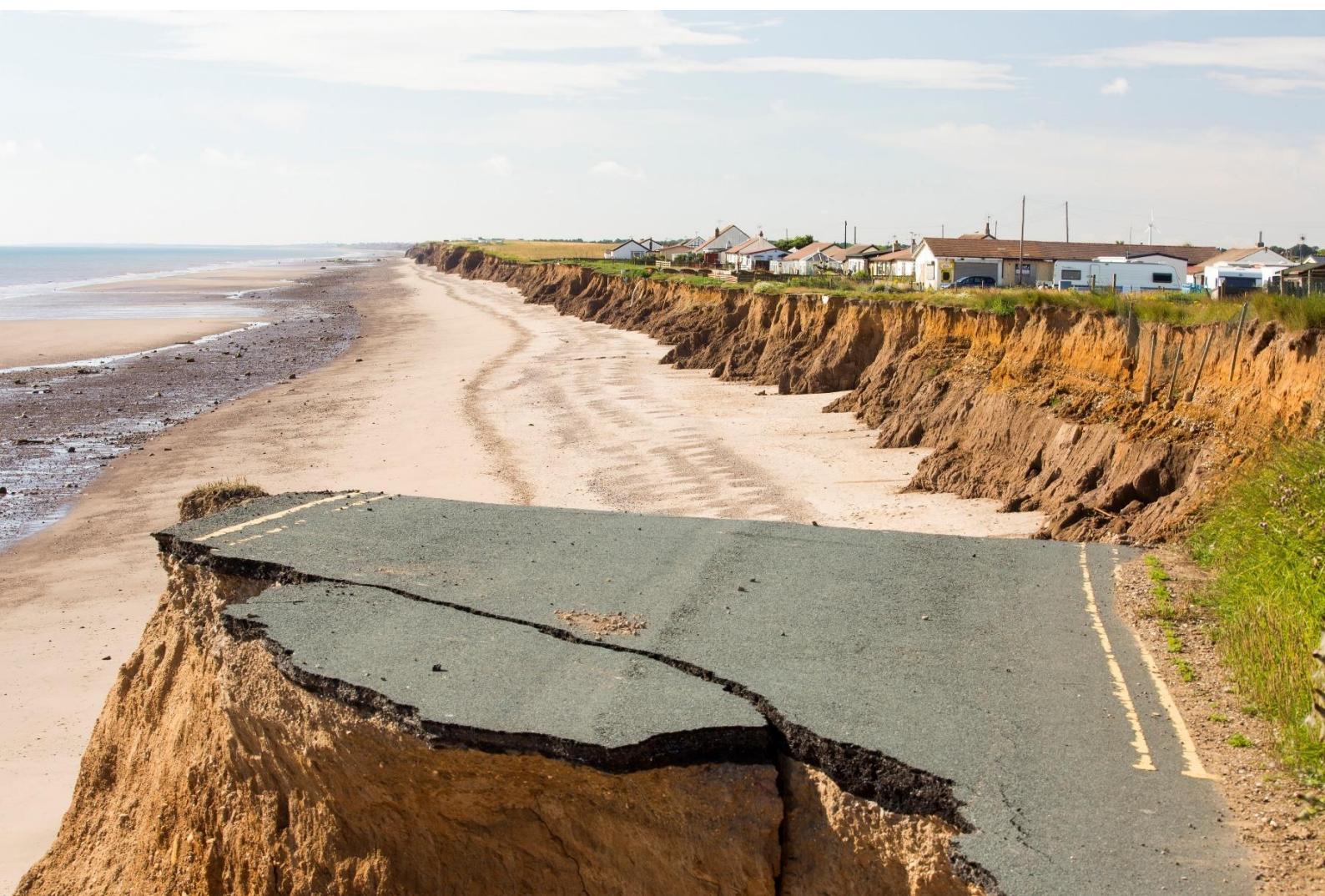


# National Adaption Programme: CIWEM's priorities for the second cycle



**CIWEM is the leading independent Chartered professional body for water and environmental professionals, promoting excellence within the sector. The Institution provides independent commentary on a wide range of issues related to water and environmental management, environmental resilience and sustainable development.**

