-agency.gov.uk/fcrm/national-strategy-public/>

⁵ <https://sp.demeter.zeus.gsi.gov.uk/Sites/aa05/FRC/Strategy/Call%20for%20evidence/1.%09https://www.gov.uk/government/consultations/improving-our-management-of-water-in-the-environment>

⁶ <https://www.gov.uk/government/consultations/review-of-local-authorities-relative-needs-and-resources>

⁷ <https://www.gov.uk/government/consultations/infrastructure-finance-review>

- **Corporation tax relief for business contributions** – asking how businesses have used the provision for businesses to receive corporation tax relief on their contributions to government funded flood and coast projects
- **Local funding initiatives for flood risk management** – seeking examples of local initiatives funded from sources other than the public sector and what could be done to help these types of initiatives succeed.
- **Developer contributions** – asking about the barriers and enablers to the use of developer contributions to ensure developments are safe for their lifetime, and what arrangements are in place for maintaining flood assets in new developments.
- **Managing financial risks from flooding** – asking about how organisations manage the financial risks associated with flooding, in the context of climate change.

11. The call for evidence is open for six weeks, closing on 19 August 2019 and is open to all those who have an interest in the topic.

12. We are grateful for any information and evidence you can provide to help answer any of the questions. Evidence might include new or existing reports or documents as well as data in various forms. It can also include examples, case studies and narratives of personal experiences.

13. Do focus on questions which are most relevant for you. We are not expecting every response to cover all of the questions.

Confidentiality and data protection

14. Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

15. Please tell us if you want the information that you provide to be treated as confidential, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

16. We will process your personal data in accordance with all applicable data protection laws. See our [privacy policy](#).

How to respond

17. You can respond using the [online survey](#). The use of Citizen Space is the preferred response method.

18. If you would prefer not to respond online, you can respond:

by email to: flood.reports@defra.gov.uk

or by writing to:

Flood and Coastal Erosion Call for Evidence
Department for Environment, Food and Rural Affairs
3rd Floor, 2 Marsham Street
London
SW1P 4DF

Topics and questions

19. There are many issues to consider when working out how to reduce the risk of harm to people, the environment and the economy from flooding and coastal erosion. This call for evidence does not cover the whole subject. It asks questions in relation to a selection of the flood and coast policy issues that the government is currently considering and would like additional evidence on.

The concept of resilience

20. As set out in the [25 Year Environment Plan](#), the government intends to boost the long-term resilience of our homes, businesses and infrastructure to harm from natural hazards including flooding and coastal erosion.

21. Resilience is an important concept in risk management. It goes beyond simply avoiding or protecting from potential threats and hazards. The government's [National Flood Resilience Review](#)⁸ took a broad view of how to strengthen resilience to flooding, including improving risk mapping and forecasting; strengthening physical protections to keep water away from communities and infrastructure; and measures to speed the recovery after a flood.

22. Resilience is an increasingly used term to describe the overall concept for what we are seeking to achieve in relation to flood and coastal erosion risk management. We believe the concept of resilience can help:

⁸ <https://www.gov.uk/government/publications/national-flood-resilience-review>

- define and communicate the overall outcomes we are seeking to achieve, and
- galvanise and co-ordinate the range of actions which are needed to reduce the harm caused by flooding and coastal erosion.

We are seeking evidence in relation to these two elements.

A. What we understand by the term “resilience”

23. There is no single definitive definition of resilience. If government is to use the concept of resilience as part of a national framework for guiding local actions, then there needs to be a shared, clear and consistent understanding of what resilience means.

24. Academics⁹ have identified four concepts of resilience. Two of these are about maintaining the current situation and two are about changing to do things differently.

Overall approach	Concept of resilience	What it means	Relevant flood and coastal erosion approaches
Maintain the current situation	Resilience as resistance	Protecting ourselves against threats and hazards	Building and maintaining flood and erosion defences.
	Resilience as bounce-back	Getting back to normal, recovery	Clearing up after a flood, repairing properties, rebuilding damaged infrastructure back to its previous state.
Change to do things differently	Resilience as adaptation	Adjusting to a new normal	Adapting properties and infrastructure so that less damage will be caused when they flood, accepting that some fields will be flooded when there is heavy rain.
	Resilience as transformation	Owning the need to make a significant change	People living in a village on a rapidly eroding coastline deciding to move to a less risky area.

