

## About you

**Please tell us if you are responding as an individual or on behalf of an organisation or group.**

Responding on behalf of an organisation or group (representing collective views)

**If 'other' please specify:**

**If you are representing collective views, please specify which organisation or group and what type it is e.g. environmental group, business.**

### Organisation or group:

ADA (Association of Drainage Authorities) ADA is the membership organisation for drainage, water level and flood risk management authorities throughout the UK. Today ADA represents over 230 members nationally, including 112 internal drainage boards, 12 regional flood & coastal committees, over 30 local authorities and 5 national agencies, as well as our associate members who are contractors, consultants and suppliers to the industry. Our purpose is to champion and campaign for the sustainable delivery of water level management, offering guidance, advice and support to our members across the UK, and informing the public about our members' essential work.

**Can we publish your response? We will not publish any personal information or parts of your response that will reveal your identity.**

Yes

## Introduction and setting the context

**1 To what extent do you agree with the vision: a nation ready for, and resilient to, flooding and coastal change – today, tomorrow and to the year 2100?**

Strong agreement (I can support it)

### Please explain your answer::

ADA considers that 'A nation prepared for, and resilient to, flooding and coastal change' would be a better form of words.

In ADA's view the Strategy would benefit from a clear and succinct definition of 'resilience', but we agree that there are many facets to achieving places and communities that are resilient to flooding and coastal change. One important aspect that appears to be overlooked and underplayed throughout the strategy is the role of maintaining our existing FCERM infrastructure and watercourse networks. It is noteworthy that the Strategy does not contain any mention the vital role of maintaining and improving our rivers and watercourses for FCERM. The Strategy should be clear that these are effective parts of the resilience toolkit and their absence should be addressed in order to give greater clarity to such activities' purpose and function.

As a National Strategy, it should make clear that its achievement is dependent on sufficient funding and the right set of legislative provisions. Both will be required from across wider Government, namely but exclusively: Defra, The Treasury, MHCLG and the Department for Transport. The Strategy needs to be clearer as to whether it is a Strategy for the EA FCERM provision or for FCERM in England, it jumps between these two functions in quite a haphazard fashion. Other RMAs and professional partners will play key roles in the delivery of the Strategy, and this must be more clearly stated and recognised, particularly for LLFAs and IDBs.

**The following question relates to the strategic overview role of the Environment Agency.**

**2 To what extent do you agree with the Environment Agency's proposed strategic overview role as set out in the chapter 'setting the context for the draft strategy'?**

Basic agreement (I can live with it)

### Please explain your answer::

ADA agrees that there needs to be a national overview role, as constituted under the Flood and Water Management Act 2010.

In regards to the proposed changes, ADA welcomes the role promoting integration with a broader climate resilience agenda to solve environmental and societal challenges.

The change that involves overseeing collaboration, sharing and monitoring between flooding and coastal change infrastructure owners needs to more clearly articulate the interaction and collaboration between the different risk management authorities and how the Environment Agency's strategic overview can build other RMAs' capacity and governance structures to support them to deliver flood and coastal resilience to the best of their respective functions. It is unclear from the present draft of the Strategy exactly what this 'oversight' would entail that is significantly different from the existing collaboration powers and duty to co-operate between risk management authorities. ADA would be concerned if this increased legislative burdens or reduced flexible working practices between RMAs which currently remain too rigid, stifling innovation and shared responsibility and voluntary partnership contributions. There would be positives gained by extending partnership working arrangements for FCERM beyond those authorities formally named in the Flood & Water Management Act 2010, namely to include Network Rail, the Coal Authority, and navigation authorities amongst others.

More generally, ADA is concerned that the setting and monitoring of national targets should be tempered to ensure that it does not unduly influence the delivery of the most appropriate resilience measures for catchments and communities, and therefore stifle partnerships and innovation to deliver FCERM with local RMAs and infrastructure owners. ADA is concerned by the extent to which local schemes and programmes have been delayed or deprioritised in 2019-20 in order to meet the national target of 300,000 homes better protected by March 2021. This needs to urgently be addressed as it is undermining the message of local partnership working conveyed elsewhere within the Strategy. Unfortunately, the practical result has been that FDGiA allocations have been used to ensure that

larger, mostly EA-led schemes, have been progressed, while smaller, local priority schemes, have been pushed back to beyond 2021, this is a significant disincentive for greater local ownership and collaboration in the future, and that balance needs to be addressed.