CIWEM  
106-109 Saffron Hill  
London  
EC1N 8QS  
Charity registration No 1043409 (England and Wales) SC038212 Scotland

[www.ciwem.org](http://www.ciwem.org)

*Cover image - Coastal Erosion Near Hornsea, Ashley Cooper, 2013, CIWEM Environmental Photographer of the Year 2014*

In the summer of 2018, following advice in 2017 by the Committee on Climate Change, the Government will publish its second National Adaptation Programme (NAP) under the Climate Change Act 2008. This will set out how England plans to adapt and increase resilience to the impacts of climate change over the next five years. This document briefly reviews the first NAP and sets out CIWEM's view on what the second cycle must include to be a strategic and effective programme for climate change adaptation.

Greenhouse gas emissions to date mean that effective climate change adaptation strategies are needed to complement efforts at mitigation. Adaptation aims to reduce society and the environment's vulnerability to climate change that is already happening which will occur in the future. 2016 was the warmest year on record<sup>1</sup>. Record rainfalls fell across England in December 2015. 2017 was the hottest year without El Niño since global records began<sup>2</sup>. The risks caused by climate change are increasing.

The Climate Change Act 2008<sup>3</sup> established legally binding carbon budgets to reduce the UK's carbon emissions, as well as setting out the requirements for adaptation through the Climate Change Risk Assessment (CCRA), the National Adaptation Programme (NAP) and the Adaptation Reporting Power (ARP).



#UKStorm (6064), Bernie Pettersen, 2014, CIWEM Environmental Photographer of the Year 2014

# National Adaptation Programme (NAP)

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The NAP is required to put in place objectives, proposals and policies to address the risks and opportunities highlighted by the CCRA, which was most recently updated in 2017<sup>4</sup>. The Government published the first NAP in July 2013, setting out what government, businesses and society are doing to adapt to the changing climate. The Adaptation Sub-Committee (ASC) of the Committee on Climate Change is tasked under the Act to assess every two years the progress being made by the NAP.

In 2015 the ASC published its first review of the NAP which showed that most of the actions were on track. However, the lack of any specific targets and deadlines meant that much could not be accurately measured<sup>5</sup>. The second review in 2017 concluded that since 2015, the risks posed by climate change had increased in a significant number of priority areas, and that the current programme as described in the NAP would not be sufficient to avoid the impacts of climate change increasing<sup>6</sup>.

A highly co-ordinated and strategically-focused NAP is therefore vital this time round, as planned adaptation is cheaper and more effective than reactive, unplanned action. CIWEM considers that this will be much more effective if actions are identified as of immediate importance or more strategic for the long-term (but which may need preparatory work, such as additional research for example).

It's important that the NAP contains a clear and concise vision of what a well-adapted England looks like. Crucially, it should not plan adaptation measures to maintain the status quo, but must recognise that change is inevitable over coming decades given the nature of climate risks. It should therefore seek to adapt to potentially rapidly changing natural systems.

Such an approach should ensure that the second NAP is considerably more than a lengthy compendium of existing, planned or aspired to future activities. It should be designed as a continual improvement programme, which analyses gaps in the existing programme to identify areas for improvement. It should set out policies and take a systems approach to delivery.

Importantly, the second NAP should be implemented effectively across government, driving and tracking actions in various appropriate departments. It should also have clearer mechanisms to track progress. It should set clear priorities for adaptation, include measurable objectives that can be monitored and evaluated, and focus on the core set of policies and actions that will deliver the most benefit over its timeframe. Fundamentally, the NAP must be a driver of additional action and stronger policy rather than a statement of what is already planned or in train.

CIWEM considers that the second NAP needs to:

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## 1 Address priority risks

The first NAP identified a comprehensive list of priority actions and associated action owners. Whilst this demonstrated the wide range of relevant risks and actions taking place to address many of them, CIWEM reflects that there were far too many priorities highlighted for it to be an effective and targeted list. They were also a list of often broad and disassociated actions, which did not work collectively to drive forward a strategic agenda.