⁹ Twigger-Ross, C. et al. (2014). Flood Resilience Community Pathfinder Evaluation. Rapid Evidence Assessment. February 2014 <https://nationalfloodforum.org.uk/wp-content/uploads/2017/04/Flood-Resilience-Community-Pathfinder-Evaluation-Rapid-Evidence-Assessment.pdf> and Wright, K. (2014). Towards a typology of community resilience. <https://baumaninstitute.leeds.ac.uk/2014/06/24/towards-a-typology-of-community-resilience-activities/>

25. For the [Flood Resilience Community Pathfinder projects](#), we looked at five aspects of community resilience¹⁰:

- **Social resilience:** The capability of individuals to engage with flooding. There are links here to social vulnerability in that communities with fewer elderly, disabled and non-native speaking residents are likely to show greater resilience.
- **Community resilience:** The networks and relationships which people use to help each other (e.g. knowing neighbours, informal help given and received and number of community groups).
- **Economic resilience:** People’s financial resilience and their ability to deal with the costs of damages, including the extent and cover of flood insurance.
- **Institutional resilience:** The arrangements for local governance of flood risk management (e.g. flood groups, multi-agency meetings, community flood plans, parish councils).
- **Infrastructure resilience:** The vulnerability of the physical infrastructure used to house, transport and produce goods and services for a community, including any actions to increase its resilience (e.g. property resilience, flood storage, highway drainage).

26. The Environment Agency’s [draft National Flood and Coastal Erosion Risk Management Strategy for England](#)¹¹ introduces the concept of ‘resilience for places’ which it says refers to the ability for a community in a place to cope with, and recover from, all sources of flooding or coastal change.

27. We would like to know more about how the term “resilience” is currently being used in flood and coastal erosion contexts.

Questions on what we understand by the term “resilience”

- How is the concept of resilience applied in relation to flooding and/or coastal erosion? For example, how do you use it in your own work? How is it used internationally?**
- How can the different aspects of resilience be brought together into one “overall resilience” concept?**

¹⁰ These are based on: Cutter, S.L. (2016). The landscape of disaster resilience indicators in the USA. *Nat. Hazards* (2016). 80: 741-758.

¹¹ <https://consult.environment-agency.gov.uk/fcrm/national-strategy-public/>

B. Describing outcomes, driving action and monitoring progress

28. The circumstances of local areas (cities, rural communities and coastal communities) differ widely but every area has the potential to be better prepared for the risks communities face and to reduce the harm they may suffer as a result of flooding or coastal erosion.
29. The actions which are needed to improve overall “resilience” lie in the hands of many different parties including local authorities, businesses, householders and land managers. Actions include decisions on land-use, managing the flow of water through the catchment, building and maintaining defences, adapting buildings and infrastructure to reduce their vulnerability, preparing for and responding to incidents, and recovering after an event.
30. It is government’s role to make sure that arrangements are in place to enable the range of necessary actions to happen, including:
- setting out what the country as a whole should be seeking to achieve in relation to flood and coastal erosion risk management,
 - putting in place a strategic policy and delivery framework to enable and encourage all the relevant parties to achieve these outcomes, aligning local outcomes to policy on wider national goals,
 - monitoring how well the system is working and the progress being made, and
 - adapting and improving the system over time.
31. We are therefore exploring whether a policy framework or system should exist to incentivise everyone to strive to reduce the harm caused by flooding and coastal erosion (which we could term striving for greater overall “resilience”) and the appropriate suite of actions by all the relevant parties in each area. A clear policy framework or system for resilience in local areas may also need to consider how to:
- identify a spatial unit/s to which it applies
 - identify elements or components that contribute to overall resilience
 - measure components or elements
 - include appropriate limit values, thresholds or standards for these based on judgements about impacts
 - combine measures for different elements into a metric or classification of overall resilience, with appropriate weighting of some due to importance or uncertainty;
 - allow for future goals or objectives to be set locally for improving resilience either on individual elements or at the combined level.
32. Following a clear definition of resilience as a concept (the subject of the previous section), such a policy framework would also most likely involve the use of some

metrics that help understand the current and future levels of resilience that are appropriate. Metrics could clearly describe and quantify the outcomes we want everyone to aim for, be effective for driving action and also monitoring progress towards achieving them.

