



Association of Directors of  
Environment, Economy, Planning & Transport

## **Environmental Audit Committee- Call for Evidence**

### **Flood resilience in England - strengthening flood resilience**

#### **Submission from ADEPT**

**January 13th 2025**

#### **ADEPT**

Place is where things get done. Place directors deliver solutions locally

The Association of Directors of Environment, Economy, Planning & Transport (ADEPT) is the voice of place directors who are responsible for providing day to day services including local highways, recycling, waste and planning, whilst preparing for the longer term.

ADEPT is a membership based, voluntary organisation with members across England. We bring together directors from county, unitary, metropolitan and combined authorities, along with sub-national transport bodies and corporate partners drawn from key service sectors.

ADEPT members develop long term strategies, investment and infrastructure needed to make their places resilient, sustainable, inclusive and prosperous. They drive clean, sustainable growth, delivering the projects that are fundamental to creating more resilient communities, economies and infrastructure. These services include housing, environmental and regulatory services, planning, economic development, culture and highways and transport.

ADEPT develops, supports and represents members to make their places more resilient, sustainable, inclusive and prosperous, leading the transformation of local authorities. We proactively engage with central government on emerging issues, promoting initiatives aimed at influencing policy, regulation and funding, developing best practices and by responding to government initiatives and consultations.

For more information on ADEPT please visit the website: [www.adeptnet.org.uk](http://www.adeptnet.org.uk)

## **1. To what extent are current flood resilience assets and interventions fit-for-purpose and what are the strengths and weaknesses?**

- **Are there alternative approaches from across the UK and elsewhere which could help inform improvements and innovation?**

When well designed and properly maintained, flood resilience assets and interventions provide substantial and highly valued reduction in flood risk. However, their ongoing maintenance and adaptation to climate change is often overlooked in favour of investing in new defences.

Most flood resilience assets tend to be designed and constructed to offer protection from single sources of flooding rather than from multiple sources. The current system makes it very difficult to propose new assets, i.e. river defences, nature-based solutions and sustainable drainage systems that will protect communities from multiple sources including surface water and groundwater through a catchment-based approach. The recent focus on property-level measures, rather than strategic flood infrastructure, poses challenges for the future. While Property Flood Resilience (PFR) is a cost-effective way to manage residual risk, it should complement traditional engineered defences and nature-based solutions.

It is recognised that new approaches and innovation in the sector are required. The [Flood & Coastal Resilience Innovation Programme](#) offers examples of innovation that should be more widely adopted.

- [Rochdale Roch](#) project which puts property flood resilience measures alongside home energy saving measures and integrates the two approaches.
- [Blue Heart](#) and [ResilientTogether](#) projects which through partnership are furthering understanding of how localised telemetry can assist LLFAs, gathering comprehensive data using smart technology to better understand, warn and plan for flooding.
- [Reclaim the Rain](#), run by Norfolk and Suffolk County Councils, are exploring innovative ways to integrate flood risk management with drought/water scarcity concerns

**ADEPT Recommendation:** The government should appraise the outcomes and recommendations from these projects to identify ways of promoting better asset management in the future.

## **2. How appropriate is the current balance between 'green' nature-based solutions and 'grey' hard infrastructure resilience assets, and what adjustments, if any, are needed to improve it?**

- **What role can natural flood management techniques, such as wetland restoration and tree planting, play in enhancing flood resilience while contributing to broader biodiversity and climate objectives?**

To get the balance right between nature-based solutions and hard engineering organisations or individuals should avoid focussing on one or the other but take a more holistic, catchment view.

The current system for funding tends to favour single intervention, whereas a catchment level approach to funding would be the best way to build resilience to flooding. This would allow a true balance of more nature-based solutions, that help reduce runoff and to “slow the flow” of water getting downstream, and hard engineering in communities lower down the catchment who remain at risk of flooding.

There is an opportunity to bring together Nature-Based Solutions, including through the provision of Sustainable Drainage Systems (SuDS), and Biodiversity Net Gain to deliver multiple benefits for flood risk and broader biodiversity and climate objectives.

However, it is essential that we have clarity over the future regulation of SuDS as part of development with a focus on adoption and long-term maintenance.

**Adept Recommendation:** ADEPT Recommendation: The government should adopt a catchment-based funding strategy that balances nature-based solutions like SuDS with hard infrastructure, improving flood resilience across rural and urban areas. Clarity should be given on how SuDS will be regulated ensuring adoption and maintenance is prioritised.

