

Press release: Natural flood management – part of the nation's flood resilience

The Environment Agency has today (31 October) published data, case studies and evidence about the role of natural flood management in reducing flood risk. Working with natural processes to reduce flood risk is not a new concept but this is the first time that all the evidence has been brought together, with the intention of enabling more uptake.

'The evidence behind natural flood management' contains more than 60 case studies from across England and explores how successful the approach is, how it could be used elsewhere and what research may still be needed.

Natural flood management is when natural processes are used to reduce the risk of flooding and coastal erosion. Examples include: restoring bends in rivers, changing the way land is managed so soil can absorb more water and creating saltmarshes on the coast to absorb wave energy.

At Hesketh, on the Lancashire coast, a 'managed realignment' scheme has created more than 300 hectares of saltmarsh which protects 143 residential properties, 3 commercial buildings and 300 hectares of farm land. Coastal schemes such as this not only dissipate wave and tidal energy but can also reduce impact on defences, reduce tidal surges and lead to slightly lower water levels at defences.

The study includes a project in Debenham, Suffolk, where modelling has shown that installing a range of natural flood management features along the River Deben could provide more than 30,000 m³ of water storage – thereby reducing annual average damages to properties and farmland by 31%.

On Lustrum Beck, in Stockton-on-Tees, modelling showed that providing 100,000 m³ of storage in the upstream catchment, using wetlands, features to reduce run-off and river restoration, could reduce flows by more than 10%.

John Curtin, Executive Director of Flood & Coastal Risk Management at the Environment Agency, said:

I often think improving flood resilience is like a mosaic, many different pieces need to come together to complete the resilience picture. Natural flood management is an important part of that mosaic when used alongside more traditional engineering. These projects also provide fantastic opportunities for community involvement and leadership.

Many of our flood schemes already feature a mixture of hard and soft engineering and natural flood management. It can be a cost-effective and sustainable way to manage flood risk alongside

traditional engineering, while creating habitat for wildlife and helping regenerate rural and urban areas through tourism.

Natural flood management works best when a 'catchment based approach' is taken, where a plan is developed to manage the flow of water along the whole length of a river catchment from its source to sea. This way, natural processes can be used upstream and on the coast to compliment engineered flood defences – such as walls and weirs – in populated areas.

Natural flood management not only reduces flood risk it can also achieve multiple benefits for people and wildlife, helping restore habitats, improve water quality and helping make catchments more resilient to the impacts of climate change.

The Environment Agency hopes that the evidence directory will help flood risk managers, local authority engineers, non-governmental organisations and community flood action groups to incorporate natural approaches to flood risk management in to their plans to reduce flood risk.

Earlier this year the government announced [a further £15m](#) for natural flood management schemes across England.

'The evidence behind natural flood management' was launched at the CIWEM (Chartered Institution of Water and Environmental Management) Conference in London.

[News story: The VMD Customer Satisfaction Survey 2017/18: Improving our service to you](#)

On 30 October 2017 the VMD launched its customer satisfaction web survey for 2017/18. If you work for, or on behalf of, Marketing Authorisation holders and holders of Manufacturing, Wholesaler Dealer, Autogenous Vaccine, Blood Bank, Equine Stem Cell and Overseas Manufacturing Authorisations you are invited to complete this survey.

The deadline for completion of the survey is Friday 17 November 2017.

We would welcome returns from any individual in your company who regularly deals with the VMD. Seeking feedback from those people who use the Regulatory services of the VMD is something extremely important to us. We are very keen to understand better how well we meet your needs; what we do well and where we could improve. In this way both VMD and you as stakeholders, can be confident that we are striving to continuously improve our service in line

with your needs and expectations.

Mo Gannon & Associates Ltd, an independent market consultancy which specialises in agriculture and animal health, is carrying out this survey on our behalf. Mo Gannon has been involved in the previous surveys so can compare and contrast the findings with those from previous years to help us collect evidence for the areas where we have improved in response to previous feedback and also where further improvement or remedial action may still be needed.

