## Wessex Flood Warden Newsletter Summer 2021



#### Dear Flood Wardens, Community Volunteers and Town and Parish Clerks - Welcome to the Summer 2021 Newsletter



## Would you like to be better prepared for emergencies?

You are invited to the fourth annual **Somerset Prepared Community Resilience Day** on **Monday, 4th October 2021**, which opens a month of free, interactive online training with emergency incident responders and volunteer organisations throughout October, organised by the Somerset Prepared Partnership.

Join us for advice, guidance, training and information from members of the Avon & Somerset Local Resilience Forum about how Professional Partners are prepared, how services work and how we can help your community be more resilient.

There will be an initial day of live online talks and anyone who registers will also receive a pack through the post and weekly emails signposting to pre-recorded videos and written toolkits on a variety of subjects, as well as being offered the opportunity to join weekly 'community chat' sessions and register for new, interactive training sessions with national training provider Communities Prepared.

Sessions will be led by a range of organisations including the Environment Agency. South West Ambulance Service Trust, Communities Prepared, Devon and Somerset Fire and Rescue Service, Somerset Rotary, Somerset Civil Contingencies Unit, SPARK, and Community Council for Somerset.

Participants are encouraged to share their experiences throughout October by tweeting Somerset Prepared (@SomersetPrepare) and using the hashtag #I'mSomersetPrepared

For more details of the live and pre-recorded sessions available, as well as to register your interest and book training sessions, please visit the event page at:

www.somersetprepared.org.uk

We hope you are able to join us and we look forward to welcoming you. There is no better opportunity to improve your emergency planning skills and help in getting Somerset Prepared.

We will contact all those who have registered for this event a bit nearer the time with more details.

## Wiltshire Prepared Resilience event



Wiltshire Prepared Resilience Event for Flood Wardens and Community Emergency Volunteers is back and will be running on 27-28 October 2021.

There will be a selection of on-line training with live, interactive and pre-recorded sessions from Professional Partners including Wiltshire Council, Environment Agency, Communities Prepared and Met Office.

We will be emailing out further information and a full agenda over the coming weeks but if you would like to pre-register for this event please email us at <a href="mailto:floodwessex@environment-agency.gov.uk">floodwessex@environment-agency.gov.uk</a>



#### We need to hear from you .....

We need your help to keep our list of contact details up to date. In the two short videos – see links below – we describe why we need your contact details and how we will use them to help support you in your role as Flood Warden or Community Emergency Volunteer. We also explain why, how and when our Flood Warning Duty Officer might want to contact you.

https://youtu.be/tyijSO4aH-g https://youtu.be/YUKA9Gaulxc

Please email us at <u>floodwessex@environment-agency.gov.uk</u> with:

- ·your name
- ·community name
- ·contact number

Email us if you would like more information about how and why we contact Flood Wardens, Community Emergency Volunteers and Town Clerks, or about how we handle your data.

## Road closures during flooding

### Avon and Somerset Police SERVE, PROTECT, RESPECT.

There have been a number of formal and informal arrangements in place where authority has been given from the police to members of the public and volunteers to close roads in the event of flooding. Following recent consultation with Somerset County Council's Highways Team, which is responsible for road closures during flooding, and due to the potential personal risks to those individuals involved, it has been decided to withdraw these police authorities to close roads in the event of flooding with immediate effect. The Council will now handle all closures directly.

Other Highways operated schemes such as the flood gates on the Somerset Levels and Moors, which have been used very successfully since the floods of 2013/14, are unaffected by this decision and will continue to operate as normal.

Somerset Highways team has a 24/7 emergency response system in place. In the event of flooded roads you should contact Highways on 0300 123 2224. This is an office-hours only number. For out of hours response use 101. The 101 police call handlers have direct contact with the Highways Duty Escalation Officer and will inform them of any flood incident.

If you have any questions about this please contact <u>countyroads-tdeane@somerset.gov.uk</u> or <u>countyroads-southsom@somerset.gov.uk</u> or Superintendent, Simon Brickwood from A&S Police.



## NeXt Warning System (XWS) Project: User Research

The Environment Agency Incident Management & Resilience Team is currently working on a project that may be of interest to you. The NeXt Warning System (XWS) project will replace and improve the existing Flood Warning System (FWS). As part of this, we will be looking to simplify how our users register to receive Flood Alerts and Warnings and improve the message quality for users.