This section of the Strategy needs to more clearly and powerfully articulate the positive interaction and collaboration between the different risk management authorities and how the Environment Agency's strategic overview should support all relevant authorities to deliver flood and coastal resilience to the best of their respective functions. ADA is concerned that there are inaccuracies within the defined functions of each type of RMA within pages 10 to 13 of the Strategy at present. ADA considers that the respective RMAs should be invited to draft the relevant sections of the National Strategy that relate to their role and function. For instance, for IDBs there is a model Policy Statement that was jointly revised by ADA, IDBs, Defra and the EA and republished in 2018.

## Climate resilient places

### 3a To what extent do you agree with strategic objective 1.1: Between now and 2050 the nation will be resilient to future flood and coastal risks. Over the next year the Environment Agency will work with partners to explore and develop the concept of standards for flood and coastal resilience?

Basic agreement (I can live with them)

#### Please explain your answer::

ADA supports the development of standards for flood and coastal resilience, where this fully involves the detailed input of all types of RMA throughout its development. The Strategic objective here should simply read: 'Between now and 2050 the nation will be resilient to future flood and coastal risks.' In ADA's opinion this should become the cornerstone for all the measures and other strategic objectives within the Strategy. The second sentence on developing the standards should be integrated as a measure beneath this strategic objective.

The Strategy should ensure that the new concept of standards in flood resilience takes a wide-ranging risk-based approach to FCERM assets and systems within catchments and along the coast.

Sensitivity to local conditions, circumstances and opportunities will be vital if national standards are to be developed that are flexible enough to have local applicability. There is a significant risk that national standards for resilience could discriminate against those communities in more remote rural locations, especially where there is little employment or where agriculture is the predominant economic sector. These areas present significant challenges in accessing partnership funding, and have a legacy of critical FCERM assets that need renewal and repair. It is important that resilience is not seen as a 'cheaper' alternative to ensuring the adequate maintenance of assets in these areas.

A critical component that needs to be urgently addressed within the Strategy is securing the safe functioning of embanked watercourses, coastal/estuarine embankments, pumping stations, and reservoirs, given the demonstrable risk to life that their failure can pose.

### 3b Please provide comments on the measures described under strategic objective 1.1, and tell us about any additional measures you think there should be, and who could implement them.

#### Please provide comments on the measures described under this ambition, and tell us about any additional measures you think there should be and how they might be delivered. :

ADA supports the enhancement of the appraisal guidance for FCERM projects. This should be wider reaching than the consideration of a range of climate change scenarios. Existing appraisal methods inadequately address the value of certain approaches to flood and coastal resilience (e.g. capital maintenance and asset replacement, riverine and coastal embankments, watercourse maintenance and surface water schemes). In particular it needs to ensure that agricultural land and infrastructure through rural areas is accurately assessed on its economic importance to the UK.

Appraisal of flood risk and coastal change projects must encompass a wider range of benefits, and take greater account of strategic priorities and aspirations for the local area and catchment. Achieving this will require a move away from the existing rigid project-based Partnership Funding FDGiA approach with strictly limited areas of benefit, and instead develop a more holistic appraisal methodology with greater flexibility for adapting to local circumstances within a catchment/sub-catchment area and a long-term timeframe for resilience. Thames Estuary 2100, the Isle of Axholme Strategy, and the emerging Humber Estuary Strategy and Great Ouse Strategy all point to a potential way forwards, but these genuine partnership approaches are currently held back by existing funding criteria.