Anonymity is guaranteed so that no individual or company will be identified against any statement. However, the VMD will be informed of how many individuals from each particular company have completed the survey. Once Mo Gannon & Associates Ltd has closed the web survey and analysed the responses, they may make a request to those of you who agreed to further contact, to add clarity to your responses. The VMD will not be involved, and the feedback given to the VMD will be anonymous.

Ultimately, we will use the findings from the survey and any follow up discussions to improve the services we provide. We will also make the results of the survey and any planned improvements available to you.

A link to the [news item](#) with a summary of the results from the previous survey and the associated action plan is included for information.

If you have not received an email with a link to the survey, or have any questions about any aspect of the survey, please contact David Lewsey in our Business Support team on 01932 338332 or by email d.lewsey@vmd.defra.gsi.gov.uk.

[Press release: Jail and suspended sentences for permit breaches that led to fire](#)

Corporate officers working for Nottinghamshire Recycling Limited (NRL) and 2 who worked for Park Farming Limited (PFL) have been sentenced today (Monday 30 October 2017) in Sheffield Crown Court after breaching environmental permits at 3 sites in Worksop, Nottinghamshire, and Kiveton and South Anston in South Yorkshire.

The environmental offences committed helped maximise the companies' financial gain at the expense of the environment, and led to a series of fires on 1 of NRL's sites at Shireoaks Road in Worksop in 2013 and 2014.

Repeat offenders

All 3 sites were operated illegally despite the fact that NRL had previously been convicted in 2011 for offences it had committed at Shireoaks Road.

Kevin Malcom Burgess of Manton Forest Farm, Worksop, Warren Richard Steele of Drury Lane, Doncaster, David Vincent Berry of Orchard Court, South Normanton, Edward Charles Freeman of Stephen Hill, Sheffield, Martin Crowther of Chapel Rise, Anston, Sheffield and Peter Charles Sanderson of Peak Close, Bramley, Rotherham, were sentenced on Monday 30 October 2017 at Sheffield Crown Court.

Defendants linked to NRL continued to act illegally after the company had previously been convicted in 2011. Documents discovered during the course of the Environment Agency's investigation clearly demonstrated that company officers were fully aware that the sites were being operated illegally.

Risk to human health

Prosecuting on behalf of the Environment Agency, Chris Badger told the court that NRL and PFL repeatedly operated outside the terms of their environmental permits for financial gain. He added that NRL officers created significant risk to the environment and harm to human health. Among other permit breaches, waste was stored in huge quantities outside of the businesses' permitted areas. Waste was blended at both the Worksop and Kiveton site in an attempt to avoid higher rates of landfill tax.

The company paid no heed to repeated warnings about the illegal storage of waste at all 3 sites, and the fire risks at Worksop. The defendants' conduct resulted in 5 fires at NRL's Worksop site during 2013 and 2014.

Large stockpiles of various waste deposited illegally by the companies at the 3 sites still remain and continue to have an environmental impact. Both NRL and PFL entered administration during the period of the investigation. They have since gone into liquidation.

'Deliberate', 'negligent' and 'reckless'

His Honour Judge Robert Moore said that the conduct of four of the companies' directors in breaking the law had been deliberate, while a fifth had acted negligently. The actions of a site manager were judged to have been reckless in aiding and abetting the offending that took place at Kiveton and South Anston.

In mitigation, the judge noted that all defendants had pleaded guilty to the charges that they faced and applied an appropriate reduction to their sentences. He also commented that the defendants had not made personal financial gain as a result of the offences. All 6 defendants were of previous good character.

The sentences imposed by the judge were as follows:

1. Kevin Burgess – 21 months' immediate custodial sentence. Disqualification from being a director for 7 years.
2. Edward Freeman – 8 months' custody suspended for 2 years with a requirement to perform 150 hours of unpaid work. Contribution towards prosecution costs of £5,000.
3. Warren Steele – 6 months' custody suspended for 2 years with a requirement to perform 100 hours of unpaid work. Contribution towards prosecution costs of £5,000.
4. Peter Sanderson – 8 months' custody suspended for 2 years with a requirement to perform 150 hours of unpaid work. Contribution towards prosecution costs of £5,000.
5. Martin Crowther – 12-month community order with a requirement to perform 80 hours of unpaid work. Contribution towards prosecution costs of £1,500.
6. David Berry – 12-month community order with a requirement to perform 100 hours of unpaid work. Contribution towards prosecution costs of £5,000.