The project team is keen to speak to a wide range of users, want to share a new prototype with users and gather feedback to help us improve the service.

The information below provides details regarding the user research the project would like you to be part of:

#### What will I need to do?

During a research session you'll be asked to conduct certain tasks using a prototype system and you'll then be asked questions about your experience.

#### How long is a session?

Up to one hour.

#### Where and when?

These sessions will be conducted remotely using screen share software. We are looking to hold the sessions on Monday to Friday between 10am and 4pm, and we can offer flexibility about timings. We also understand that life is unpredictable right now, so you will be able to cancel or rearrange at short notice.

#### Why take part?

During these uncertain times we want to continue researching with our users and help people prepare, respond and recover from flooding. Taking part in this research is a way to help shape how the flood warning service works in the future.

#### How do I take part?

If you are able to help, please reply to the project team's user researcher, Jacqueline Buckley at <a href="mailto:research.warning@environment-agency.gov.uk">research.warning@environment-agency.gov.uk</a>.

We appreciate that there are significant pressures at the moment, both at home and at work. Taking part in this research is completely voluntary, but your time and input would be greatly appreciated.

#### **Further Information about the Project**

The Flood Warning Service covers areas that are at risk of flooding from rivers and the sea. In limited locations, we are also able to warn people of groundwater flooding. Flood warning information is provided on a community scale across England to the public, partners and media who live, visit or have an interest in those communities.

There are 3 types of warning message with bespoke advice, actions, and triggers:

- ·Flood Alert Flooding is possible, be prepared;
- ·Flood Warning Flooding is expected, immediate action required;
- ·Severe Flood Warning Severe flooding, danger to life.

The Flood Warning System (FWS) is used to provide flood warnings to the public, professional partners and the media across England and Wales. It is used by Floodline staff to register customers in addition to customers being able to register themselves online. It uses phone, mobile, text messages and digital channels to send warning messages simultaneously.

We look forward to hearing from you.

#### Update - National Flood and Coastal Resilience Innovation Programme



Following on from the article in the December newsletter about the National Flood and Coastal Resilience Innovation Programme, there were 79 eligible expressions of interest. An assessment panel reviewed the applications and selected 25 projects to proceed. The proposal based on the Bristol Frome catchment was successful in Wessex. The Frome Catchment Innovation Programme will use a mix of flood resilience measures that mirror the rural to city nature of the Frome catchment. Building on the existing River Frome Reconnected Partnership (RFR), the two Local Authorities (Bristol City and South Gloucestershire) will work together with the Environment Agency, water company and catchment partnership. There are six themes to the project:

- Delivering Nature Based solutions in the upper catchment
- ·Sustainable Urban Drainage retrofitting Sustainable Urban Drainage Systems (SuDs), installing SuDs on council owned properties, integrating SuDs into the Liveable Neighbourhoods project
- ·River Restoration on the Frome Gateway site
- ·Exploring Policy Challenge areas Seeking innovative ways to meet the need for regeneration in areas with flood risk challenges
- ·Landscape Enterprise Network (LENs) Linking the management of landscapes to long term needs of business and society
- ·Monitoring Using innovative technology for monitoring city centre flood risk infrastructure, and using citizen science to help monitor for flood objectives and increase awareness. The projects are now progressing to develop the Expression of Interest (EOI) into a detailed project plan and business case. Collectively, the 25 projects will:
- •Support local authorities, businesses and communities to test and demonstrate innovative practical resilience actions in their areas
- ·Improve the resilience of 25 local areas, reducing the costs of future damage and disruption from flooding and coastal erosion
- Improve evidence on the costs and benefits of the innovative resilience actions and demonstrate how different actions work together across geographical areas
- ·Use the evidence and learning developed to inform future approaches to, and investments in, flood and coastal erosion risk management

The latest news about the programme is on our SharePoint site. If you would like access to the SharePoint site please email <a href="mailto:linevativeResilience@environment-agency.gov.uk">linevativeResilience@environment-agency.gov.uk</a>



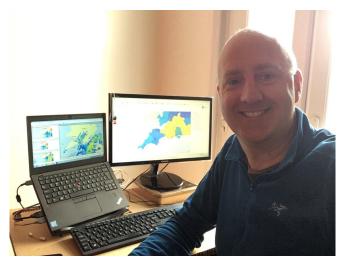
## Supercomputing leap in weather and climate forecasting

The Met Office and Microsoft join forces to build world's most powerful weather and climate forecasting supercomputer in UK.