### **3. What changes to the planning system and building regulations are needed to ensure that buildings and infrastructure are resilient to flooding in the short, medium, and long-term?**

- **What long-term land use strategies and approaches to flooding should the government consider, especially for communities that cannot be protected from flooding or inundation?**

Flood risk in planning often focusses on the direct impacts to developments as opposed to the wider catchment or infrastructure. Recent research, including findings cited by the Town and Country Planning Association, highlights that even when flood risk mitigations are agreed at the planning consent stage, their delivery is not guaranteed. A stronger emphasis should be placed on agreeing flood resilience strategies upfront rather than relying on post-consent conditions.

The existing mechanisms within local planning policy to safeguard areas at flood risk or for future flood risk management infrastructure is rarely used. Flooding is too often seen

as something to be designed out rather than avoided as per the spirit of the National Planning Policy Framework (NPPF).

Better use of strategic planning, designation and land use management at a catchment scale would provide stronger safeguards against future inappropriate development and hence future increased resilience costs. For areas where existing or future risk is unlikely to be mitigated, use of strategic planning to designate high risk areas should be used. Power to designate “Critical Drainage Areas” should rest with Lead Local Flood Authorities and Local Planning Authorities. These can effectively reduce flood risk over time by requiring increased scrutiny and active reduction through redevelopment across a catchment. This could be linked to climate change adaptation principles to further increase wider community resilience to multiple risks.

In extreme cases a process like coastal managed realignment should be used for communities where the level of existing or future risk means that vulnerable land uses are no longer safe. Otherwise, these communities face a future of decreasing resilience over time. In short, the sequential test and principal of avoidance needs to be determined at a catchment scale.

**ADEPT Recommendation:** The government should prioritise upfront flood resilience strategies in planning, using catchment-scale strategic planning to designate high-risk areas and manage land use. LLFAs and Local Planning Authorities should have the authority to designate Critical Drainage Areas. In extreme cases, a managed realignment approach should be considered for communities with unsustainable flood risk.

## **Monitoring flood resilience**

### **4. To what extent are current metrics for monitoring the effectiveness of flood resilience fit for purpose, and what improvements could make them more effective?**

- **Do current metrics capture the range and effectiveness of privately-owned flood resilience assets, and if not, how can this be improved?**
- **Do we have appropriate metrics and mechanisms to measure the cost effectiveness of flooding assets and interventions in terms of investment versus long-term savings and, if not, what should they look like?**

We currently measure community flood resilience through a simplistic approach – by identifying how many homes are physically protected from flooding. This approach focuses on physical infrastructure and misses the much broader definition of flood resilience.

Resilience is the “capacity of communities to prepare, resist, respond, recover, learn and adapt”. The ongoing Environment Agency [Flood & Coastal Resilience Innovation Programme](#) (FCIP) defines resilience as “the capacity of people and places to plan for, better protect, respond to and recover from flooding and coastal change.” Through the programme, in particular the [FAIR](#) project and [Project Groundwater](#), a framework is being developed that demonstrates a better understanding and measure of community flood resilience. Adopting this approach would allow for better decisions to be made regarding the value of assets, investment and identify potential long-term savings to society.

**ADEPT Recommendation:** Current metrics for flood resilience should be expanded to capture the broader concept of resilience, beyond just physical protection. This includes adopting frameworks like those developed through the Environment Agency's FCIP programme to better assess community flood resilience.

### **Coordination of flood resilience**

#### **5. How effectively and how frequently do flood risk management authorities work together to tackle flooding issues and do they have sufficient resources and skills available to carry out their work?**

- **For instance, how can the government ensure that areas prone to flooding near the mouth of a river, are not negatively impacted by increased pressure on the river, or by flood-mitigation measures taken upstream?**
- **Where is the interface between the responsibilities for river and surface water flooding, and how could monitoring and coordination be improved to enhance effectiveness and early warning of flooding?**

Although it has greatly improved over the years, silo working between the Environment Agency, LLFA's and Water Companies is still very much evident. This is partly due to the divided nature of flood sources and responsibilities, limited resources among RMAs, and conflicting objectives and investment priorities. This often leads to reduced collaboration between Risk Management Authorities (RMA's), missed opportunities for funding schemes with multiple benefits and fragmented roles with unclear accountability.

These differences become more apparent when faced with an extreme storm event. Flooding is frequently the result of a combination of sources but often organisations are reluctant to respond on the assumption that the “type” of flooding falls outside of their remit. There needs to be a better balance of prior preparation and responsive actions post-flood events. This should include a streamlined approach in how to collect and share data during extreme storm events and a definitive way of working together.

Encouraging a catchment approach in the planning for and addressing of flooding from all sources that brings together multiple Risk Management Authorities, groups and communities would improve water and flood management in a much more coordinated way. These partnerships could then produce catchment wide plans and strategies that aim to improve resilience, water quality, biodiversity and adaptation to climate change.