Furthermore, the current system for apportioning benefits to schemes within the same catchment is holding back the delivery of places and communities resilient to flooding and coastal change. This is where the tangible benefits within a given area are apportioned to projects tackling a specific form of flooding, whilst other significant forms of flood risk remain. ADA would support a measure that strives to remove the need for benefit apportionment between schemes within a given place. Particularly, where schemes seek to address different or multiple forms of flood risk within a catchment/place.

Benefit apportionment itself creates a significant barrier to engaging with local communities and promoting better understanding of the risks posed, particularly where vulnerable communities are subject to risk from multiple sources of flood risk. It also perpetuates an unhelpful competition between local and national RMAs where they are delivering different types of scheme. For example, fluvial and surface water schemes, where both may be needed in combination to manage accumulated risk to communities, and where the impacts of both are indistinguishable in all practical respects on the ground. The same circumstances can also arise where large scale coastal schemes overlap with areas of benefit for smaller fluvial or surface water schemes.

Currently the Strategy does not mention maintaining and improving our rivers and watercourses as part of our resilience toolkit, this should be addressed to give greater clarity on the purpose and function of maintenance.

The current system of project review requires overhaul to fairly reflect the make-up of the review group in relation to the investment contributions made.

### 4a To what extent do you agree with strategic objective 1.2: Between now and 2050 risk management authorities will help places plan and adapt to flooding and coastal change across a range of climate futures?

Strong agreement (I can support them)

#### Please explain your answer::

ADA strongly supports the development of a catchment-based approach with the localities and communities concerned. It is fundamental that this is undertaken with the benefit of the broadest possible understanding of the social, environmental and economic characteristics of the catchment/place, as well as with a clear understanding of its potential for the future.

This objective should be better worded as places themselves cannot plan, people/communities/businesses plan and adapt.

**4b Please provide comments on the measures described under strategic objective 1.2, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 1.2, and tell us about any additional measures you think there should be, and who could implement them. :**

ADA is unclear on what is meant by Measure 1.2.2. This should be revised to clarify what tangible outputs are being proposed in this measure. Much of the evidence we need exists but more effort needs to be placed on its effective dissemination to practitioners and communities.

Measure 1.2.3 should explicitly mention planning authorities and Government departments.

Measure 1.2.5 should be explicit about how these local flood risk strategies should be used by other RMAs and Planning Authorities

It will be necessary to find methods by which adaptive measures can be tested/measured. At present it is not easy to test/validate surface water management or ordinary watercourse interventions.

**5a To what extent do you agree with strategic objective 1.3: Between now and 2030 all those involved in managing water will embrace and embed adaptive approaches to enhance the resilience of our environment to future flooding and drought?**

Some limited agreement (I can agree in part, but not entirely)

**Please explain your answer::**

ADA supports the Strategy embracing a holistic approach to water management. In particular better integrating both water resource and water level management more closely with flood risk management so as to ensure a clear linkage through drought, flood risk, lowland landscapes and water quality. In this area ADA considers the measures should be made more ambitious and tangible.

ADA had hoped for a more integrated approach to water within the Strategy that would meet the aspiration to put water at the heart of flood risk management decision making. To this end the content of this section of the Strategy should be much broader than its current focus on natural processes in flood risk management. ADA is concerned that there is little mention of how flood risk management can benefit from good water resources, SuDS, and water level management, especially in England's lowlands, or from the role of water companies, in providing adaptive measures for flood risk management.

It is important that throughout the Strategy, it looks more broadly than simply using natural processes within FCERM. This should contain a range of land management practices, including those that farmers can undertake on productive agricultural land to reduce flood risk, manage water resources and soil. These should be fully developed and incentivised through the next Environmental Land Management Scheme and there should be a tangible measure to this effect. Furthermore, it particularly needs to consider the application of measures to the lowland tenth of England and how these can be integrated with our existing land drainage networks and infrastructure, with the assistance of IDBs.

**5b Please provide comments on the measures described under strategic objective 1.3, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 1.3, and tell us about any additional measures you think there should be, and who could implement them. :**

ADA considers that an opportunity has been missed to include a measure to incentivise effective flood storage. In keeping with the resilience approach, we should be looking to work with land managers to make certain areas of agricultural land within our river corridors and along our coasts available for water when needed (in a known, planned and controlled way) whilst remaining agriculturally highly productive. There is much more we can learn from Europe in this area in terms of establishing the right package of incentives, reward, remediation, and means of recovery.