Visit: Supercomputing leap in weather and climate forecasting - Met Office

## Meet one of our Flood Warning Duty Officers (FWDOs)





Hello, I'm Iain Harris and my day-job with the EA is in the Wessex Area Incident Team. I coordinate training and exercising for incident activities, working with National colleagues and local leads to help ensure staff are confident and capable in their incident roles.

I became a Somerset FWDO after being involved in the EA response to the 2013/14 floods. Following this I was keen to take on an incident role where I could directly help communities affected by flooding. I'm on duty approximately I week in every 6 (24/7 during these periods) and for resilience we

always work in pairs. During my FWDO duty weeks I'm responsible for issuing any Flood Alerts, Flood Warnings and Severe Flood Warnings that are required for Somerset.

I make decisions about these using our Flood Warning Procedures, various forecasting systems and information from Monitoring & Forecasting Duty Officers (MFDOs). The MFDO is the link between myself and the Met Office. They provide an early warning of any weather forecast that suggests a river or coastal site in Somerset may cross a threshold for flooding.

Once this happens we discuss the forecast, different scenarios, catchment conditions and relevant real-time information from our large network of river gauges, rain gauges and coastal monitoring sites. I can then add my local knowledge and make a decision about what type of warnings will be required, when to issue them, and whether to escalate our overall response.

The geography of Somerset provides a diverse set of challenges - whether it's the 'rapid response' catchments running off Exmoor, the rivers and spillways on the Somerset Moors, or the coastline anywhere between Porlock and Portishead.

I must mention FWDO colleagues in Dorset and the Bristol area who also deal with issues we don't see in Somerset, like groundwater flooding and flood risk in a major city. Wherever we're based though it always gets the pulse racing when the duty phone rings at 2am!

#### **Dorset**

#### **Catchment Partnerships**



## Tackling flooding with natural processes - we'd like to hear from you!

Dorset Catchment Partnerships are a collective of organisations with interests in the water environment - local authorities, regulators, water companies, community groups, relevant charities, and membership organisations. We operate at a catchment scale, delivering work from source to sea, targeting action where it will provide the best outcomes. By working together, our partners can achieve maximum impact to improve water quality and biodiversity, increase natural function in our rivers, and reduce flood risk - all of which benefit local communities. The umbrella of Dorset Catchment Partnerships includes Poole Harbour Catchment Initiative, Stour Catchment Initiative, and West Dorset Rivers and Coastal Streams.

The partnership supports projects that utilise nature-based solutions to reduce flooding, such as Dorset Wild Rivers (DWR). DWR is a partnership programme by Dorset Wildlife Trust, Farming & Wildlife Advisory Group South West and Dorset Area of Outstanding Natural Beauty, who are supporting landowners to adapt land management practices. The interventions range from tree planting along watercourses or growing cover crops on fields over winter, up to more ambitious river restoration projects such as the creation of wet woodlands or wetlands. DWR is delivering this work across Dorset, including the headwaters of the River Stour in North Dorset, the River Corfe in Purbeck and the River Hooke in West Dorset.

The aim is for the catchment to function more naturally, where run off will be intercepted by vegetation and enter the river more slowly. At high flow, the river should have more space for water to spread out into ponds, meadows, or new temporary streams, thereby reducing the volume of water rushing downstream. Not only can this protect roads and homes downstream from flooding, there will also be creation of habitat for wildlife and fewer pollutants being washed into the river. Whilst full scale restoration isn't always possible, elements of natural flood management are integrated into many of the partnership's projects.

A highlight of these projects is having enthusiastic engagement and steer from the local community, whose input is critical to the sustainability of the project. In return, the project can provide social benefits to the community, such as improved wellbeing due to reduced flood risk and investment in local contractors and suppliers for project delivery. Therefore, the implementation of nature-based solutions at a catchment scale has the potential to achieve the Dorset Catchment Partnerships vision: Dorset's river catchments being sustainably healthy, resilient and safe for people and wildlife.