33. There are different types of metrics that can be used:

Type of metric	What is it	Flood and coast example
Goals	A descriptive summary of the long term outcomes we are aiming for. They can be qualitative or quantitative.	The Government's 25 Year Environment Plan high level goal of “a reduced risk of harm from environmental hazards such as flooding and drought” and policy priority to “reduce the risk of harm to people, the environment and the economy from natural hazards including flooding and coastal erosion”.
Indicators	Measures used for monitoring changes and trends over time.	The draft indicator framework for the 25 Year Environment Plan included a headline indicator for “Resilience to natural hazards” and two relevant system indicators below this headline: <ul style="list-style-type: none"> • Disruption or unwanted impacts from flooding or coastal erosion (H20) • Communities resilient to flooding or coastal erosion (H22)
Targets	A specific and measurable deliverable. Generally shorter term.	The government target for 300,000 homes to be better protected from flooding and coastal erosion between 2015 and 2021 as a result of central government’s £2.6 billion spending on flood and coastal defence.
Limit values, thresholds or standards	Minimum or maximum levels of something (which is comparable and verifiable) to be kept above or below at all times ¹² .	In its first National Infrastructure Assessment the National Infrastructure Commission recommended flood resilience standards. “The Commission’s judgement is that all properties, wherever feasible, should be resilient to severe flooding, with a 0.5 per cent annual probability, by 2050. The Commission also believe that a higher standard should be provided for the largest cities. Their analysis assumed an annual probability of 0.1 per cent for main conurbations.”

34. As part of a policy framework or system on resilience we could

¹² Standards can be a confusing term as it is also used in certain specific contexts e.g. British Standards, building standards.

- focus on a single primary metric as the main outcome, driver of action and indicator of progress, or
- use a suite of metrics to describe a range of outcomes, or
- develop a composite metric which covers a range of outcomes and actions (for example, a composite “overall resilience” metric).

35. There are many different aspects to consider when thinking about what combination of metrics (goals, indicators, targets and standards) we should use to describe outcomes, monitor progress and drive action.

36. A framework or system for resilience levels would have a number of policy considerations given its relationship to wider national policy goals and decisions. Given the breadth of the concept and the uncertainties involved in applying it, it is unlikely that this could be established on a scientific basis alone. It would require judgements to be made about the appropriate or desired outcome in terms of resilience – in different local circumstances – as many aspects of this framework would relate to this intended outcome. In addition, any policy framework or system for driving action would need to address the following range of criteria:

- **Range of risks and impacts:** the approach works for all sources of flooding and coastal erosion, for the full range of impacts and for the range of different scenarios which may occur (for example, ensuring greater local resilience for a number of different-sized potential future storm or flooding events);
- **Geographical area and local variation:** the approach can be tailored to suit differing circumstances in local areas and be reflective of differing social, economic and environmental priorities there;
- **Level of ambition:** the approach effectively drives action and enables future improvement;
- **Costs and benefits:** the approach is seen as appropriate in terms of how the costs and benefits would be felt by different groups of people and areas of the country (perhaps especially for those at highest risk and those least able to take action), results in future goals or actions which are not disproportionately costly or unsustainable, and engages all sources of financing and funding. The approach is also not overly bureaucratic or costly to apply;
- **Communication:** people can easily understand what the metrics mean, the expected outcomes in their area and what they need to do to contribute to achieving them, and there is transparency about uncertainties to avoid a false sense of security locally;
- **Timescales:** the metrics are useful for identifying whether short term actions (for the next 1-5 years) are working towards addressing long term risks / impacts and objectives for improving resilience over time;
- **Roles and responsibilities:** the approach is seen as democratic and appropriate in terms of who decides the outcomes to be achieved in an area,

what should be done by whom to achieve them and, what happens if actions are not carried out and/or if outcomes are not achieved, and

- **Data and verification:** it is feasible and affordable to gather, verify and keep up to date the data which is needed to populate the metrics.

37. To help with considering how best to describe outcomes, drive action and monitor progress on flooding and coastal erosion, we would like evidence about the effective use of different types of frameworks, systems and metrics. The results of this call for evidence will inform our decisions about which approach to adopt for the future as part of our policy for managing flood and coastal erosion risk in England.