In its 2017 Climate Change Risk Assessment Evidence Report, the ASC highlighted a table of 56 risks and opportunities, grouped into four categories:

- More action needed
- Research priorities
- Sustain current action
- Watching brief

CIWEM considers that those 20 issues highlighted as requiring "more action" on the basis of the magnitude of risk and confidence attached to that risk, should form a far more prioritised focus under the 2018 NAP.

**Within this "more action needed" group, CIWEM particularly urges the Government to take strong action on the following risks in the NAP and to make progress on addressing them in its 5-year cycle:**

### → Risks to soils from increased seasonal aridity and wetness

Future changes to the climate will have significant impacts on our soils, which are vital to a healthy environment, including erosion and compaction which are further exacerbated by increased seasonal aridity and wetness caused by climate change. The Government has identified the risk to soils in the 25 Year Environment Plan<sup>7</sup> and pledged that "by 2030 we want all of England's soils to be managed sustainably, and we will use natural capital thinking to develop appropriate soil metrics and management approaches".

CIWEM welcomes the commitment to soils and considers that improvement to soil management practices which enable the natural environment to better cope with changes to the climate should be a priority action for Defra over the next five years, brought forward through post-Brexit agricultural policies.





### → Risks to public water supplies from drought and low river flows

The UK water industry is well-engaged with climate change and has long term plans to manage its impacts through Water Resources Management Plans and the Drought Planning process. However, there are still projected to be widespread deficits in public water supplies by 2050<sup>8</sup>.

The 25 Year Environment Plan stated that the Government "will reduce the risk of harm to people, the environment and the economy from natural hazards including flooding, drought and coastal erosion by ensuring interruptions to water supplies are minimised during prolonged dry weather and drought".

CIWEM calls for increasing regional collaboration between water companies through bodies such as Water Resources East, Water Resources South East and Water Resources North over the next five years. We would also encourage the Government to drive greater awareness of water efficiency through improved product labelling schemes and granting water companies powers to meter supplies compulsorily in areas other than those designated as water stressed.

## → Risks of land management practices exacerbating flood risk

Whilst current investment programmes in flood risk management are seeking to move 300,000 properties from a higher flood risk band to a lower one, overall flood risk is expected to increase because of population growth and climate change. Land management practices have a considerable impact on the risk and level of flooding experienced by local and downstream communities. The Government has stated in the 25 Year Environment Plan that it will ensure:

- decisions on land use, including development, will reflect current and future flood risk
- risk of harm from flooding and coastal erosion will be reduced through a range of measures including greater use of natural flood management, and
- uptake of sustainable drainage systems will be increased

Land management and engineering approaches which deliver environmental benefit alongside flood risk management should be a priority action for Defra in the next NAP. For example, we consider that over the course of the next five years, Government should commit to removing the ongoing barriers which exist in relation to the adoption and long-term maintenance of sustainable drainage systems (SuDS), to prioritise the retrofitting of SuDS particularly where there is limited capacity in existing urban drainage, and to the greater use of natural flood management.

## → Risks to infrastructure from river, surface/groundwater flooding, and coastal flooding and erosion



Increased frequency of flooding from all sources is the most significant risk of climate change to UK infrastructure, including energy, transport, water, waste and digital communications<sup>9</sup>. The Government has committed in the 25 Year Environment Plan to "do what is necessary to adapt to the effects of a changing climate, improving the resilience of our infrastructure".

Given the crucial role that infrastructure has in modern society, risks from flooding need to be prioritised by Defra in the next NAP to avoid impacts to existing assets and to assess risk in the design of new development. The update to the National Flood and Coastal Erosion Risk Management Strategy will help significantly to drive this forward, but there remain challenges regarding the extensive range of responsibilities for managing

surface water, our understanding of groundwater flooding and problems with managing the long-term impacts of sea level rise and erosion on coastal communities. Planning should also begin to consider responses to longer term risks, particularly in coastal areas liable to flooding exacerbated by sea level rise.

The complexities of co-ordinating the wide range of roles and responsibilities, and of quality drainage asset data is a significant challenge in responding to flooding events and optimising the implementation of adaptation measures. The next NAP must set out measures to make meaningful progress in managing these risks more effectively, including through improved integration and cooperation amongst the range of risk management authorities, and identification of a single lead agency for each risk area.