Dorset Catchment Partnerships would like to hear about local flood wardens' experiences of community involvement in flooding in Dorset. If you'd be interested in writing a short article for the partnership's monthly newsletter, please email us at <a href="mailto:info@pooleharbourcatchment.co.uk">info@pooleharbourcatchment.co.uk</a>. Within the Wessex region, there are four Catchment Partnerships that have adopted the Catchment Based Approach: Bristol Avon, Somerset, Hampshire Avon and Dorset. Go to <a href="https://catchmentbasedapproach.org/">https://catchmentbasedapproach.org/</a> to find out more about the Catchment Based Approach and identify your local Catchment Partnership.



## Know your local authority's policy on sandbags

BANES - see their policy <a href="here">here</a>
Bournemouth, Christchurch & Poole - see their policy <a href=here</a>
Bristol City Council - see their policy <a href=here</a>
Dorset Council - see their policy <a href=here</a>
Mendip District Council - see their policy <a href=here</a>
North Somerset Council - see their policy <a href=here</a>
Sedgemoor District Council - see their policy <a href=here</a>
Somerset County Council - see their policy <a href=here</a>
South Gloucestershire Council - see their policy <a href=here</a>
Wiltshire County Council - see their policy <a href=here</a>

#### **Groundwater Flood Models**



After several years as our groundwater flood lead Nicol Sellick has moved on to become an Advisor covering Dorset in our Partnership and Strategic Overview team. Nicol has pioneered the introduction of flood warnings for groundwater nationally and been the font of all knowledge locally. We will miss her greatly in the team, but she is just down the 'virtual' corridor .....

As well as working with communities to improve the service, Nicol has been working hard to improve the forecasts for groundwater flooding.

Last year the EA:

- ·Undertook work which recalibrated the models
- ·The formula used to forecast the groundwater levels has been improved. It's now a series of IF statements considering rainfall characteristics, antecedent groundwater levels and groundwater level gradient
- Introduced three new models, these forecast groundwater levels at three new sites, allowing new locations to have flood warnings

This Financial Year we are planning to:

- ·Automate running models on Incident Management Forecasting System (IMFS)
- ·Check current thresholds for any improvements
- ·Try and provide new warnings to communities which have experienced property flooding and disruption to roads
- ·Work with Wessex Water to add thresholds which relate to sewer inundation to the current forecast models.







# 2021 Somerset Water Forum

Friday 19th November 2021, 10:00am - 4:00pm

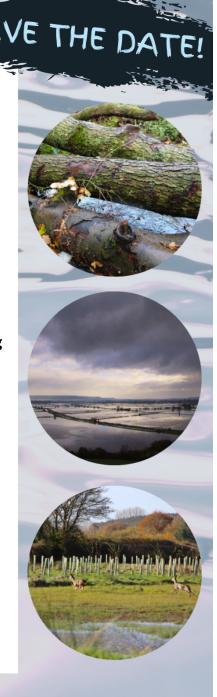
**Key note speaker: Rebecca Pow MP**, Parliamentary Under Secretary of State for the Environment

What's different about how Somerset is tackling current and future flooding, drought, biodiversity and water quality challenges?

The 2021 Somerset Water Forum will explore what's being done now – and what needs to be done next. Join us and share your thoughts on the projects and priorities.

Register here for updates and to provisionally book your place.

**Venue TBC** - The Forum is being planned as a face-to-face event (with a virtual event as back up).











#### A message from Councillor Nicolas Frampton, Chairman of Manston & Hammoon Parish Council

As a Parish Council we would like to highlight the fact that we have recently installed some new flood gates at Hammoon.

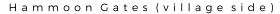
Our village seems to be affected by flooding more often every year so, after many years of discussion and the realisation that signs do not deter drivers, we have finally managed to get installed a permanent physical barrier on each side of the river which will stop people from driving into the flood water from both directions. As far as we are aware, no lives have yet been lost due to flooding here at Hammoon. However there are many incidents every year of vehicles trying to drive through the flood waters, which not only puts lives in danger, especially those of our emergency services, but also every incident potentially has a large cost implication to our community (e.g. many past incidents have resulted in at least two fire engines, various police cars and several ambulances attending, plus either the Air Ambulance and/or the Coast Guard helicopter).