The measures within this section are currently too vague. Measure 1.3.2 should be integrated within the system of farm payments, schemes and rules currently used, that being revised by Defra under ELMS, and with specific cross reference Agriculture Bill.

**6a To what extent do you agree with strategic objective 1.4: Between now and 2030 risk management authorities enhance the natural, built and historic environments so we leave it in a better state for the next generation?**

Strong agreement (I can support them)

**Please explain your answer::**

ADA supports this strategic objective strongly, but is concerned that there remains a considerable funding gap for the maintenance of environmental enhancement by the majority of RMAs. There is limited value in creating greater enhancement if we cannot maintain the water level management infrastructure and watercourses in a manner that sustains our existing designated species, habitats and sites. Whilst the maintenance of existing sites and habitats is perhaps implicit within the words to enhance, ADA thinks this should be more explicitly referred to within this objective and its measures.

Furthermore, there is a need for the development of a simpler funding mechanisms for SuDS and smaller attenuation/rural SuDS projects.

Small rural communities form an integral part the fabric of our society and current investment mechanisms do not recognise the value of these communities. Systems need changing to allow RMAs to enhance these important socio-economic environments.

**6b Please provide comments on the measures described under strategic objective 1.4, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 1.4, and tell us about any additional measures you think there should be, and who could implement them. :**

Measure 1.4.2 should be turned around to look at how FCERM land and infrastructure can benefit the nature recovery network and other habitat improvements, whilst retaining their safe and effective delivery of FCERM.

Measure 1.4.3 should be revised to find a better form of words than the use of 'natural/near-natural'. It is important that the purpose and function of watercourses is fully considered within the designation of watercourses under the Water Framework Directive. Many are artificial or heavily modified, and have been for many centuries, and therefore cannot achieve a natural/near-natural condition, but steps can still be taken towards achieving good environmental potential in recognition of the often excellent and scarce environmental conditions that are provided by their routine management and maintenance. For instance the Fens offer an important stronghold for a number of rare aquatic plants and the water vole owing to the careful channel and bank maintenance and water level management provided by IDBs.

All these measures need effective and enhanced funding for RMAs in order to be delivered, and crucially, maintained. There is a sense that these measures are specifically retained within the Strategy rather than by referencing other strategic documents/strategies because schemes are usually predicated on delivering Outcome Measures due to this generating the most funding, even where they strive to provide multiple benefits to society.

Defra/Environment Agency should consider guidance and funding for schemes that deliver optimal benefits to the nation/environment as a whole, as opposed to only funding schemes that optimise flood risk management outcome measures. There may be schemes that can deliver many benefits across a number of sectors, but may cost more. There may also be schemes that could deliver the maximum benefit for the funding available by reducing the outcome measures to maximise other outcomes.

A measure to make the funding mechanism for FDGiA more flexible to work with other funding mechanisms for the wider benefits delivered would be welcomed, especially where there are multiple partners involved delivering multiple objectives. The process of public and private sector investment on the same scheme is currently largely incompatible and therefore actively discourages private investment. We should have a single aligned assurance route for multiple public funds, with a fair balance of reviewers to the level of investment contributed.

**7a To what extent do you agree with strategic objective 1.5: Between now and 2030, risk management authorities will use funding and financing from new sources to invest in making the nation resilient to flooding and coastal change?**

Some limited agreement (I can agree in part, but not entirely)

**Please explain your answer::**

ADA supports the strategic objective but considers this is an area that requires much greater ambition and significant adjustment to attract private investment. This objective and its measures need to establish the clearer alignment of funding streams and direction with other Government departments and agencies in their delivery of infrastructure and management of climate change. At the same time we need to appraise and significantly overhaul the Government's financial and fiscal mechanisms and processes to enable and encourage private finance to better invest in FCERM.

