

## **Duffield Parish Council (DPC) - Update on the recent Flooding**

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The recent flooding caused by Storm Babet has affected many villagers. The aim of this update is to inform villagers of what is happening, who is responsible for what, and where assistance can be found. It also provides the Parish Council view of priorities so that villagers can comment via their councillors or the Parish Clerk. In summary the Parish Council is lobbying for action from higher levels of government to minimise the possibility of a recurrence. If, despite that, the flooding is repeated we want the consequences to be less serious and in particular we want any risks of death or injury to be minimised.

### **Summary of Events on Friday 20th October and Saturday 21st October.**

Following unprecedented heavy rain there were numerous local flooding events around Duffield from Friday morning onwards. Water poured off the surrounding hills, there was heavy rain in the village, and drains were overwhelmed. Among these, the drain near Jasmine Cottage on the A6 was incapable of taking all the flow and the A6 flooded and became impassable for a while. There was serious flooding later in the Meadows area.

On Friday afternoon the Ecclesbourne rose and spilled over its banks near Village Court causing extensive flooding along the A6 and once again blocking it to traffic. Children were sent home from school. Village Court and the Squash and Tennis Clubs were flooded, together with some homes.

On Saturday the Derwent flooded St Alkmunds Church.

### **Responsibilities for Floods**

Coordination of flood protection and investigations - Derbyshire County Council.(DCC)

The Rivers Ecclesbourne and Derwent and their defences - the Environment Agency (EA).

Drains and sewers are complex. Some take sewage, some a mixture of sewage and stormwater, some just take stormwater. Responsibility is split between - Derbyshire County Council. (DCC) and Severn-Trent (S-T)

Drains across private land - the land owners (the 'riparian owners')  
Culverts under roads - Derbyshire County Council Highways (DCC-H)

Emergency actions - closing roads - evacuating people - the Emergency Services

Sandbags and post-flood support finance and advice for those affected by the flooding - Amber Valley Borough Council (AVBC) and Derbyshire County Council.

## **The History and Future of Duffield Flood Defences**

Duffield village has a history of severe flooding. The main cause was the River Ecclesbourne, which often burst its banks, and flowed down Tamworth Street, then down the A6 to beyond the Baptist Chapel where it entered the fields.

A flood prevention scheme was completed on the River Ecclesbourne in 1974 and remains in place. It was successful for many years. The design intent was to protect the village from a one in a hundred year flood - i.e. so that the chance of flooding in any given year was 1%.

In February 2020 the Ecclesbourne River just overflowed its banks at Village Court. DPC wrote to the EA drawing their attention to this issue and an exchange of letters followed.

The river level in February 2020 was a record (1.9m). The level in October 2023 set a new record (2.15m). The level gauge is near the Puss in Boots and is effectively a measure of flow towards the village.

Looking to the future, an obvious question is whether Duffield's flood defences still reduce our annual flood risk to 1%. In recent years average annual rainfall in the UK has been around 10% higher than the historic level. There is also some evidence that extreme rainfall events may also be more frequent recently. If that is true, then the annual flood risk in Duffield may be higher than 1%. The EA have stated recently that they are re-assessing this question, because it is a factor in deciding the required action.

If the risk is high, substantial modification of drains, culverts, bridges and flood defences may be required to provide good protection. This could be costly.

It may be that the village has to live with the possibility of more regular flooding, which affects whether buildings need to be made resilient.

### **What is happening now?**

Those affected by the flooding are engaged in recovering their lives and making repairs. Some modest financial support has been provided through Amber Valley District Council. Duffield Community Association has also been helping both financially and with volunteers.

The next decision many will face is whether to make their properties resilient. This is a complicated decision with insurance and other implications. Derbyshire County Council operates a government resilience scheme on behalf of DEFRA. Properties (homes or businesses) that have been internally flooded will be able to claim up to £5K. The process will involve a survey, after which the work can be done. The programme is awaiting resources, it will probably be running by mid/late January.

Derbyshire County Council and the Environment Agency will be holding a drop in session on Monday 15th January from 2 until 7 at the Strutt Centre for residents of Belper and surrounding areas (including Duffield) for residents and businesses affected by flooding. This will cover recovery after the flood and the available support.

The detailed causes of the flooding on the River Ecclesbourne are being investigated by the EA. While we know that is happening, we have no information on the likely conclusions. That is not surprising, the investigation is complicated and requires expertise because there are many potential contributory factors to flooding, for example fallen trees can block the flow, rivers change the shape of their beds, flood defences can fail, the land upstream, its shape, whether it is dry or already sodden, and the extent of paving can affect water flow rates into the village

EA computer models will be used to simulate the river systems. Floods give the opportunity to improve the model accuracy, using video and other information. These models will be available to assess the effectiveness of changes to improve defences. Many videos and pieces of information have been sent to the EA. Our Flood Warden has produced a detailed file illustrating the problem areas during Storm Babet.