In partnership with Dorset Council Highways and the Environment Agency, plus the full backing of the local Fire Brigade, now during any periods of heavy rain which then causes the river to flood, the gates will be securely closed until the flood waters have receded.













Hammoon Gates (Manston side)

The minor road through Hammoon has been identified as the site with highest risk to drivers in Dorset. Flooding similar to the images above occurs very frequently with lives of both motorists and emergency services personnel at risk. A similar set up has been installed at Staverton near Trowbridge. However, Local Authority Highways teams might consider other locations, but almost certainly, a significant risk to life would need to be demonstrated rather than simply the nuisance caused by cars passing through flood water.

## EA field teams undertake contingency plan testing



EA field teams in Somerset have been undertaking contingency plan testing during May. In particular our exercise at West Sedgemoor Pumping Station was featured on the local news, partially because it's in an area prone to flood impacts but also because the area is a Site of Special Scientific Interest (SSSI) meaning there is criticality in how the water levels are maintained to ensure favourable conditions for birds and invertebrates – many species of which are in decline.

In this scenario we were planning for (a) pump failure requiring temporary pumping measures to be put in place and (b) additional pumping required (say in a summer or winter flood). Both scenarios required the deployment of ultra-high volume pumps (UHVPs) and, as we were using a new model of pump, this meant our field teams were really tested in how to install, assemble and operate the kit in this scenario. We tried to ensure as many of our team members as possible had the opportunity to undertake training (delivered by the manufacturing engineer) and to work on the different elements of the installation (pipework configuration, specialist lifting requirements, pump operation) to keep their skills fresh and to ensure there was a spread of abilities. The outcome was that we have additional capability in the Somerset field teams and the Contingency Plan can be adapted for use at different pumping stations across Wessex.

The skills of our field teams are critical but, as we do more with less and with the outcomes of continuing climate change, the involvement of Flood Wardens and our other volunteer partners is essential. We hope to host training opportunities (pumps, sandbags and temporary barriers) which we can open up to our partners with the easing of Covid restrictions.



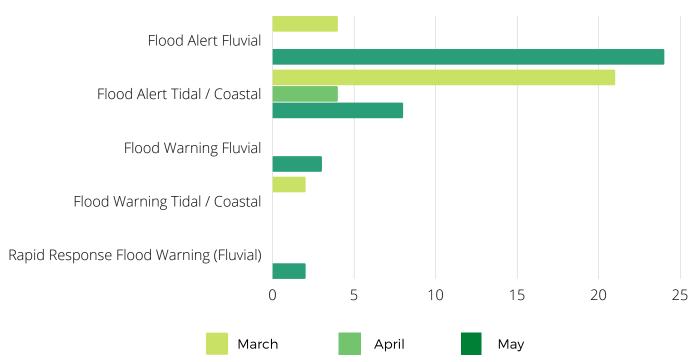






#### 2021 Water Situation Report

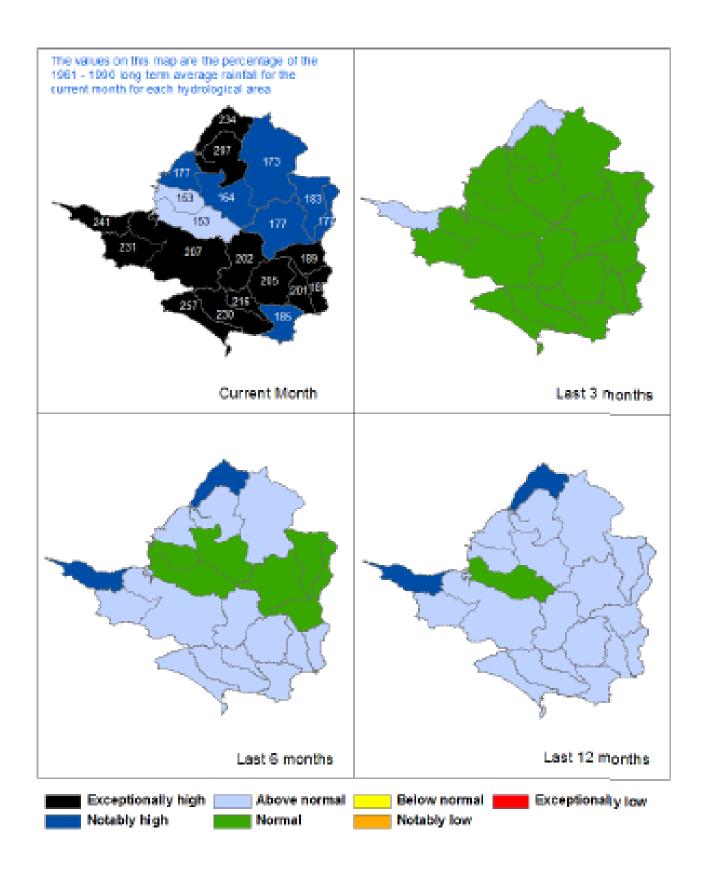
#### In total across Wessex in the last three months we issued:



#### RAINFALL

Following the 12th driest April on record (since 1891) for Wessex, rainfall in May was 'exceptionally high' at 195% of Long Term Average (LTA) making it the fifth wettest May on record. Whilst the last week of May was largely dry, the rest of the month had multiple bands of widespread rainfall; the most notable daily accumulations occurred on 12th and 23rd May.

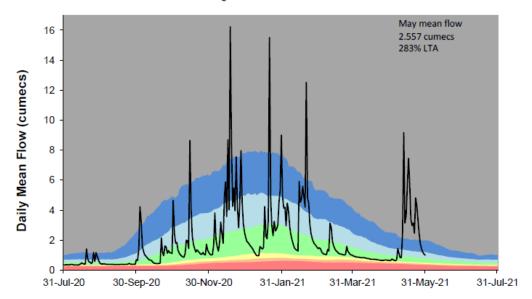
Despite receiving 'exceptionally high' rainfall in May, the 3 month cumulative rainfall is largely 'normal' across Wessex, which reflects the below average rainfall received in March and April when some places were completely dry until the 30th. The 6th and 12th month cumulative rainfall is largely 'above normal' or higher, with rainfall totals since the start of the water year (October 2020) increasing to 119% LTA.



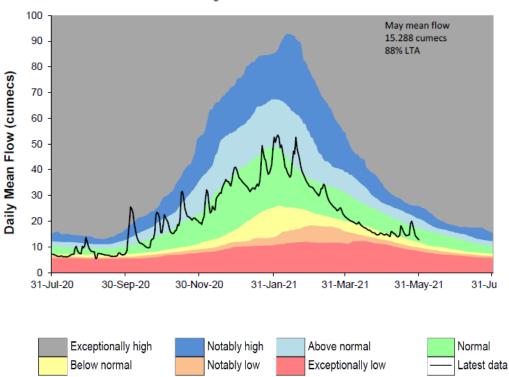
#### **RIVER FLOWS**

**M**onth mean flows were 'normal' or higher across Wessex. Following the 'exceptionally high' rainfall, the responsive surface water rivers in the north and west had largely 'above normal' or higher monthly mean flows, whereas the less responsive groundwater dominated rivers in the south-east had largely 'normal' monthly mean flows. This contrast is demonstrated by the Isle (Ashford Mill) having 283% LTA month mean flow, whilst the Lower Hampshire Avon (Knapp Mill) had 88% LTA.

Isle at Ashford Mill Ranking used data from 01/10/1962 to 31/12/2017



#### Lower Hampshire Avon at Knapp Mill Ranking used data from 01/01/1975 to 31/12/2017



#### **GROUNDWATER LEVELS**

After a winter which saw moderately high groundwater levels, a fairly normal recession has taken place through to the start of May, many sites started to plateau or increase at the end of the month in response to the heavy rainfall.

Kingston Russell Road
Ranking derived from data for the period Jan-1974 to Dec-2017

121
119
117
115
113
111
107
105
103
101
Aug-18 Dec-18 Apr-19 Aug-19 Dec-19 Apr-20 Aug-20 Dec-20 Apr-21

## Where to find further information



For local weather information including weather warnings visit the Met Office at <a href="https://www.metoffice.gov.uk">www.metoffice.gov.uk</a>

River and sea levels and to sign up for flood warnings

Wessex Area Water Situation Reports. Monthly reports are produced on Gov.uk

Flood Re has been set up to help those households who live in a flood risk area find affordable home insurance. For more information contact your insurer or visit www.floodre.co.uk

The National Flood Forum provide further advice and support at <a href="https://www.nationalfloodforum.org.uk">www.nationalfloodforum.org.uk</a>

Flooding: Find out the answers to frequently asked questions here

<u>Property Flood Resilience Toolkit | The Flood Hub.</u> This toolkit contains all the resources you need as a basic introduction for your property to become more flood resilient. Click on each resource to download it and build up your toolkit!