One of our continuing challenges is how to effectively engage and encourage the private sector to invest in FCERM. To date we have not attracted any significant investment. Our financial operation in the UK of the public and private sectors is very different, and trying to align the two in a way that the private sector feels comfortable to invest money with guarantees on a return for that investment has so far proven very elusive. FCERM funding needs to empower local decision making for communities, businesses, and local risk management authorities to act to take measures to reduce flood risk.

This is one particular area where the new Strategy could promote the review and amendment of the financial mechanisms and instruments available to entice private investment on a large scale. The Dutch operate a separate bank just for the benefit of public sector works called the Nederlandse Waterschapsbank (NWB Bank). Founded in 1954 on the back of the devastating 1953 floods, the NWB Bank today is capitalised to a value of around £75 billion, and lent just under £7 billion to the Dutch public sector last year.

Whilst we do have something similar in the UK, known as the Public Works Loan Board, it operates within the UK Debt Management Office as an executive agency of The Treasury. The difference appears to be how each system is managed, their flexibility of operation, and the ability to innovate to attract private investment. For example, the NWB Bank, have recently successfully raised almost £9 billion pounds through a Green Bond sold predominantly to large investment trusts. In turn this investment is available for lending to projects that create economic, environmental and social improvement in the Netherlands. Perhaps it is time for the UK to consider financial tools and mechanisms with a similar remit to the NWB Bank and crucially accessible to all RMAs.

**7b Please provide comments on the measures described under strategic objective 1.5, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 1.5, and tell us about any additional measures you think there should be, and who could implement them. :**

ADA would like to see a broader range of RMAs involved in shaping, delivering and having access to any funding options identified under Measure 1.5.1. As previously mentioned, all RMAs and contributors should have a fair involvement in the review and decision making for projects based in proportion to the level of contribution made.

Please also read the points raised in answer to Question 7a.

**Today's growth and infrastructure - resilient to tomorrow's climate**

**8a To what extent do you agree with strategic objective 2.1: Between now and 2030 all new development will contribute to achieving place based resilience to flooding and coastal change?**

Basic agreement (I can live with them)

**Please explain your answer::**

This objective and these measures need to be strengthened. The measures need to recognise the role of planning authorities themselves, and the need to strengthen their capacity to robustly take account of advice provided by all RMAs (whether statutory consultees or otherwise) regarding development and FCERM.

**8b Please provide comments on the measures described under strategic objective 2.1, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 2.1, and tell us about any additional measures you think there should be, and who could implement them. :**

Measure 2.1.1 needs to recognise the funding constraints of existing RMAs and to grow their capacity. In order to invest in these important skills all RMAs need to have access to the right levels of funding and support in this area.

Measure 2.1.2 needs to recognise the importance of the role of all RMAs advising planning authorities and developers on their respective expertise in FCERM. There could be a key role for IDBs and LLFAs to integrate their advice and provide a joined up approach to regulation, such as consenting under the Land Drainage Act 1991 and byelaws enforcement.

There remains significant gaps in terms of our provision of SuDS and their long term maintenance in England, owing to inaction on Schedule 3 of the Flood &

Water Management Act 2010. Measures to provide strategic direction in regards to SuDS should be provided here.

**9a To what extent do you agree with strategic objective 2.2: Between now and 2030 all new development will seek to support environmental net gain in local places?**

Some limited agreement (I can agree in part, but not entirely)

**Please explain your answer::**

Confused by the inclusion of this objective in that it doesn't directly refer to FCERM activities or identify an agent for delivery. This would be more relevant if emphasis is placed on the priority of good water management practices having the added advantage of supporting environmental net gain.

**9b Please provide comments on the measures described under strategic objective 2.2, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 2.2, and tell us about any additional measures you think there should be, and who could implement them. :**

The measures in their current form are not sufficient to meet the strategic objective, much greater consideration needs to be given to the capacity and proportionality of applying these measures to all programmes and projects by all RMAs.