Commenting after the hearing, Environment Agency Waste Regulatory Specialist Iain Regan said:

This was a large and complex investigation, and one in which Nottinghamshire Recycling Limited at various stages deliberately attempted to mislead us as the regulator. Companies like NRL distort the waste market by unfairly undercutting legitimate waste businesses, making it difficult for compliant firms to compete. This causes erosion of the legal waste sector and standards, resulting in an industry which is vulnerable to domination by illegal operators who have no concern for protecting the public or the environment.

We hope this case assures the legitimate waste industry and the public that we will investigate businesses who deliberately or recklessly flout the law, and that the sentences passed today send a clear message that behaviour as exhibited by NRL, PFL and their management is unacceptable. □

The EA has brought this case to a successful outcome by dedicated hard work and professionalism.

Offences

1. Operating a regulated facility except under and in accordance with an environmental permit, contrary to Regulations 38(1)(a) and 41(1) of the Environmental Permitting (England and Wales) Regulations 2010 – Kevin Burgess, Warren Steele, David Berry, Edward Freeman and Peter Sanderson. Worksop offence.
2. Keeping controlled waste in a manner likely to cause pollution of the

environment or harm to human health, contrary to Sections 33(1)(c), 33(6) and 157 of the Environmental Protection Act 1990 – Kevin Burgess, Warren Steele, David Berry and Edward Freeman. Worksop offence.

3. Operating a regulated facility except under and in accordance with an environmental permit, contrary to Regulations 38(1)(a) and 41(1) of the Environmental Permitting (England and Wales) Regulations 2010 – Kevin Burgess, Warren Steele, David Berry and Edward Freeman. Martin Crowther, at the same place and time, did aid, abet, counsel and procure those persons to commit the said offence. Kiveton offence.
4. Operating a regulated facility except under and in accordance with an environmental permit, contrary to Regulations 38(1)(a) and 41(1) of the Environmental Permitting (England and Wales) Regulations 2010 – Kevin Burgess. Martin Crowther, at the same place and time, did aid abet, counsel and procure Kevin Burgess to commit the said offence. South Anston offence.

Press release: Government to take action on Fixed Odds Betting Terminals

- Government also announces moves to ensure stronger protections around online gambling and a new industry-led responsible gambling advertising campaign

The maximum stakes on Fixed Odds Betting Terminals (FOBTs) will be reduced, Gambling Minister Tracey Crouch announced today as the government published its gambling review.

The government has launched a [consultation](#) on a range of options on cutting maximum stakes of B2 gaming machines, otherwise known as FOBTs, from £100 to between £50 and £2. We have also asked the [Gambling Commission](#) for more information about how better tracking and monitoring of play on FOBTs can help with interventions to protect players and also if spin speed on games such as roulette should be looked at.

This is to reduce the potential for large losses on the machines and the risk of harm to both the player and wider communities in which these machines are located, such as the increased health costs associated with problem gambling.

In addition to the launch of a 12 week consultation on FOBTs, there will be a package of measures taking effect to strengthen protections around online gambling and gambling advertising to further minimise the risk to vulnerable people and children.

Gambling Minister Tracey Crouch said:

It is vital that we strike the right balance between socially responsible growth and protecting the most vulnerable, including children, from gambling-related harm.

Given the strong evidence and public concerns about the risks of high stakes gaming machines on the high street, we are convinced of the need for action. That is why today we have set out a package of proposals to ensure all consumers and wider communities are protected.

We have seen online gambling grow rapidly and we need to protect players in this space, while also making sure those experiencing harm relating to gambling receive the help they need.