The body tasked with overall coordination is Derbyshire County Council (DCC). They will produce a formal 'Section 19' flood investigation report to review all the Storm Babet flood events in Derbyshire. The report will be produced by Jacobs, a subcontractor. Work has started. Phase 1 is data collection, to be completed by February.

Phase 2 will include detailed assessment of some as yet undecided communities/catchment areas. This may include Duffield.

The final Section 19 report is likely to be in Spring/Summer 2024 - not a year away as originally reported.

### **Duffield Parish Council (DPC) Roles**

DPC has no official responsibility, and it is important to be cautious because flooding is costly and dangerous, and decisions need expertise, so there are liability issues in the event of poor advice.

DPC also does not have the resources, authority or budget to decide on complex questions related to flood defences. We can pass ideas to the EA or DCC, but ultimately the decision on which specific measures should be implemented rests with them.

Despite that, as the layer of government closest to the village we can and should check that the responsible bodies are doing their jobs, feed our high level requirements to those bodies, and lobby for adequate flood protection. We can also support the activities of the above organisations should they request that support.

Discussions with residents to date have identified the following areas as needing improvement:

### **Flood Warnings**

Duffield lags behind many other places because we do not seem to get timely and accurate Flood Warnings. We get many Flood Alerts (Flooding is possible), but they aren't specific enough for action. Proper Flood Warnings (Flooding is expected - act now) should come before flooding happens and say that immediate action is needed. They allow events to be cancelled, schools to be closed if required, and flood prevention boards and sandbags to be put in place to protect property.

On the day of the flood we had a Flood Alert, but we have had more than 30 of those in the last five years. We also received a Flood Warning, but that was only issued when flooding of Village Court and the A6 had already started.

The absence of a proper flood warning meant that:

1. Activities for vulnerable people, schools etc in the flood zone continued as usual.

2. Vulnerable adults and children had to walk home on flooded pavements and roads.
3. There was inadequate time to properly protect homes
4. Vulnerable people were evacuated from homes after rather than before they flooded.

Many other rivers have better Flood Warning systems. A better system Duffield could involve rain measurements in the Ecclesbourne valley and river flow measurements further upstream, and/or observations by patrols on the ground upstream of the village. That information would then be used by the EA team to predict the likely river levels at Duffield. They can then send out Flood Warnings, on a 24/7 basis, to everyone who signs up to receive them.

We have written to DCC, our MP, and the Environment Agency to request a proper Flood Warning system. The EA has recently acknowledged that our Flood Warning for Storm Babet was inadequate and have said that they will make improvements.

Villagers are encouraged to sign up for Flood Warnings. For further details of the Flood Warning service see [here](#). To sign up for Flood Warnings see [here](#).

### **Ecclesbourne Flood Defences**

DPC have requested improvements to the Ecclesbourne river defences to reduce the possibility of another overspill at Village Court. We have asked that the capability is maximised and that any other requirements (e.g. for fish) do not compromise that capability.

We have yet to hear whether this is possible. The answer will depend on the outcome of the flow modelling currently in hand. It may also depend on availability of funding.

### **A6 Culverts and the drains and ditches that feed them**

There are two culverts under the A6 between the centre of the village and Flaxholme - one at Jasmine Cottage about 100m south of the Wirksworth Road junction, the other near the stone building with a large clock south of the Broadway junction. Both were the centre of local flooding affecting homes and the A6.

For the Jasmine Cottage culvert we have stated that an urgent priority is to fit an improved trash screen. This is a grille upstream of the A6 culvert to prevent debris from being swept into the culvert and blocking it. A rudimentary screen is fitted at present but it is often left in the raised position because it blocks with debris. An

improved screen would need to have a larger flow area, often achieved by sloping the screen away from the direction of flow. This provides a screen that blocks less readily and is easier to clear. It should be noted that unscreened culverts can be very dangerous should anyone fall into the water.

Longer term we have asked that the sizing of the culvert itself be reviewed.

For the culvert nearer Flaxholme the position is much more complicated. There is a history of the trash screen blocking due to debris carried from the various ditches that feed the culvert. DPC will request that Derbyshire County Council focus its efforts on resolving the complex responsibilities for this culvert.

### **Flood Action Group**

When the initial response is finished, DPC will set up a Flood Action Group led by the Flood Warden with the aim of channelling ideas and producing a Village Flood Plan.

### **Comments/Questions**

If you have comments or questions don't hesitate to contact the Parish Clerk or one of the Duffield Parish Councillors.