#### Personal Flood Plan Template

The personal flood plan includes a list of things you should do (like moving sentimental items to safety), and provides space for you to note down important contact details such as your utility companies and insurance



#### **Community Flood Plan Template**

This flood plan template is for anyone involved in supporting communities or groups to improve their ability to plan for a flood



## What to do before, during and after a flood

Practical advice on what to do to protect you and your property from flooding



## Would your business stay afloat?

A guide to preparing your business for flooding



## Prepare your property for flooding

A guide for householders and small businesses to prepare for flooding



### Flooding from groundwater

Practical advice to help you reduce the impact of flooding from groundwater



### Flood Warnings - Do you know what to do?













- Prepare a bag that includes medicines and insurance documents
- Visit the flood warning information service
- Turn off gas, water and electricity
- Move things upstairs or to safety
- Move family, pets and car to safety
- Call 999 if in immediate danger
- Follow advice from emergency services
- Keep yourself and your family safe

#### Useful contacts

Contact Floodline on 0345 988 1188 for up to date flood warning information or advice.

Contact the Environment Agency incident hotline on **0800 80 70 60** to report flooding, blockages in rivers or any other environment incident.

### Reporting flood risk and riparian responsibilities



If you are concerned about blockages, obstructions to flow in the river or know of cut vegetation being deposited in the watercourse, which can cause pollution, remember to ring our Incident Hotline **0800 80 70 60** which is open and manned 24 hours a day. You will be given advice and guidance and the information you share will be recorded and passed to the relevant duty team who will be able to take any necessary actions.

If your community is affected by flooding please remember to share this information with us. Photos, times and description of flooding are vital in helping us understand how your community has been affected and what we can do going forwards, whether it be changes to flood warning thresholds or assessing your community for a scheme or property flood resilience measures.

If you have received training on the Severe Weather Information Management (SWIM) system you can record information directly at <a href="https://www.swim.geowessex.com">www.swim.geowessex.com</a>. SWIM has recently changed its name undergoing a significant upgrade – it is now called FORT standing for Flood Online Reporting Tool, better reflecting what it actually does.

We are working to improve the way Wardens and Flood Groups can feed information into the system. Wardens will be able to enter and maintain their own contact details, they will be able to add more detailed flood extents onto the map and will be able to share a link with members of their community which will allow the public to upload photos and videos directly into their community flood report.

Alternatively you can email us at <a href="mailto:floodwessex@environment-agency.gov.uk">floodwessex@environment-agency.gov.uk</a>



#### Keeping in touch

If you are a new flood warden or have received this newsletter from your Town or Parish Clerk, please contact the Wessex Flood Resilience Team at <a href="mailto:floodwessex@environment-agency.gov.uk">floodwessex@environment-agency.gov.uk</a> so that we can update our records and sign you up to receive the newsletter and invitations to future training opportunities.

Subscribe to the Flood Warden Newsletter Why not forward this
Newsletter to a friend?









The Environment Agency will contact you in relation to your role as Flood Warden or Community Volunteer. We will only share your contact details with members of the Local Resilience Forum if relevant to support you in your role as Flood Warden or Community Emergency Volunteer. We will not transfer the personal data that you provide outside the UK and you have the right to withdraw consent for us to hold your data at any time.

You have rights under the General Data Protection Regulation (GDPR) and the Data Protection Act 2018 (DPA 2018). The Information Commissioner's Office (ICO) is the supervisory authority for data protection legislation. The ICO website has a full list of your rights under data protection legislation, you can access this here: <a href="https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/individual-rights">https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/individual-rights</a>

For general information on how the Environment Agency treats your personal data and how to contact us, see our Personal Information Charter:

https://www.gov.uk/government/organisations/environment-agency/about/personal-information-charter