A vehicle to achieve this coordination and partnership approach to water and flood management could be through the developing Local Environment Improvement Plans with devolution offering opportunities to coordinate this. More flexibility in the way available funding from government can be spent could enable more positive action and innovation on the ground.

Other examples of taking a wider more long-term approach include [Humber 2100+](#). This is an “adaptation pathways” project that is working to produce a new style of strategy that can adapt and change as time and needs change. In theory this approach is practical however it is unknown how deliverable this will be.

**ADEPT Recommendation:** The government should enhance coordination between the Environment Agency, LLFAs, and Water Companies by promoting a catchment-based approach to flood planning. Existing catchment partnerships should broaden their focus to include flood management alongside water quality and climate adaptation. Local Environment Improvement Plans, supported by devolution, could facilitate this coordination, while long-term strategies like Humber 2100+ should be explored for adaptability and implementation.

## **6. What should the key priorities be for the Flood Resilience Taskforce, and how can it enhance coordination and improve flood resilience?**

- **Is there a role for community-based flood response teams, and who is responsible for building that resource?**

Local Authorities should have a stronger voice at the Flood Resilience Taskforce in their role as Emergency Planning Authorities and Lead Local Flood Authorities. ADEPT is happy to represent its members and offer our support.

The following should be key priorities for the Flood Resilience Taskforce:

- i. Prioritising a whole catchment approach to flood risk management that strengthens partnerships and aligns flood resilience with that of Local Nature Recovery Strategies, water quality improvement and water security

- ii. Looking at roles and responsibilities and how organisations can work together rather than in silos when it comes to managing flooding but also responding to and recovering from flood events.
- iii. Championing the range of flood risk management activities, including maintenance, planning, community resilience, and not just capital investment.
- iv. Consider how the existing flood risk funding framework could better support risk management authorities to help communities' resilience through better education of, consultation and engagement with communities to achieve flood resilience.

Across the country there is a growing network of community flood action groups who establish themselves to increase resilience to flooding. They are a valuable resource in providing an informed point of contact for residents of a community where the scale of flooding may hinder the ability of larger authorities to respond in a timely manner. By empowering communities to take ownership of flood risk, flood groups can be self-sufficient, working together with neighbouring groups and other volunteers within the community to resolve issues, enhance resilience at a local level and be part of a rapid recovery strategy.

In Hull and East Riding, the Living with Water partnership draws on the power of communities to increase knowledge and improve resilience. This is carried out through engagement activities organised, led and delivered in partnership with Hull City Council, East Riding of Yorkshire Council, Environment Agency, Yorkshire Water, University of Hull and community volunteers. The benefit of such a partnership includes better informed communities and individuals more likely to take individual action.

ADEPT Recommendation: The Flood Resilience Taskforce should focus on promoting a catchment-based approach, fostering collaboration among organisations, and advocating for community engagement in flood resilience. Encouraging the growth of community-based flood response teams and partnerships can further enhance local resilience and improve recovery efforts. ADEPT to be invited to join the Flood Resilience Taskforce to better represent LLFAs.

## **7. Is there a backlog in maintenance of existing flooding adaptation/resilience assets and in identifying where new ones could be introduced?**

- **Is there clarity about whose responsibilities these are, and how could this be improved?**
- **How strong is the knowledge base on both the condition of existing assets and where new ones might be needed and what steps could strengthen it?**

Maintenance of drainage assets, unlike flood defences, is largely reactive and typically prompted by flooding events. Estimating annual revenue needs is challenging due to the uncertainty of when and where spending will be required, compounded by competing financial demands. Proactive maintenance depends on adequate funding and resources, making Government support vital for LLFA's to deliver effectively. Additionally, scheme delivery through Grant in Aid funding does not account for lifetime maintenance costs, often hindering the progression of new projects.

Many urban drainage networks are constrained by outdated design standards that fail to account for climate change, rapid urban expansion, and land-use changes. Much of this runoff comes from saturated higher ground during flood events, ultimately overwhelming stormwater networks that can comprise of privately owned assets as well as the highways and sewer system, many of which are unable to cope with the increased overland flows. This places additional pressure on local authorities to finance capital improvements beyond their statutory responsibilities.

The Environment Agency approach to maintenance of assets varies regionally, with some delegation of responsibilities to landowners or other RMAs, leading to delays.

Better information is needed to understand what assets are in place, who is responsible for them and what condition they are in. The Environment Agency is only focussed on main river assets with information on other assets being inconsistent.

**ADEPT Recommendation:** The government should clarify responsibilities for flood resilience and maintenance, ensuring better coordination between RMAs. Proactive maintenance of drainage assets should be prioritised, with sufficient funding and resources allocated, including consideration of lifetime maintenance costs in project delivery. Improved data on asset conditions and ownership is needed.