For instance, Measure 2.2.1 fits best with larger scale new-build assets. On the other hand ongoing capital maintenance programmes, or individual property or local action, the capacity to measure biodiversity net gain might be onerous to measure and disproportionate to the benefit demonstrated and thus its rigid requirement to national parameters could result in inaction and a reduction in resilience.

A measure is needed to ensure that all RMAs receive the support and guidance needed to achieve net gain on all projects and programmes in a manner that can be maintained and sustained. Furthermore detailed policy will be needed setting out how this will be funded as a new long term burden for RMAs. Without it this objective is unachievable.

It is important to stress that long-term financial settlements are needed to allow sensible forward planning to achieve delivery efficiencies.

**10a To what extent do you agree with strategic objective 2.3: Between now and 2030 all risk management authorities will contribute positively to local economic regeneration and sustainable growth through their investments in flooding and coastal change projects?**

Strong agreement (I can support them)

**Please explain your answer :**

ADA strongly supports the close alignment of flood risk and water management to the promotion of local growth and development. The Strategy should align with strategic work to develop water resources for development and growth. There needs to be more clarity on how this will be achieved.

**10b Please provide comments on the measures described under strategic objective 2.3, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 2.3, and tell us about any additional measures you think there should be, and who could implement them. :**

This measure needs to consider the implications to growth of the functioning of existing FCERM assets and systems. ADA thinks that it would be appropriate to set a higher standard of resilience for ensuring the safe and effective functioning of existing FCERM infrastructure such as pumping stations, reservoirs and embanked watercourses.

**11a To what extent do you agree with strategic objective 2.4: Between now and 2050 places affected by flooding and coastal change will be 'built back better' and in better places?**

Basic agreement (I can live with them)

**Please explain your answer :**

ADA agrees with the aspiration to build back better, but there must be recognition around the limitations of relocation. Strategically, rethinking the configuration of locations must be available as an option, where this supports the future prosperity of an area. But there are national assets and infrastructure that cannot be moved, such as high grade agricultural land, which will become increasingly important to national food security as climate change and population growth increase.

It is important that relocation is carefully considered alongside the strategy's aspiration to support growth and development within those areas potentially affected. Communication with, and support measures for, communities affected will be crucial components for relocation measures to be successful.

**11b Please provide comments on the measures described under strategic objective 2.4, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 2.4, and tell us about any additional measures you think there should be, and who could implement them.:**

See 11a.

**12a To what extent do you agree with strategic objective 2.5: Between now and 2030 all flooding and coastal infrastructure owners will understand the responsibilities they have to support flood and coastal resilience in places?**

Strong agreement (I can support them)

**Please explain your answer: :**

Support for RMAs will be needed to achieve this objective and associated measures. There should be an opportunity to talk about enhancing better governance around FCERM infrastructure in this objective, not only for RMAs, but other infrastructure owners such as Network Rail and riparian owners. This objective should better articulate the critical importance and value of maintaining assets and systems across flood and water management. Setting measures to ensure that the most appropriate authority is facilitated to manage each and every stretch of coast and river, such as Public Sector Cooperation Agreements, de-manning and 'Transfer Powers' to deliver more with less and share resources effectively. Transfer of flood and water management assets between public authorities is currently particularly onerous and requires streamlining in line with the powers available to other public entities such as Highways Authorities. ADA would support a measure that would facilitate building capacity and strengthening governance within local authorities and IDBs that would enable them to adopt locally critical stretches of watercourse and assets that the EA will no longer manage.

**12b Please provide comments on the measures described under strategic objective 2.5, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 2.5, and tell us about any additional measures you think there should be, and who could implement them.:**

See 12a.

**13a To what extent do you agree with strategic objective 2.6: Between now and 2050 the Environment Agency and risk management authorities will work with infrastructure providers to ensure all infrastructure investment is resilient to future flooding and coastal change?**

Complete agreement (I can support them wholeheartedly)

**Please explain your answer: :**

This will require greater integration between FCERM funding streams and those of infrastructure providers to fit in with their long term planning cycles. Infrastructure failure impacts upon a greater number of people, and results in much more severe consequences for those affected. ADA thinks that it would be appropriate to set a higher standard of resilience for infrastructure, including existing FCERM infrastructure such as pumping stations, reservoirs and embanked watercourses.