Questions on describing outcomes, driving action and monitoring progress

- iii. **Please provide examples from other contexts of the effective use of metrics to achieve an overarching outcome (e.g. sustainability or wellbeing) and of frameworks which are successful in supporting this.**
- iv. **What would be the advantages and disadvantages of using composite metrics to describe, drive and monitor flood and coastal erosion outcomes (nationally and locally)?**
- v. **If you identified disadvantages in question iv, how may these be overcome?**

Adapting to coastal change

38. Coastal communities have unique circumstances. Coastlines can bring a range of economic, environmental and social opportunities but also face changes. Coastal change is a natural, ongoing process. The most recent climate change projections identify significant flooding and erosion risks in some coastal areas as a result of sea level rise and more extreme weather. We recognise that, whilst some coastal areas will be able to manage these risks effectively, others will face particular challenges. Many coastal communities have strong and thriving local economies but on average, in comparison to other areas, coastal communities are more deprived and less economically robust.

39. The government is committed to supporting coastal communities to strengthen their appeal as places to live, work and visit. That includes managing the risks and impacts of coastal erosion and flooding where it is sustainable and affordable to do so. We are also committed to supporting coastal communities in areas where managing the risks and impacts is less sustainable and affordable, and so different approaches are needed. The communities in these coastal areas will need to plan for the long-term and make the long term transitions required to adapt to the coastal changes, supporting the wellbeing of local people.

C. Enabling action in coastal communities

40. Important decisions about how the coastline is managed are best made by those who understand local needs. Lower tier local authorities are responsible for making decisions on managing the coast in their roles as both local planning authorities and coast protection authorities. They need to understand the nature and extent of coastal flooding and erosion projected for their stretches of coastline and work with their communities to understand the situation and to encourage and enable them to make the necessary transitions.
41. Local authorities have a range of powers and tools to help them make these important decisions and lead the changes. Work with Local Economic Partnerships is vital too. In the long-term, coastal change may potentially change the fortunes of coastal economies. Funding defences, re-aligning sea frontages, modifying commercial and amenity space where it is a risk, will all need to be part and parcel of an area's overall economic plan to thrive, supported by businesses large and small across the whole area. Similar partnership approaches will be needed in some local areas for managing the transition in housing and transport infrastructure.
42. Shoreline Management Plans focus on three time horizons: 20, 50 and 100 years, and set out one of four approaches to managing sections of the coastline:
- hold the line (build and maintain defences);
 - managed realignment (limited movement of the shoreline forwards or backwards);
 - no active intervention (allow the coast line to evolve naturally) and
 - advance the line (build new defences seaward of existing defences).
43. Shoreline Management Plans are based on an assessment of the feasibility and sustainability of each of the four approaches. A policy of 'holding the line' can often require expensive investment in defences over time from all sources. Being able to identify, in a timely way, the stretches of coast where it is not sustainable or affordable in the long-term to have defences, means authorities there have time to work with communities to prepare for proactive transition.
44. The National Planning Policy Framework¹³ expects local authorities to reduce risk from coastal change by avoiding inappropriate development in vulnerable areas. It says that local planning authorities should identify as a Coastal Change Management Area any area likely to be affected by physical changes to the coast, be clear what development is appropriate in the area and make provision for development and infrastructure that needs to be relocated away from it.

¹³ <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

45. Coastal authorities may bid for central government funding to support coastline management projects, and may also fund these projects themselves. One option would be to carry out coast protection work in accordance with a works scheme (as per sections 4 and 6 of the Coast Protection Act 1949) and use their powers under section 7 of that Act to levy coast protection charges from those with an interest in the land that would benefit from the work.
46. The land use planning and Shoreline Management Planning processes are both mechanisms for aligning coastline management decisions with wider proposals for managing land use, and with the area's economic, social and environmental objectives, so that there is a common vision for the future of the community.
47. Through this call for evidence we wish to understand more about the challenges local authorities face in assessing the sustainability and affordability of different approaches, and in making decisions on coastline management. Especially in cases where it is not sustainable or affordable to build and maintain defences in the long term so authorities need to plan for a proactive transition and to prepare and support communities accordingly.