## **8. What level of flood resilience is required to address the flood risks identified in the Climate Change Risk Assessment and is current funding adequate to meet these risks effectively?**

- **Is there sufficient government support and funding for the maintenance of privately-owned flood defence and resilience assets?**
- **What changes, if any, should be made to the next iteration of the Flood and Coastal Erosion Risk Management (FCERM) investment programme to improve its outcomes?**
- **How well does the National Adaptation Plan address the need for flooding adaptation measures, and what additional steps should be taken to ensure effective long-term flood resilience in high-risk areas?**

The next iteration of the FCERM investment programme should firstly support a catchment approach to investing in flood risk and enable funding of multiple interventions that combine to improve flood resilience over a longer period taking climate change into account.

It should encourage a mix of interventions including nature-based solutions and be agile enough so opportunities that present themselves are not missed.

Decision making and assurance around funding for catchment programmes should be devolved locally to either local authorities or partnerships rather than nationally.

Adept has previously said that National Adaptation Plan 3, published in July 2023, is a disappointing strategy. Although there is a short section on working with local government, this is largely a restatement of existing activities and wider policies such as devolution and nature recovery. The NAP should be strengthened to provide a framework and funding for local authorities to deliver local adaptation programmes including for flooding and water resilience.

**ADEPT Recommendation:** The FCERM investment programme should prioritise a catchment-based approach, funding diverse interventions, including nature-based solutions, with local authorities or partnerships overseeing decision-making. Increased support and funding for the maintenance of both public and privately-owned flood resilience assets is essential to effectively address long-term climate change impacts. The National Adaptation Plan should be strengthened to help authorities deliver adaptation and resilience programmes

## **9. How can the Government encourage more long-term private investment in flooding defences and resilience measures?**

- **What role can the insurance industry play in supporting this?**

The current Partnership Funding model does little to encourage private investment in flood defences and resilience measures. The majority of what is classed as “Partnership Funding” by the Environment Agency has come from public sources such as Local Authority contributions or Levy investment from the Regional Flood and Coastal Committees. Local Levy is in part funded through precepts on the Local Authorities and as such should be recognised as an (indirect) contribution.

Private investment must be incentivised in some way. An opportunity might exist through Biodiversity Net Gain where developers or investors could be encouraged to buy credits linked to BNG delivered through Flood Alleviation Schemes or Sustainable Drainage Systems.

The insurance industry must also encourage landowners, developers and commercial premises owners to invest in flood resilience to lower premiums. The existing Build Back Better Scheme offered by the insurance industry to homeowners that have flooded should be incentivised to ensure a better take up.

**ADEPT Recommendation:** The government should incentivise private investment in flood resilience through initiatives like Biodiversity Net Gain linked to flood schemes. The insurance industry should promote resilience measures to lower premiums,.

## **10. What support do property owners and neighbourhoods require to enhance their resilience to flooding?**

- **What is the current level of awareness among property owners about flood resilience measures, how they can be improved, and who can support it?**

The current awareness among property owners is poor when it comes to how to make homes more resilient. Funding and schemes such as the Government's Flood Recovery Grant or the Insurance Industry's "Build Back Better" scheme is only accessible to homeowners who have suffered flooding rather than encouraging those at risk of flooding to take preventative action. Accessing this funding is also prohibitively difficult for residents.

To improve the uptake of flood resilience measures, property owners need more accessible funding to protect their homes and businesses. Financial support such as government sponsored 0% loans and/or 0% VAT on flood resilience measures should be made available in the same way that Government Heating Grants are (such as HUG2). The grants should be funded from Government but can be administered locally by local authorities in the same way.

The [Rochdale Roch](#) project funded through the [Flood & Coastal Resilience Innovation Programme](#) aims to offer Property Flood Resilience advice to residents alongside advice on energy efficiency and insulation. This initiative is an excellent example of how to raise awareness and encourage homeowners to improve their resilience.

We should also be encouraging neighbourhoods to take up measures that improve the resilience of the community beyond the individual property scale. This might include flood barriers, SuDS features, water butts and small defences. Grants should be made available to community groups to consider such measures which could be implemented alongside community gardens such as those in the London Boroughs.

Improved communication of flood risk and riparian ownership during the sale and rental of properties is essential to ensure homeowners and tenants are better informed and prepared.

A public campaign to raise awareness of measures that increase or decrease flood risk is needed. For example, residents should be educated on the impact of paving over driveways and other seemingly small actions that can significantly affect flood risk. Promoting these simple but impactful measures will help the public make more informed decisions and reduce flood risks.

**ADEPT Recommendation:** The government should provide accessible funding and financial incentives for at risk property owners to implement flood resilience measures, administered locally. Public awareness campaigns should educate on flood risks, including minor actions like not paving driveways with impermeable materials, to help individuals and communities reduce flood risks.