**13b Please provide comments on the measures described under strategic objective 2.6, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 2.6, and tell us about any additional measures you think there should be, and who could implement them.:**

Measure 2.6.1. needs to include working with Government as well as infrastructure providers to ensure infrastructure meets a minimum standard of resilience, and receives adequate investment.

Collectively, we will need to establish a much better understanding and assessment of the risks that are posed to and from infrastructure, and the impacts that these confer on communities and the local and national economy and environment. This often includes significant consequential impacts within time critical business supply chains, such as within the agri-food sector, as well as for health and wellbeing.

ADA would support a measure for the EA to work with other RMAs and infrastructure providers to assess and map the risks of flooding and coastal change to infrastructure. Such infrastructure consequence maps should be routinely available for use within Flood Emergency Plans.

There is a particular need to more consistently investigate the impacts that loss of infrastructure has during and following flood incidents. Such assessments will need to include identifying the communities affected by the loss of infrastructure even where they may not otherwise be affected by flooding, e.g. losing electricity that powers pumps, or mobile signal needed for provision of information and telemetry. We live in an ever more interdependent society and one that will increasingly be dependent on the 'internet of things'.

**A nation of climate champions, able to adapt to flooding and coastal change through innovation**

**14a To what extent do you agree with strategic objective 3.1: Between now and 2030 young people at 16 should understand the impact of flooding and coastal change, but also recognise the potential solutions for their place, and opportunities for career development?**

Strong agreement (I can support them)

**Please explain your answer.:**

ADA strongly agrees. The Strategy must be a fundamental part of the educational curriculum in England starting at GCSE level. Educational resources are required to assist teachers.

Given that it take more than a generation to educate the nation the timescale set for this objective is not nearly ambitious enough to have a significant impact on the awareness of the nation. At the latest ADA demands that this objective is achieved by 2021 and is highlighted at every level of Government by EVERYONE who works within FCERM.

The Environment Agency should operate an outreach programme to secondary schools in each of their areas to assist in embedding strategic messages around flood (and drought) risk management. ADA also recommends the creation of a National Youth Panel with representative seats allocated on key national and regional committees. For example, the EA's Executive Flood Group, the RFCCs Chairs group, ADA's Board of Directors and ADEPT Flood & Water Group. ADA notes that each Water Board has a youth director on its Board, growing its young leaders in water management. ADA also strongly supports the continued running and indeed expansion of the Flood Foundation Degree.

**14b Please provide comments on the measures described under strategic objective 3.1, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under this ambition, and tell us about any additional measures you think there should be and how they might be delivered. :**

We need more proactive and engaging methods for raising awareness. There should be a measure to support and train RMAs in the use of social media to articulate flood risk and climate change impacts that they can then tailor to specific flood risk areas and local circumstances.

**15a To what extent do you agree with strategic objective 3.2: Between now and 2030 people will understand the potential impact of flooding and coastal change on them and take action?**

Some limited agreement (I can agree in part, but not entirely)

**Please explain your answer :**

People often have a better understanding where they have also shared in the design and delivery of the solutions. 'Taking action' is not just about protecting oneself or family, but also contributing as a landowner or neighbour, to the support of your community and not increasing flood risk for others. For riparian owners this could be undertaking routine watercourse maintenance or supporting others with post-flooding trauma.

Where there is lower flood risk priority and a higher need for wider collaborative approaches, the EA must be prepared to allow local delivery partnerships to take the controlling lead on the design and delivery of solutions through public sector co-operation and possible transfer of assets.

**15b Please provide comments on the measures described under strategic objective 3.2, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 3.2, and tell us about any additional measures you think there should be, and who could implement them.:**

See 15a.

