

ANNUAL CONFERENCE 2020 REPORT

ADA's 83rd Annual Conference took place virtually, via the Zoom Webinar platform, on the morning of Wednesday 11 November with 145 delegates attending from across ADA's members, associate members, and students from Brunel University London's, Flood & Coastal Engineering Programme.

The Conference focused on three excellent presentations from our guest speakers that you can find summarised on the facing page. The speakers' slides can be downloaded from www.ada.org.uk/ada-conference.

SPEAKERS

DAVID COOPER DEPUTY DIRECTOR FOR FLOOD & COASTAL EROSION RISK MANAGEMENT POLICY, DEFRA

David opened his address by thanking IDBs, and all ADA members, for their enthusiasm, skills and expertise maintaining watercourses, managing water, and reducing flood risk. He did this on behalf of Defra Minister, Rebecca Pow MP, who was unable to attend the Conference owing to the continued passage of the Environment Bill through Parliament.

David recognised that many involved with IDBs were keen to see the Bill progress, as it contained clauses that could facilitate new IDBs and the expansion of existing ones. But he emphasised that IDBs needed to continue to win the trust and support of the communities they serve and their MPs. He felt that IDBs can help to do that by demonstrating good governance and good environmental stewardship of the water environment.

On climate change, David stated that the Government's target was to reach net

zero greenhouse gas emissions by 2050, and that Defra would welcome IDBs and ADA exploring what can be done to reduce carbon emissions within IDBs' activities, especially through water pumping operations.

David reviewed the Government's investment in flood risk management schemes, the benefits it was delivering, and the record £5.2 billion to be invested between 2021 and 2027, to better protect a further 336,000 properties that was announced by the Chancellor in the Budget. He said that Defra understood that maintaining new and existing assets is also crucial. Within the recently published Policy Statement, which sets out the Government's ambition to create a nation more resilient to future flood and coastal erosion risk, Defra had committed to commence a review, by the end of 2021, of the statutory powers and responsibilities to map, monitor, inspect, and maintain all flooding coastal erosion assets. He said: ***"We want to ensure that responsibilities are clear so that local bodies, including yourselves, can work together to ensure the whole system of defences in an area works to its best advantage."***

**PROFESSOR CHRIS STOAT
HEAD OF RESEARCH AT THE
ALLERTON PROJECT, GAME &
WILDLIFE CONSERVATION TRUST**

The weather extremes expected of climate change, sedimentation of channels, and the resulting poor water quality are urgent challenges faced by managers of lowland freshwaters. Professor Chris Stoa set out the details of how the Water Friendly Farming project is studying the effectiveness of measures designed to reduce the harmful effects of these issues, when employed on a catchment scale. The research and demonstration is being undertaken in two Leicestershire headwater catchments, as a collaboration between a number of partners including: the Allerton Project, the Freshwater Habitats Trust, and the Environment Agency.

Some natural flood management (NFM) measures, such as permeable dams, have been used to great effect across the country and are being reviewed, refined, and improved as part of the Project. The changes to the design and installation of such structures were explained by Chris and could be key to their wider use and effectiveness.

Professor Stoa highlighted the criticality of improving and maintaining soil health and quality in conjunction with measures to intercept run-off and slow the flow if we are to achieve the freshwater quality improvements needed. The research results shown demonstrate that key elements to a healthy and permeable soil can all help to increase infiltration and soil water holding capacity. These elements include reduced

tillage approaches, reducing and alleviating compaction, and sustaining healthy earthworm populations. Consequently these can help reduce surface run-off and downstream flood risk.

Chris's sentiments hold true for the managers of lowland catchments too. Any approaches taken to keep soil in the fields will help to secure our food production capabilities in the future. The same approaches will mean there is less sediment to be removed from our channels, reducing pollution impacts on our wildlife, and lessening flooding of our communities. The holistic approaches to catchment management being promoted by Chris and the Water Friendly Farming project team will benefit all involved.

**DR TOBY WILLISON
EXECUTIVE DIRECTOR OF
OPERATIONS, ENVIRONMENT
AGENCY**

In one of his last public engagements in his role at the Environment Agency, before he moves to a new role as Environment Director at Southern Water, Toby Willison was keen to share three key messages with conference attendees. Covering partnership working, the journey to a carbon net-zero industry, and how we attract future generations to get involved in water and flood risk management.

On partnership working, he recognised the progress being made but observed that much can still be done by all parties to improve how those partnerships operate and deliver results. A number of Conference attendees challenged the equitable nature of partnership working at present, citing the

need for the process to be a truly bilateral one.