The package of measures taking effect include:

- Raising standards of player protection for online gambling – The Gambling Commission will consult on changes to the Licence Conditions and Codes of Practice next year, with the aim of raising standards on player protection online and will set out expectations to the industry around customer interaction online.
- Responsible gambling campaign – GambleAware, Advertising Association, broadcasters and gambling industry groups will come together to draw up a major two year responsible gambling advertising campaign. The campaign will have a budget of £5 to £7 million per year and will include TV adverts, including around live sport, as well as radio, cinema, online and print. The campaign will be funded by gambling operators, including online-only betting firms, with airspace and digital media provided by broadcasters.
- New advertising guidelines – This will be drawn up by the Committees of Advertising Practice (CAP) to help protect those at risk of problem gambling and children and young people by ensuring that the content of gambling adverts does not encourage impulsive or socially irresponsible gambling.
- Strengthening the code on responsible gambling advertising – The Industry Group for Responsible Gambling (IGRG) are strengthening the code on responsible gambling advertising to require operators to ensure gambling content and channels cannot be accessed by under-18s via social media
- Responsible gambling initiatives – Gambling operators should step up on

funding for research, education and treatment. If not, government will consider other options, including introducing a mandatory levy on gambling operators.

Regarding the stakes and prizes of other gaming machines, the government is recommending maintaining current stakes, apart from on prize bingo gaming where the government is content with industry proposals to increase takes from £1 to £2 and prizes from £70 to £100.

This follows the Government's [call for evidence](#) launched in October 2016, that looked at the gambling landscape, including the number and location of gaming machines in licensed premises and the social responsibility measures in place to protect players and communities from gambling-related harm.

For further information contact: DCMS Press Office on: 020 7211 2210

The consultation will close on 23 January 2018, following which government will consider its final proposals.

[Press release: Spooky science at Dstl](#)

Understanding the bizarre behaviour of quantum particles is challenging but offers many marvellous and mysterious uses that could benefit us all. At the Defence Science and Technology Laboratory (Dstl), physicists are focusing on quantum technology for navigation and sensing.

Working with experts from UK industry and academia, Dstl is developing deployable devices that will be used to see through walls, around corners and underground. For example, the gravity imager uses cold atom technology to detect minute changes in density caused by spaces such as tunnels or rooms, and create a ghostly picture of the hidden world. For the military, this can detect and map hidden areas, but it could also be used more widely to find, for example, sink holes and buried pipes.

Chris, a physicist in Dstl's Future Sensing Technology team, said:

Quantum-enhanced sensors can detect gravity changes at a very fine scale. We're working with industry and academia to shrink the size, weight and power of systems, moving from lab-based prototypes to deployable devices. Crucially, these devices retain the ability to perform measurements to a remarkable level of precision.

We're also developing mathematical tools to make use of the information that these sensors gather. In the case of the gravity imager, we can go from a collection of individual gravity observations to a three-dimensional image of what the subterranean

world looks like.

Dstl has already helped Thales create a system that can see, image and identify multiple moving targets at range around corners using quantum photonic technology. The exquisite precision of the technology means it could, in theory, be used to diagnose medical disorders and detect density anomalies without any invasive procedures.

Quantum can also protect us against otherworldly phenomena. Space weather events can interfere with the global navigation satellite system (GNSS) – which includes GPS – and potentially wreak havoc on our daily lives. A recent government report estimates that five days without GNSS would cost the UK economy £5.2 billion. Quantum-based systems for position, navigation and timing would not be affected. Such systems would also be safe from intentional jamming and spoofing.

Chris added:

As well as the gravity imager, we're working on quantum clocks and accelerometers for ultra-precise timing and navigation. GNSS relies on a strong signal between satellites and receiver; whenever this connection is lost or degraded, for example if you're inside a building or tunnel, the uncertainty in your position grows. Quantum sensors bypass this issue by taking local measurements of motion. The potential applications extend beyond military use; for example first responders could have a navigation system to help in a collapsed building.

At Dstl, we do a lot of our work with the National Physical Laboratory, Birmingham University and Imperial College ensuring UK defence and security benefits from this cutting-edge technology. Glasgow, Strathclyde, Oxford and many other universities are also working with us on future novel quantum sensing technologies.

Dstl has run three successful summer schools for PhD students researching quantum technology. The courses have given students an awareness of military applications and systems engineering, as well as commercial and business skills, to help them think about real-world uses of their research and empower them to contribute to the future UK quantum landscape after they have concluded their current research.

Watch the video to find out more about quantum physics.

[What is quantum physics?](#)