Questions on enabling action in coastal communities

- vi. **Please provide evidence about approaches which coastal protection authorities and coastal groups can use to make a robust assessment of the long-term affordability and ongoing sustainability of coastal management policies, including any barriers to implementation.**
- vii. **Please provide information about how coast authorities have successfully combined decisions about managing the coastline (Shoreline Management Plans) with wider plans and decisions for the area (including land use, economic development, social and environmental objectives) and the challenges of achieving this.**
- viii. **Please provide examples where an authority has sought, successfully or unsuccessfully, to use its Coast Protection Act 1949 powers to a) make a coast protection scheme to carry out coast protection works and b) levy coast protection charges in respect of such a scheme.**
- ix. **Please provide examples of cases where a coast protection authority has sought to create a Coastal Change Management Area including any barriers the authority faced, and how the area is helping local communities to adapt.**

Meeting the investment challenge

48. The costs of managing flood and coastal erosion are increasing as a result of climate change and population growth.

49. The majority of funding for flood and coastal erosion risk management schemes comes from central government. The government is investing £2.6 billion from 2015 to 2021 in flood and coast projects, with a further £1bn spent on maintenance. This central government funding will attract more than £600 million of additional “partnership funding” investment. Alongside this there is additional investment by local government, the private sector, non-government organisations and landowners, as well as a range of community and voluntary initiatives.

50. The government has recently sought views on several aspects of the overall flood and coast funding picture, notably on:

- raising funds to deal with flooding and coastal erosion in the consultation on [Improving Our Management of Water in the Environment](#)¹⁴,
- local authority funding for flood and coast in the [Review of Local Authorities' Relative Needs and Resources](#)¹⁵ and
- private investment in infrastructure in the [Infrastructure Finance Review consultation](#)¹⁶.

This call for evidence focuses on four additional aspects of the funding picture: corporation tax relief for business contributions, private and community funded initiatives; the contributions made by developers; and flooding as a financial risk.

D. Corporation tax relief for business contribution

51. Legislation which was introduced in the Finance Bill 2015 enables companies and unincorporated businesses to receive corporation tax relief on the partnership funding contributions which they make to government funded flood and coastal erosion schemes.

52. The aim of this tax relief was to encourage private sector contributions to projects across the country through partnership funding, allowing more flood defence and coastal erosion schemes to go ahead. We would like to know how and where it is being used.

Question on corporation tax relief for business contributions

- x. **Please provide evidence on how and where businesses have used the provision for them to receive corporation tax relief on their contributions to government funded flood and coast projects.**

¹⁴

<https://sp.demeter.zeus.gsi.gov.uk/Sites/aa05/FRC/Strategy/Call%20for%20evidence/1.%09https://www.gov.uk/government/consultations/improving-our-management-of-water-in-the-environment>

¹⁵ <https://www.gov.uk/government/consultations/review-of-local-authorities-relative-needs-and-resources>

¹⁶ <https://www.gov.uk/government/consultations/infrastructure-finance-review>

E. Local funding initiatives that harness community and private contributions

53. Local leadership of flood and coastal erosion projects is valuable for promoting local ownership of objectives and risks and local engagement in designing appropriate schemes. Recent years have seen a wider range of initiatives led and funded by landowners, communities and businesses, for example:

- **private investment in sustainable drainage systems (SUDS)**. A recent review¹⁷ found that almost 90% of all the approved planning applications sampled featured SUDS, and there are examples of local public bodies retrofitting SUDS on an “invest to save” basis;
- **investment in drainage and traditional defences**, such as investment by the Crown Estate in protecting the low-lying high grade agricultural land of Sunk Island on the Humber, or in Eastbourne where adding a privately built defence on to the existing defences allowed the Sovereign Harbour housing development to be built. The defences are managed by the Environment Agency using government funding plus contributions raised through a service charge paid by residents of the housing development;
- **private and public sectors working together**, such as the case of the Pevensy Bay public private partnership, which uses private finance to provide the capital to significantly improve the standard of protection to over 10,000 properties. The 25 year contract is publicly funded and gives residents a high degree of protection against coastal flooding whilst in place;
- **investment in catchment management**, for example where water companies have recognised that proactive management of catchment areas to manage risks to water supply and increase flood and drought resilience can deliver wider environmental objectives than constructed infrastructure can deliver.

54. We would like to know more about the arrangements which have been used to harness local, private and community funding contributions and how these types of initiatives can be encouraged.

