

OTHER FLOODING

There are many different types of flooding that can happen depending on where the water comes from. Each of these flooding types is managed by different organisations across South Gloucestershire.

Listed below are the six most common types of flooding:



Surface Water Flooding

Surface water flooding happens when rainwater flows or ponds over the surface of the ground and does not soak into the land or enter a drain or river. It usually happens during heavy rainfall (more than 30mm per hour) and is made worse by blocked ditches, drains and compacted or waterlogged soil. There is no early warning system for surface water flooding and it is difficult to predict, however the Environment Agency Flood Risk Maps do show the risk across the region.

River Flooding

River flooding happens when a stream or river (watercourse) cannot cope with the amount of water that is flowing into it from the surrounding land. Rivers are separated into "main rivers" and "ordinary watercourses". Main rivers are usually the larger ones in the county such as the River Frome and Avon but also some smaller streams that are important for drainage. Ordinary watercourses are any other smaller rivers, streams or ditches. The Environment Agency Flood Risk Maps let you explore the main rivers.

Groundwater Flooding

Groundwater flooding happens when water levels in the ground rise above the surface. It is common after long periods of constant heavy rainfall and likely in low lying areas, those with natural springs and where chalk is present under the ground (which acts like a sponge to store water).

Sewer Flooding

Sewer flooding happens either when the pipes in the network are blocked or when there is heavy rainfall and the sewers cannot cope with the amount of water because they are not designed to cope with heavy, prolonged rainfall. The danger of this type of flooding is that water can become contaminated with raw sewage and enter land and property, or the river system.

Reservoir Flooding

Reservoir flooding is extremely rare. It happens when there is a failure in the dam holding back the water as a result of erosion, accidental damage or water levels rising above/over-topping the dam. Whilst the risk is low, the resulting flooding can be very destructive.

Snowmelt Flooding

Snowmelt can cause significant flooding. Unlike rainfall, which reaches the soil almost immediately, snow stores the water for some time until it melts. Long periods of snowfall can

therefore result in a large volume of water being released in a short space of time (around 1cm of water is released for every 10cm of snow). Snowmelt flooding is made worse when the ground remains frozen and snow melts, as the water cannot enter the ground, and so acts like surface water flooding.

Coastal Flooding

Coastal flooding happens when there are high tides and stormy weather conditions that can result in a "tidal surge", which could cause sea levels to rise over flood defences.