#### → **Risk to people, communities, buildings and business sites from flooding**

Flooding has had a devastating impact on communities in parts of the UK in recent years, some of whom have been flooded on repeated occasions. Flooding can force families from their homes for prolonged periods, with significant impacts on physical and mental health and can put small businesses out of operation. The Government has highlighted flooding in the 25 Year Environment Plan and has pledged to "make at-risk properties more resilient to flooding" and to "support an industry-owned voluntary code of practice to promote consumer and business confidence in measures to reduce the impact of flooding on buildings, and on those who live and work in them."

Access by property owners to reliable and independently approved property flood resilience measures is an essential step in moving to market priced insurance for those who fall under the scope of Flood Re, when the scheme ends in 2041. The NAP should take steps to ensure that the rate of upgrade of properties is sufficient, and is appropriately recognised by insurers

to ensure that as many homes as possible may be affordably insured, and are flood resilient, after that time. It should also take forward measures which actively drive betterment in terms of property flood resilience when insurance claims are settled and flooded properties are repaired, including updates to the Building Regulations where appropriate, and to ensure property flood resilience measures are consistently installed to a high standard.

## 2 Greater strategic oversight and leadership

The Department for Environment, Food and Rural Affairs (Defra) has overall responsibility for production and delivery of the NAP. CIWEM considers that following on from the first Programme, there are lessons to be learned in terms of the extent of leadership and strategic oversight that will be required from the Department so that the second iteration to be successful in terms of maximising progress on adaptation.

We consider that a lack of strategic overview to date from Defra has impacted the effectiveness of the NAP, where delivery has appeared rather piecemeal and uncoordinated. The second NAP should include clearer definitions of ownership, and importantly ensure a coordinated and integrated approach, cross-departmentally as well as between the national and local levels.

It is vital that there is a strong driver for the Programme. Defra should be analysing submissions under the Adaptation Reporting Power and using these to identify any gaps in current adaptation activities. Such a systematic review of adaptation needs and actions would highlight priority risks, and inform a schedule of actions to form the next five year Programme. We suggest that an annual progress review by Defra of these actions against the timelines or deadlines set out in the NAP would be an effective way to drive implementation and highlight where action is progressing, or stalling. In other words, we would like to see the NAP being more demanding and exacting.

## 3 Set measurable objectives

CIWEM recommends that the second NAP must have objectives that are outcome-focused and measurable. The objectives must have a quantifiable desired outcome, for example, reduced numbers of flooding occurrences or disruption to services. The first NAP set mostly objectives that were processes rather than outcomes, so meaningful assessment of progress was compromised.

The ASC's 2015 review of the NAP showed that most of the actions appeared on track, however the lack of any specific targets and deadlines in the Programme meant that accurately measuring the extent of progress was rarely possible<sup>10</sup>. This concern was reiterated in the second review in 2017. Therefore, outcome-based reporting and SMART actions which can be monitored are vital to ensure progress at the national level.

## References

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- <sup>1</sup> Committee on Climate Change. [Progress in preparing for climate change – 2017 Report to Parliament](#). June 2017.
  - <sup>2</sup> Met Office. [2017: Warmest year on record without El Niño](#). January 2018.
  - <sup>3</sup> HM Government. [Climate Change Act](#). 2008.
  - <sup>4</sup> Adaptation Sub-Committee. [Climate Change Risk Assessment Evidence Report](#). 2017.
  - <sup>5</sup> Adaptation Sub-Committee. [Progress in preparing for climate change, 2015 report to Parliament](#). 2015
  - <sup>6</sup> Adaptation Sub-Committee. [Progress in preparing for climate change, 2015 report to Parliament](#). 2017
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- <sup>7</sup> Defra. [A Greener Future: Our 25 Year Plan to Improve the Environment](#). 2018.
  - <sup>8</sup> Adaptation Sub-Committee. [Climate Change Risk Assessment Evidence Report](#). 2017.
  - <sup>9</sup> Adaptation Sub-Committee. [Climate Change Risk Assessment Evidence Report](#). 2017.
  - <sup>10</sup> Adaptation Sub-Committee. [Progress in preparing for climate change, 2015 report to Parliament](#). 2015.