SAVE OUR GREEN SPACES -SG FLOOD RISK INFORMATION

February 2025 - Jane Evans

I have put together information that I have found from sources on the internet. I have noted Copy Right Restrictions if they apply. Hopefully this document may enable the reader to find information for themselves.

Every single resident of South Gloucestershire knows that we are getting more flooding due to the amount of heavy or prolonged rainfall we are experiencing due to Climate Change. We are all feeling the effects of it wherever we live or travel. The residents of London Road and Winfield Road in Warmley have experienced the A420 being flooded more frequently…24th November 2024 being the most recent. The homes and businesses which line the route had water splashing up over their doors and windows and in some cases have to get sandbags out.

Soil Types make a difference -

1. The ground in BS30 according Cranfield University’s Land Information System (LandIS) is…

**Slowly permeable seasonally wet, acid, loamy and clayey soil.**

**Drainage – Impeded**.

The soil type in Pucklechurch - **Lime-rich loamy and clayey soils with impeded drainage.**

This organisation has information on all the soil in the UK so you can check any area by going to their web-site.

So, it’s not surprising that the fields from London Road up to Webbs Heath are saturated and cannot hold anymore water. Also, the water table is very high at the time of writing and can be over long periods of wet weather.

Residents have informed me of areas which have flooded but these are just a few examples of an ever-increasing issue in the area. Some listed are potentially going to see mass developments close by…

Cossham Street – Mangotsfield

Barry Road to St. Annes Drive – Oldland Common

Abson Road to Pucklechurch

Siston Lane – in a couple of places

Bridge Road by Rodway Common

South Gloucestershire Council as the Lead Local Flood Authority (LLFA) have to develop and maintain a Local Flood Risk Management Strategy. In South Gloucestershire, the Local Flood Risk Management Strategy (**2**) states that surface water flooding is a major concern within South Gloucestershire.

The document identifies those urban areas north and north east of Bristol, such as Filton and Kingswood, Thornbury, Emerson’s Green, Longwell Green, Yate Chipping Sodbury, Pilning, Hanham, Aust and North Common are at greatest risk of surface flooding.

Other sources of flooding can be ground water, ordinary water courses, sewers and main rivers or the sea. More surface water and ground water are of concern. As well as flooding, all this water will go into our streams and rivers putting them under pressure. This also causes Storm Drains to over flow and therefore potentially causing sewage discharges (which I have talked about in another document).

Flooding from surface water runoff is caused by intense periods of rainfall or storms when the ground is already saturated. In urban areas, surface water will accumulate where it cannot either infiltrate impermeable surfaces or be collected and carried within existing drainage systems. This could be drains blocked by debris, poor drains or sewer flooding.

Groundwater Flooding is flooding caused by high groundwater levels. It occurs where excess water emerges at the ground surface or there is a high-water table and sometimes in structures such as basements.

As already mentioned in BS30 there is a clayey soil which can be water logged and impermeable to the heavy rain we are experiencing with Climate Change. In the Kingswood/Warmley area we also have old mine workings. These shafts are filled with water, local residents working on the Drift Mine on Webbs Heath witnessed the water gushing out of the bore holes which were being made to test the ground in the area.

South Gloucestershire Council have multiple documents which discuss flooding, causes and mitigations. However, the bottom line is that building a large number of homes together with amenities and transport hubs will only add to surface water.

We already have flooding when we have the natural soak aways in our green fields. Mitigations to prevent flooding in the eastern fringe will have to be extremely robust and I don’t think residents have any trust in the council, planners and developers to deliver this. All mitigations have to be maintained e.g. **attenuation ponds**, drains and sewers by SGC, The Environment Agency and Wessex Water. It’s well documented that roads and pavements are not being maintained properly now so where is the extra workforce and money coming from.

**Attenuation pond – is a manmade structure that stores excess water to prevent flooding. They are also known as stormwater attenuation ponds, detention ponds or balancing ponds.**

For example, in the plan for North Warmley New Neighbourhood on page 146 in the draft local plan 2025 (**3**) is a map of the proposed development.

It shows attenuation ponds and new accessible wetland habitats...also marked are Potential Locations of **SuDS.**

Information below is taken from South Gloucestershire Local Flood Risk Management Strategy (**2**)

**SuDS –** Sustainable Drainage Systems. SuDS are management practices which enable surface water to be drained in a more sustainable manner and to mimic local natural drainage. The inclusion of SuDS within developments is an opportunity to enhance ecological and amenity value, increase biodiversity, and promote Green Infrastructure, incorporating above ground facilities into the development strategy.

One could argue that the Green Belt meets all these criteria and mitigations would not be needed if other options were considered rather than mass developments. We have an abundance of wildlife in the Eastern Fringe for example in Pucklechurch, Warmley, Shortwood and Oldland Common just to name a few areas. Smaller developments may give the wildlife a chance to thrive along side the housing. These massive developments will eventually join up and the very thing the Greenbelt was there to prevent will be gone. Urban sprawl will see us creep towards the city of Bristol.

**(4)** There is an article from the BBC News, 5th March 2024 – the headline:

***“Abington flooding: Damage caused by new developments, residents claim.”***

We do not want to be telling SGC that “we told you so” when we have even more flooding than at present.

**Water Quality in our Rivers and Streams**

Data on the health of our rivers and streams e.g. The Boyd, Siston Brook can be found on the following web site, however this is not completely up to date and more recent data hard to find.

**Department for Environment Food & Rural Affairs – Environment Agency**

**Catchment Data Explorer (5)**

There is a short article about a programme to improve Siston Brook and River Boyd catchments on the site below:

 Bristol Avon Catchment Partnership May 2024 Project Spotlight–Thriving Water **(6)**

**References:**

1. Cranfield University’s Land Information System (LandIS):

<https://www.landis.org.uk>

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1. South Gloucestershire Local Flood Risk Management Strategy 2022–2027 (produced July 2022):

**Betasouthglos.gov.uk>local-flood-risk-management**

1. South Gloucestershire Local Plan Regulation 19 2025 (Cabinet Dispatch Version): **https://council.southglos.gov.uk/documents/g16939/Public%20reports%20pack%2003rd-Feb-2025%2010.00%20Cabinet.pdf?T=10&fbclid=IwY2xjawIPC7JleHRuA2FlbQIxMAABHXM0YPIivsIo86hs6uribOa1JYI6ofTg3yQ2XQmNrXbinpNCOd8mdkWafQ\_aem\_bkI1T\_0ioZFtIEARjePFRw**

1. [**https://www.bbc.uk/news/uk-england-oxfordshire-68448259**](https://www.bbc.uk/news/uk-england-oxfordshire-68448259)
2. DEFRA – Environment Agency Catchment Data Explorer:

 (Open Government Licence – copyright)

 **Environment.data.gov.uk/catchment-planning**

1. <https://www.bristolavoncatchment.co.uk/bacp-newsletters>

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