Toby went on to say that our changing climate is a scientific and uncontested fact and that we all have a duty to act to reduce our carbon footprints. Whilst he said that it might be too late to make a noticeable difference for our generation, our children and grandchildren will benefit from the actions we take now towards reaching a carbon net-zero position as soon as possible.

Following on from Prof Stoate's presentation on the management of soils, Toby, having himself been involved in similar work earlier in his career, echoed the messages around land management being one of the underestimated areas which could make significant future positive differences on water quality and watercourse maintenance.

He concluded his presentation by challenging the industry about how they must take more active steps to inform and attract the next generation of water managers to replace the skilled but increasingly ageing demographic of the current experts. Toby welcomed the attendance at the Conference of Brunel University London's Flood Foundation and BSc Degree students. He emphasised that the diversity of those involved in the future will be crucial as the risk of flooding and drought spares no-one.

OPEN DISCUSSION FORUM

A wide-ranging question and answer session was held as part of the ADA Conference. It provided an opportunity for delegates to raise flood and water management topics for discussion with both our guest speakers and a panel of experts, who were: Julia

Beeden (Cambridgeshire County Council), Emily Clarke (Anglian Water), John Curtin (Environment Agency), David Jenkins (Wessex RFCC), David Thomas (Middle Level Commissioners and IDBs), and Innes Thomson (ADA).

David Thomas opened the discussions by asking whether green energy incentives/grants might be considered for IDBs, who collectively operate hundreds of pumping stations across England. David Cooper said that Defra were happy to talk to ADA and the sector further on this once ADA had started to look at the greenhouse gas reductions that IDBs might want to make.

Michael Sly (North Level District IDB) asked about what timescales Defra envisaged for expanding drainage districts. David Cooper explained that there remained a number of steps to work through, firstly the passage of the Environment Bill through parliament, secondly the regulations and guidance to support IDBs with the new valuation process. He felt it would be into 2021 before IDBs could start making use of the new processes, and begin putting choices around expanded drainage districts to local decision.

Cllr Matthew Riddle (Lower Severn IDB) asked whether local councils should be given wider powers to inspect and audit maintenance work of SuDS in addition to their initial design. Julia Beeden agreed and felt councils would be willing to take that on as long as it was properly resourced. She said that a similar process needs to happen for sustainable drainage systems as for when highways are designed and constructed. Highways are built through a program of

inspection so that council officers have assurance that when they are adopted, they know that it has been constructed in the correct way and can be maintained.

There were questions about the function and maintenance of permeable dams for upstream attenuation within watercourses (David Thomas) and the role of beavers (Cllr Alan Beal, South Holland IDB). John Curtin, reported on a piece of work that the EA had been involved in with the Forestry Commission and ADEPT, looking at risk assessments around woody debris in channels. John had also visited a Woodland Trust site in the Northwest where they have planted willow into the base, holding woody debris dams in place for far longer and help lengthen the gaps between maintenance. John hoped that ELMS (new Environmental Land Management Scheme) may assist with maintaining natural flood management features, but recognised that it is still early days for the scheme's development.

On beavers, Chris Storate noted that a dam's ability to attenuate flood flows was dependent upon how much water a dam was already holding behind it. Toby Willison highlighted that there had been research in the Southwest of England that had shown that beaver dams could help slow the flows in certain circumstances. He said that Natural England, with Defra, were accumulating such knowledge to make a more informed policy decisions about the wider efficacy of beaver reintroductions. Innes highlighted the importance of learning from beaver populations in other European nations including Switzerland, Austria and the Netherlands.

Jonathan Glerum (Anglian Water) asked about how the sector could make a real difference to all those dispersed properties that are at risk from flooding. Julia Beeden agreed that this was a really important question from an LLFA perspective, given that the traditional funding approach does not work for schemes of that scale. Grouping projects together to create efficiencies and proposed changes to the partnership funding calculator, may help with this. Collaboration between the local highway authority/RMA, with the community and the parish councils themselves could help deliver some practical on the ground measures. Finally, Julia noted that the LGA were looking at devolving more funding decisions to councils.

The final questions put to the panel came from Peter Bateson (Witham Fourth District IDB), who asked how successful water companies had been in delivering partnership projects with other risk management authorities and from Martin Hurst (Southern RFCC) on new water company drainage and wastewater management plans. Emily Clarke said that Anglian Water were welcoming views on these plans and that during AMP6 had started a dedicated partnership funding programme. Through this programme Emily had liaised with all of the IDBs and LLFAs in the Anglian region. Their program over the next five years included lots of partnership schemes, but she said that if there were any IDBs/LLFAs that are looking at schemes that would provide benefits to Anglian Water assets and customers, then she would be happy to speak with them. David Thomas highlighted the positive work being undertaken by Water Resources East to bring partners together across the East of England.