**16a To what extent do you agree with strategic objective 3.3: Between now and 2030 people will receive a consistent and coordinated level of support from all those involved in response and recovery from flooding and coastal change?**

Strong agreement (I can support them)

**Please explain your answer :**

England's flood incident management system is an excellent model. There is a danger that during incidents, however, that category 2 responders and other very capable and experienced entities who wish to assist are heavily overshadowed by category 1 responders. Those other bodies need to be fully recognised and integrated into any emergency response and recovery such that they are valued for the important support roles which they can provide.

ADA is keen to ensure that IDBs are integrated within the response and recovery process. The recent June 2019 flooding across Lincolnshire, and in particular in Wainfleet, ably demonstrated the value of have IDB representatives attending emergency command and utilising their assets and systems to aid recovery. Such local knowledge of communities, water infrastructure and locality can be invaluable for making rapid critical decisions for our emergency services.

**16b Please provide comments on the measures described under strategic objective 3.3, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 3.3, and tell us about any additional measures you think there should be, and who could implement them. :**

See 16a.

**17a To what extent do you agree with strategic objective 3.4: Between now and 2030 the nation will be recognised as world leader in managing flooding and coastal change, as well as developing and attracting talent to create resilient places?**

Strong agreement (I can support them)

**Please explain your answer :**

The biggest risk to this objective is the loss of knowledge and skills. Any Strategy needs to attract, retain, recognise and properly reward people working in the water and flood risk sector. Incentives could be offered to potential students considering a career in FCERM (akin to a teacher's incentives if training in STEM subjects). We need to ensure that UK expertise is actively promoted and supported overseas, with active government support, especially in assisting developing countries. We should aim to offer tailored UK training for developing county students with the intention that they return to those countries to improve their flood risk management.

**17b Please provide comments on the measures described under strategic objective 3.4, and tell us about any additional measures you think there should be, and who could implement them.**

**Please provide comments on the measures described under strategic objective 3.4, and tell us about any additional measures you think there should be, and who could implement them.:**

See 17a.

**Any other comments**

**18 Please provide any other comments**

**Please provide any other comments.:**

It is welcomed that the Strategy is more ambitious than its predecessor. However, it is essential that the final document more actively promotes a genuine, catchment-based, partnership approach as part of the national framework. There seems to be a tension arising from the current national overview role of the Environment Agency, which gives the Strategy a tendency towards national standards and targets, whilst a recognition that these are best delivered through effective local partnerships, which require a more flexible approach.

Too often the Strategy defaults to describing or justifying the Environment Agency's existing strategic roles, with the result that surface water management and operational functions like maintenance seem to receive less significance. Achieving a nation ready for and resilient to flooding and coastal change will continue to need both fully embedded and supported within the resilience toolkit. The Strategy is also not always clear on the roles and responsibilities of authorities other than the Environment Agency.

By the same token, it is not clear from the document itself where 'It is critical that everyone understands as soon as possible how the Strategy will be implemented in the short and medium terms. The final version of the Strategy should be clearer throughout as to the 'ownership' of the various objectives and measures.

ADA feels that throughout the opportunity has been missed to address and simplify the increasing bureaucracy and red-tape within the delivery of flood risk management. Namely around the maintenance of watercourses and assets, but also within the funding of the Partnership Funding programme.

The Strategy must point towards Defra and MHCLG in particular strengthening their climate change remit to ensure that FCERM implication on matters of spatial planning are fully embedded.

It should robustly challenge the Treasury to find the new financial mechanisms and incentives needed to unlock a step change in private financing and contribution.

ADA would welcome a series of measures to further strengthen the capacity, resource, and governance of IDBs, LLFAs, and RFCCs to ensure they continue to play a full and active part in delivering flood and coastal resilience at a local and regional level.

## **Strategic Environmental Assessment Environmental Report**

### **Do you agree with the conclusions of the environmental assessment?**

Not Answered

**If not, please explain why::**

### **Are there any further significant environmental effects (positive or negative) of the draft strategy you think should be considered?**

Not Answered

**If yes, please describe them::**

### **Are there further mitigations for potential negative effects or opportunities to achieve positive effects that should be considered for the final national FCERM strategy?**

Not Answered

**If yes, please give details::**