Questions on local funding initiatives that harness community and private contributions

- x. **Please provide examples of initiatives delivering flood and coastal erosion outcomes which have been funded from sources other than the public sector, and explain how they were funded.**

¹⁷ <https://www.gov.uk/government/publications/a-review-of-the-application-and-effectiveness-of-planning-policy-for-sustainable-drainage-systems>

- xii. **What determines the success of flood and coastal erosion initiatives which have private and community contributions?**
- xiii. **What could be done to encourage private and community funded initiatives and help them succeed?**

F. Developer contributions

- 55. Government is committed to increasing housing supply, providing much needed homes and meeting the commitment to deliver 300,000 additional homes a year on average by the mid 2020s.
- 56. The National Planning Policy Framework is very clear that inappropriate development in areas at risk of flooding should be avoided. Local planning authorities follow the sequential, risk-based policy in the National Planning Policy Framework, steering new development away from flood risk areas wherever possible.
- 57. If local planning authorities are considering developments in flood risk areas, they need to take account of advice from the Environment Agency, lead local flood authorities and other flood risk management bodies and be satisfied that:
 - suitable alternative sites at lower flood risk are not available;
 - new development will be resistant and resilient to all sources of flooding and safe for its lifetime, taking account of climate change; and
 - flood risk will not be increased elsewhere, and where possible, will be reduced.
- 58. The mechanisms which local authorities can use to secure financial contributions from developers to ensure that new properties are safe for their lifetime are the Community Infrastructure Levy (used to fund infrastructure needed to support new developments in an area) and section 106 agreements (used to secure works at a particular development site). Government has recently signalled some changes to these mechanisms as well as the introduction of a new strategic infrastructure tariff.
- 59. We would like to learn more about how these existing mechanisms are being used to secure funding from developers to ensure that new developments are safe for their lifetime.

Questions on developer contributions

- xiv. **Please provide evidence on the extent to which contributions being made by developers (through section 106, Community Infrastructure Levy and other means) are being used to fund works to manage the flood risks.**

- xv. **What are the barriers to securing and using developer contributions to ensure that new developments are safe for their lifetime, taking account of climate change? How can these barriers be overcome?**
- xvi. **Please provide examples of cases where authorities have sought (successfully or unsuccessfully) to pool contributions to build larger pieces of flood or coast infrastructure that benefit more than one local authority area.**
- xvii. **Where flood alleviation measures have been put in place as part of a new development, have the ongoing maintenance costs been provided for under these arrangements?**

G. Managing financial risks from flooding

60. Many public and private sector organisations face financial risks relating to climate change and the transition to a low carbon economy. The international Task Force on Climate Related Disclosures¹⁸ has recommended that governments and businesses should reflect these climate risks in their accounts.
61. The government's Green Finance Strategy, commits to considering the financial exposures relating to climate change and the low carbon transition within the public sector.¹⁹ This includes asking government departments to incorporate the updated 2018 Green Book focus on climate risks in their policy development, including at the Spending Review.²⁰
62. One such exposure covers the increasing risk of flood damage to government property. Following the 2007 floods, the government spent £852m on recovery and repairing damage to flood infrastructure, roads and schools. This kind of expenditure may increase as flooding becomes more severe and more unpredictable as a result of climate change.²¹
63. Public bodies already identify the financial costs that could arise as a result of flooding when planning and appraising infrastructure projects under [Green Book](#) rules.²² However there is no expectation that on an ongoing basis public bodies should identify and disclose potential financial impact of flooding on their business.

¹⁸ <https://www.fsb-tcfd.org/>

¹⁹ Green Finance Strategy, p.9

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/813656/190701_BEIS_Green_Finance_Strategy_Accessible_PDF_FINAL.pdf

²⁰ Green Finance Strategy, p.32.

²¹ See Environment Agency, *Climate change impacts and adaptation* (November 2018), available from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/758983/Climate_change_impacts_and_adaptation.pdf

²² <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>

In principle, identifying and disclosing these risks could help with business planning and risk mitigation.

64. We would like to know more about how other organisations are already identifying flooding related financial risks and how the information is used.

Questions on managing financial risks from flooding

- i. Please provide examples of public and private organisations which are already disclosing their financial exposure to flood or other climate risks and how they go about it.**
- ii. What are the barriers to identifying and disclosing financial exposure to flood risks and how could they be overcome?**

Next steps

65. We are grateful for any information and evidence you can provide to help answer any of the questions above. Do focus on the questions which are most relevant for you. We are not expecting every response to cover all of the questions.

66. The call for evidence closes on 19 August 2019 and details for how to respond are in the “How to Respond” section above.

67. The government will carefully consider your responses and will use them, along with other information sources, to inform the development of the government policy statement on flood and coastal erosion and national infrastructure strategy.